## CAMBODIA INTER-CENSAL POPULATION SURVEY 2013 FINAL REPORT



National Institute of Statistics, Ministry of Planning Phnom Penh, Cambodia Sponsored by United Nation Population Fund Japan International Cooperation Agency

KINGDOM OF CAMBODIA
Nation Religion King

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## FOREWORD

This report presents the results of Cambodia Inter-censal Population Survey, 2013 (CIPS, 2013) that was carried out in March 2013 by the National Institute of Statistics. It is a nationally representative sample survey of 955 Primary Sampling Units and 28,650 households. This survey was taken between two censuses, the 2008 census and the proposed 2018 census, in order to update information on population size and growth, educational attainment, labour and employment, fertility, mortality, migration, disabled population, and other population characteristics as well as household facilities and amenities. The main objective of the CIPS, 2013 was to provide demographic and socio-economic data, necessary for policy making, planning, monitoring and evaluation at national and sub-national levels. It was also intended to provide statistical information that would be useful to measure progress towards achieving the national objectives and targets of the various plans and programmes. This survey has been designed to estimate most of the indicators disaggregated by sex, for Total, Urban and Rural areas at the national level and in the case of each province for total areas only. The tables, figures and text are related to the most important indicators consistent with the objectives of the survey.

More than a thousand staff members of the NIS and Provincial Planning Offices were trained for conducting the survey. Their services would be utilized to train in turn a large number of enumerators and supervisors who would be recruited for the next Census. The CIPS 2013 may therefore be called the harbinger of the next Population Census in Cambodia due in the year 2018. The National Institute of Statistics emphasizes the importance of close collaboration with international development partners and national counterparts to ensure transfer of knowledge to improve analytical methodologies, and plan and organize national reports. This emphasis will facilitate the long term sustainability of demographic analysis in the country.

On behalf of the Ministry of Planning, I wish to place on record our gratitude to the United Nations Population Fund (UNFPA) for supporting the whole process of CIPS, 2013 including resources and technical assistance program with emphasis on capacity development. Thanks are due to Japan International Cooperation Agency (JICA) for providing technical assistance for mapping villages and Enumeration Areas (EAs), and for participating in analysis and dissemination of the results.

I appreciate the hard work put in by the staff of the NIS under the guidance and supervision of H.E Mrs. Hang Lina, Director General, NIS and the Provincial Planning Offices in making the survey a success as well as in the preparation of this report. I wish to take this opportunity to thank all staff in the National Institute of Statistics as well as all survey field staff who have taken part and contributed to the success of the Cambodia Inter-censal Population Survey, 2013. We are also thankful to technical advisers for the survey: Mr. Nott Rama Rao, Dr. Gouranga Das Varma, Mr. Gregory Martin, Mr. Fumihiko Nishi, Mr. Akihiko Ito, and Mr. Akihito Yamauchi.

We are pleased to present to line-ministries, international agencies, non-government organization, policy makers, programme implementers, development planners, and researchers a publication with a plethora of useful information. We hope to receive feedback and comments to improve our subsequent publications.


Ministry of Planning
Phnom Penh
November 2013
Map 1. Cambodia by province


## Cambodia Inter-censal Population Survey 2013 <br> Final Result

Figures at a Glance

| Basic Characteristics of administrative |  |  |  |
| :---: | :---: | :---: | :---: |
| Number of municipality | 1 |  |  |
| Number of provinces | 23 |  |  |
| Number of cities/Krongs | 26 |  |  |
| Number of khans | 9 |  |  |
| Number of districts | 159 |  |  |
| Number of sangkats | 204 |  |  |
| Number of communes | 1,429 |  |  |
| Number of villages | 14,119 |  |  |
| Characteristics | Total | Males | Females |
| Total population | 14,676,591 | 7,121,508 | 7,555,083 |
| Urban population | 3,146,212 | 1,527,479 | 1,618,734 |
| Percentage of urban population | 21.4 | 21.5 | 21.4 |
| Annual growth Rate | 1.46 \% |  |  |
| Population density | 82/sq.km |  |  |
| Percentage of population under 15 | 29.4 | 31.2 | 27.8 |
| Percentage of population 15-64 | 65.6 | 64.7 | 66.4 |
| Percentage of population $65+$ | 5.0 | 4.1 | 5.8 |
| Age dependency ratio |  |  |  |
| Total | 52.4 | 54.5 | 50.5 |
| Urban | 41.8 | 43.0 | 40.6 |
| Rural | 55.6 | 57.9 | 53.5 |
| Sex ratio |  |  |  |
| Total | 94.3 |  |  |
| Urban | 94.4 |  |  |
| Rural | 94.2 |  |  |
| Median age |  |  |  |
| Total | 24.5 | 23.4 | 25.6 |
| Urban | 26.9 | 25.8 | 27.8 |
| Rural | 23.9 | 22.8 | 25.1 |
| Number of Households | 3,163,226 |  |  |
| Percent of female headed households | 27.1 |  |  |
| Average household size |  |  |  |
| Total | 4.6 |  |  |
| Urban | 4.8 |  |  |
| Rural | 4.6 |  |  |
|  |  |  |  |
| Percentage of population aged 15 and over by marital status |  |  |  |
| Never married | 31.1 | 35.3 | 27.4 |
| Married | 61.9 | 62.5 | 61.3 |
| Widowed | 5.0 | 1.3 | 8.4 |
| Divorced | 1.8 | 0.8 | 2.7 |
| Separated | 0.2 | 0.1 | 0.3 |


| Singulate Mean age at Marriage |  |  |  |
| :---: | :---: | :---: | :---: |
| Total | 25.0 | 26.2 | 23.7 |
| Urban | 27.5 | 29.1 | 25.8 |
| Rural | 24.2 | 25.4 | 23.0 |
| Adult literacy rate (population aged 15 and more) |  |  |  |
| Total | 79.7 | 86.4 | 73.6 |
| Urban | 90.3 | 94.2 | 86.8 |
| Rural | 76.5 | 84.1 | 69.7 |
| Educational attainment of Literate population aged 7+ |  |  |  |
| No educational level | 3.1 | 2.8 | 3.4 |
| Primary not completed | 40.8 | 37.5 | 44.3 |
| Primary completed | 29.4 | 29.4 | 29.3 |
| Lower secondary | 21 | 23.4 | 18.5 |
| Secondary/diploma | 3.9 | 4.5 | 3.2 |
| Beyond Secondary | 1.8 | 2.4 | 1.3 |
|  |  |  |  |
| Proportion currently attending school/educational institution |  |  |  |
| Aged 5-11 | 74.2 | 73.2 | 75.2 |
| Aged 12-14 | 88.2 | 88.2 | 88.2 |
| Aged 15-17 | 61.4 | 64.1 | 58.7 |
| Aged 18-24 | 21.5 | 25.4 | 17.6 |
| Aged $25+$ | 0.7 | 1.0 | 0.4 |
| Percentage of disabled population | 2.1 | 2.2 | 1.9 |
| Percentage of disabled population by type of disability |  |  |  |
| Difficulty in seeing | 34.8 | 31.4 | 38.6 |
| Difficulty in speech | 5.4 | 4.4 | 6.5 |
| Difficulty in hearing | 9.0 | 7.4 | 10.8 |
| Difficulty in movement | 33.4 | 41.4 | 24.7 |
| Mental | 12.2 | 9.8 | 14.7 |
| Mental retardation | 5.2 | 3.6 | 6.8 |
| Mental illness | 7.0 | 6.2 | 7.9 |
| Any other | 3.5 | 3.9 | 3.1 |
| Multiple disabilities | 1.6 | 1.7 | 1.6 |
| Employment and Unemployment |  |  |  |
| Labour force participation rate | 62.3 | 63.8 | 60.9 |
| Employment rate | 60.8 | 62.4 | 59.3 |
| Unemployment rate | 1.5 | 1.4 | 1.7 |
| Economically inactive rate | 37.7 | 36.2 | 39.1 |
| Labour force participation rate aged 15-64 |  |  |  |
| Total | 82.2 | 84.5 | 80.0 |
| Urban | 73.2 | 79.5 | 67.4 |
| Rural | 84.8 | 86.0 | 83.7 |
| Unemployment rate aged 15-64 |  |  |  |
| Total | 2.3 | 2.1 | 2.5 |
| Urban | 4.4 | 3.5 | 5.4 |
| Rural | 1.8 | 1.7 | 1.9 |


| Employment rate by industrial sector |  |  |  |
| :---: | :---: | :---: | :---: |
| Primary | 64.3 | 62.3 | 66.3 |
| Secondary | 11.5 | 11.6 | 11.5 |
| Tertiary | 23.8 | 25.6 | 21.9 |
| Employed population aged $5+$ with secondary activity | 42.3 | 44.3 | 40.4 |
| Percentage of migrant by place of last residence |  |  |  |
| Total | 28.9 | 30.0 | 27.9 |
| Urban | 49.4 | 48.6 | 50.1 |
| Rural | 23.3 | 24.9 | 21.8 |
|  |  |  |  |
| Percentage of internal migrants by migration stream |  |  |  |
| Rural to Rural | 58.4 | 60.3 | 56.5 |
| Rural to Urban | 24.5 | 23.5 | 25.5 |
| Urban to Rural | 5.1 | 5.1 | 5.1 |
| Urban to Urban | 12.0 | 11.1 | 12.9 |
|  |  |  |  |
| Percentage of buildings by nature of construction | Permanent | SemiPermane | Temporary |
| Total | 73.6 | 19.7 | 6.7 |
| Urban | 93.0 | 5.3 | 1.7 |
| Rural | 68.9 | 23.2 | 7.9 |
|  |  |  |  |
| Percentages of households by source of drinking water |  |  |  |
| Piped water | 19.8 |  |  |
| Tube/wipe well | 29.5 |  |  |
| Protected dug well | 6.2 |  |  |
| Unprotected dug well | 14.3 |  |  |
| Rain | 1.4 |  |  |
| Spring, river, etc | 18.7 |  |  |
| Bought | 8.6 |  |  |
| Other | 1.4 |  |  |
|  |  |  |  |
| Percentage of households using electricity as main source of light |  |  |  |
| Total | 48.0 |  |  |
| Urban | 94.0 |  |  |
| Rural | 36.0 |  |  |
|  |  |  |  |
| Percentage of households by main type of fuel used for cooking |  |  |  |
| Firewood | 77.9 |  |  |
| Charcoal | 8.4 |  |  |
| Kerosene | 0.1 |  |  |
| Liquefied Petroleum gas (LPG) | 12.1 |  |  |
| Others | 1.4 |  |  |
|  |  |  |  |
| Percentage of households having toilet facility within premises |  |  |  |
| Total | 48.7 |  |  |
| Urban | 87.5 |  |  |
| Rural | 38.5 |  |  |


| Percentage accessibility to internet facility |  |  |  |
| :--- | ---: | ---: | :--- |
| No Access | 94.5 |  |  |
| Accessed at home | 2.6 |  |  |
| Accessed outside home | 1.3 |  |  |
| Accessed at home and outside home | 1.6 |  |  |
| Total fertility rate per 1,000 live birth |  |  |  |
| Total | 2.8 |  |  |
| Urban | 2.1 |  |  |
| Rural | 3.1 |  |  |
| Infant mortality rate per 1,000 live birth |  |  |  |
| Total |  |  |  |
| Urban | 33 |  |  |
| Rural | 9 |  |  |
| Under five mortality rate per 1,000 live birth | 38 |  |  |
| Total |  |  |  |
| Urban | 53 |  |  |
| Rural | 15 |  |  |
| Life expectancy at birth | 60 |  |  |
| Total |  |  |  |
| Urban | 68.9 |  |  |
| Rural | 76.8 |  |  |

## List of Abbreviations and Acronyms

| ASFR | Age-Specific Fertility Rates |
| :---: | :---: |
| CDHS | Cambodia Demographic and Health Survey |
| CD-ROM | Compact Disc Read-only Memory |
| CEB | Children Ever Born |
| CIPS | Cambodia Inter-censal Population Survey |
| CMDGs | Cambodia Millennium Development Goals |
| CS | Children Surviving |
| CWR | Child Woman Ratio |
| CSPro | Census and Survey Processing System |
| DDG | Deputy Director General |
| DG | Director General |
| DUSC | Data Users Service Center |
| EA | Enumeration Area |
| GIS | Geographic Information System |
| GRR | Gross Reproduction Rate |
| IMR | Infant Mortality Rate |
| JICA | Japan International Cooperation Agency |
| MOP | Ministry of Planning |
| NGO | Non-governmental organization |
| NIS | National Institute of Statistics |
| NSDP | National Strategic Development Plan |
| PES | Post Enumeration Survey |
| POPMAP | Population Map |
| PSU | Primary Sample Units |
| QA | Quality Assurance |
| REDATAM | Retrieval of Data for Small Areas by Microcomputer |
| RGC | Royal Government of Cambodia |
| RS | Rectangular Strategy |
| SSU | Secondary Sampling Units |
| TFR | Total Fertility Rate |
| TV | Television |
| U5MR | Under-Five Mortality Rate |
| UN | United Nations |
| UN CensusInfo | United Nation Census Information |
| UNFPA | United Nations Population Fund |
| WHO | World Health Organization |
| WB | World Bank |
| WinR+ | Redatam Plus for Windows |

# Chapter 1 <br> Introduction 

### 1.1 Background

The Cambodia Inter-censal Population Survey 2013 (CIPS) was conducted in March 2013. The reference time for the survey was the midnight of March 3 ( 00 hours). This is the second Inter-censal Population Survey to be conducted in Cambodia (CIPS 2013). The first one (CIPS 2004) was conducted in March 2004. The Inter-censal Population Survey in March 2013 was planned to take place exactly in the middle of the two censuses held in 2008 and 2018. For the first time, the 2013 Inter-censal Population Survey provides estimates up to the provincial level. The target population set for CIPS, 2013 was the normal household population (regular households) of Cambodia. People living in institutions, such as hospitals, hostels, police quarters and prisons as well as homeless populations were not covered in the survey. However, normal households residing within institutional settings were covered.

It is a nationally representative sample survey conducted for updating information on population size and growth, fertility, mortality, migration and other population characteristics as well as household facilities and amenities.

The process of formulating a National Population Policy has been greatly advanced through the availability of population and demographic data. At the same time data from specialized surveys such as the socio-economic survey and Demographic and Health Survey, labour force surveys and migration studies have complemented the census data and helped build a body of essential statistics to guide the development process. The conduct of the Cambodia Inter-censal Population Survey 2013 is an important step in the creation of a continuous flow of population data that will enable Cambodia prepare plans and programmes of development supported by a strong database.

### 1.2 Survey Objective

The Cambodia Inter-censal Population Survey 2013 was conducted with the objective of providing information on the following characteristics of the population: Population size and distribution; sex, age and marital status; fertility and mortality; migration status; disabled population; literacy and educational level; employment and unemployment; housing and household amenities; and other population and household information. These fresh data will enable calculation of reliable estimates and projections of: Population size and growth, fertility and mortality levels, volume of migration, housing and household amenities and related details. The survey was also intended to train the national staff in sampling, data collection, data processing, analysis and dissemination.

### 1.3 Survey Content

The draft questionnaires for the CIPS 2013 were more or less on the 2008 General Census pattern. Some modifications, however, were made by adding new questions and amending some of the old questions. Two types of questionnaires were used in the CIPS 2013: Form A House-list and Form B Household Questionnaire (see Appendix I and II).

The Form A was used to collect information on buildings containing one or more households during the preliminary round preceding the survey night (March 3, 2013). Form B which has five parts, was used for the survey enumeration in the period closely following the reference time.

### 1.4 Survey Organization

The sampling design and estimation procedure adopted in the survey are described in Chapter 2.The first preliminary field work for the survey was mapping that was carried out with technical assistance from Japan International Cooperation Agency (JICA). Trained NIS staffs were deputed to draw the sketch map of the villages and detailed EA maps.

The Director General of NIS served as the Director of CIPS 2013. The provincial planning directors of each of the 23 provinces and Phnom Penh Municipality served as coordinators in their respective areas. About a hundred NIS survey coordinators were drawn from different divisions of NIS and allotted to provinces at the rate of about eight to nine villages per person. They then acted as technical advisors to all survey staff and were responsible for technical aspects of the survey in the allotted province. Their foremost tasks were to train the supervisors and the enumerators, supervise the fieldwork and ensure proper distribution of CIPS materials and collection of completed records.

For every selected enumeration area, there was one enumerator and normally the work of three enumerators was monitored and supervised by one supervisor. Enumerators and supervisors were drawn from the cadre of teachers and other civil servants. Preferably those residing within or near the selected villages were appointed by the provincial directors. In all there were 955 enumerators and 318 supervisors busy in the field during early March 2013. The Senior Minister, Minister of planning, Secretaries and Under-Secretaries of State, and other Directors of Departments also assisted in supervising the field activities.

A technical consultant appointed by UNFPA undertook a few short-term missions at appropriate stages to provide training and overall guidance to the NIS and to ensure proper organization and implementation of the CIPS field undertaking as well as to assist in the preparation of the tabulation plan and reports. A sampling consultant provided guidance on sampling particularly on estimation procedure and computation of sampling errors. Data Processing consultant (DPC) in his short-term missions gave training to the staff in data processing and guided and supervised the processing of CIPS results.

### 1.5 Training for Field Staff

The 100 NIS Survey Coordinators (NIS SC) were first intensively trained at the NIS (NovemberDecember 2012) by senior officers on updating village/EA maps, sampling, house-listing, interviewing households and filling-in household questionnaires, concepts and definition. The Province Directors (with their Deputy Directors) were trained on CIPS at NIS for one week in January 2013, since they were expected to be deeply involved in organizing the survey and making field visits to ensure that the survey was proceeding smoothly. The training of appointed enumerators and supervisors on all aspects of the survey, especially questionnaires and concepts (including practice), was conducted at the Provincial Headquarters by NIS survey coordinators assisted by the Provincial Director/Deputy Director for six days (19 to 23 February, 2013).

### 1.6 Data Collection and Supervision

For every selected EA, a field listing was organized in order to make a current and complete listing of households located within it. At the first step the enumerator would have to update sketch maps of villages and EA maps. Residential and partly residential buildings were numbered using sticker and marked on map by covering a prescribed path of travel in order to make sure that all buildings in which households resided were accounted for.

During the primary operation of the survey (lasting five days from 26 February to 2 March, 2013) building/structures wholly or partly used for residential purpose in selected EAs (955 in all) were listed in the House List called Form A (Appendix 1). After the listing operation was completed in an EA, a fixed sample size of 30 households was selected from the house list by the respective supervisor. This selection was carried out systematically by computing interval in each EA and choosing the random start, by using linear sampling. It was closely supervised by NIS survey coordinators to ensure correctness in the selection process.

During the main phase of the survey, the Household Questionnaire called Form B (Appendix II) was completed by the enumerator in each of the 30 sample households selected in his/her EA. Overall, the supervisory teams found that respondents were willingly answering the survey questions.

### 1.7 Data Processing

The completed records ( Form A, Form B, Form I, Form II, Map, and other prescribed Forms) were systematically collected from the provinces by NIS Survey Coordinators on the due dates and submitted to the team receptionist at NIS. Training on editing and coding of filled-in schedules was conducted for senior staff, who in turn trained other editors and coders. The purpose of the editing process was to remove matters of obvious inconsistency, incorrectness and incompleteness, and to improve the quality of data collected. In order to capture the data recorded on Form A (House List), Form B (Household Questionnaire) and Form 2 (Enumerator's Summary), three separate data entry applications using CSPro software package were made. CSPro package was used for tabulation as well. The data entry section consisted of 14 keyboard operators working under two supervisors. They were
thoroughly trained on data entry procedures and the CSPro data entry software in the third week of March 2013.

### 1.8 Tabulation and Analysis Plans

In consultation with data users, NIS decided to produce about 78 basic priority tables (see Appendix III) most of which are for both National and provincial levels. The Provincial level Tables are only for Total and not separately for rural and urban areas due to smallness of the sample size. These tables cover most of the topics included in the CIPS 2013 questionnaires and their cross classification should satisfy most of the requirements of all sections of data users. The production of priority tables may be followed by the preparation of additional tables called supplementary tables if proposed by the data users, and other tables produced in the course of in-depth analysis.

Analysis of the survey data will include preliminary analysis of provisional population totals, general analysis at the National and Provincial levels of the final survey data as well as in-depth analysis in respect of the following topics by the NIS analysis team with technical assistance by UNFPA and JICA: (i) Fertility and mortality (ii) Population growth and change in spatial distribution (iii) Nuptiality (iv) Gender and age composition (v) Disability (vi) Migration (vii) Literacy and educational attainment (viii) Economic activity and employment (ix) Housing and household amenities (x) Family and Household (xi) Population Projections (xii) Women in Cambodia and (xiii) Urbanization and development in Cambodia. Some more topics may also be taken up for study if needed. A separate report on each topic is expected to be prepared. For this purpose a workshop may be held for each subject involving the national staff not only within the NIS but also from other line Ministries concerned. This will afford an opportunity to the staff concerned to interact with each other and study deeply the survey results and draw conclusions which could be incorporated in the analytical report. Such a system worked very well in the past census analysis programmes.

### 1.9 Dissemination Plan

The reports mentioned under the analysis plan will be printed and published. The preliminary report based on provisional population totals was released in August 2013. The present report contains general analysis mostly at the national level, of the data contained in the priority tables. This will be followed by the publication of analytical reports mentioned above in stages.

Off-line electronic dissemination products will be mainly in the form of CD-ROM. The project plans to produce a variety of electronic dissemination products based on CD ROMs. These include: a Table Retrieval System, a Community Profile System and a thematic mapping application. Census Info will also be used as dissemination tool. The NIS maintains a web site (www.nis.gov.kh) for providing information from population censuses, the results of various types of surveys, periodical publication, etc. The salient results of CIPS 2013 will be put on the web site. Seminars for the presentation of the survey results and workshops to train planners in the line Ministries and other data users may be conducted in the course of 2013-14 in Phnom Penh and every province/district so as to benefit participants down to the district level.

### 1.10 Quality Assurance

Adequate steps were taken to ensure quality of data at every stage of the Survey. For quality assurance in field work, the importance of collecting quality information was stressed in the training classes for enumerators and supervisors. The need to collect accurate data by gender was also emphasized. For every four enumerators, there was a field supervisor who closely checked the work of every enumerator under him/her. The data processing division initially carried out manual coding and editing of filled-in schedules. Computer editing was also carried out to produce clean data sets freed of errors and ready for tabulation. QA was maintained in production of tables also so as to maintain timeliness and security of the tables. In the dissemination of census results accessibility, relevance and user satisfaction is proposed to be ensured.

### 1.11 Limitations of the Survey

The various estimates presented in this report are derived from a sample of the surveyed population. As in any such survey, these estimates are subject to both sampling and non-sampling errors. Although the CIPS 2013 sample was chosen at random, the people who took part in the survey might not necessarily be a representative cross-section of the total population. Like all sample surveys the results of the present survey are estimates of the corresponding figures for the whole population and these results might vary from the true value in the population. Nevertheless the demographic, social and economic indicators produced are broadly comparable with earlier census and survey results so as to serve as a measure of change over time, useful for planning and monitoring.

# Chapter 2 <br> Sampling Design, Estimation and Evaluation 

### 2.1 Introduction

This is the second Inter-censal Population Survey to be conducted in Cambodia (CIPS 2013). The total sample size determined in order to make reliable estimates at provincial level was 955 out of 28,000 Enumeration Areas (EAs) of the 2008 Census as Primary Sampling Units (PSUs) and 28,650 households as the Secondary Sampling Units (SSUs).

The survey was designed to provide reliable estimates for urban and rural areas at the national level but at provincial level, it was expected to provide reliable estimates only for total population disaggregated by sex. Sample fraction varied by stratum and data were weighted to correctly represent the population. Usually data would be weighted if the sample design gave each individual an equal chance of being selected. This can be achieved by using survey weights. Weights can also serve other purposes, such as helping to correct for non-response.

### 2.2 Sampling Frame

The sampling frame used for the 2013 CIPS was the complete list of all EAs of the 2008 General Population Census of Cambodia. The list was updated to reflect administrative changes since the last census up to September 2011. The main administrative change was the relocation of the boundary between Kandal and Phnom Penh provinces with the result that 20 communes were shifted from Kandal province to Phnom Penh. Twelve new communes were established, six of them in Battambang province. In addition there were less significant changes like shifting of communes from one district to another within a province, splitting and merging of villages etc. and creation of another Khan in Phnom Penh (called Khan Pur Senchey) by annexing some part of Khan Dangkor and Kandal province. Taking into account all aspects, some geographic areas have been re-coded for construction of a revised and updated sampling frame for utilization in the multistage sample design.

### 2.3 Stratification

The main domains of study for the survey are the provinces. Reliable estimates were required for each province. Consequently, the sampling frame was stratified by province. Within province a further stratification by urban and rural was done. There was no explicit stratification of province as urban and rural in the Demographic Survey of 1996 and CIPS 2004. The list of EAs was geographically ordered in a serpentine fashion within each stratum. This ordering provided a further implicit stratification on geographical location within the explicit strata as systematic sampling was employed.

### 2.4 Sample Size and Sample Allocation

An approximately almost equal allocation number of households over the provinces were employed, giving a sample of approximately 1,200 households in each province. The size of the provinces (population-wise) varies substantially; the largest province represents 13.1 percent of the total households in the country; the smallest one represents just 0.3 percent of the total households in the country. Within each province the sample was allocated approximately proportionally between urban and rural areas.

Table 2.1 Distribution of Sample Enumeration Areas (EA) and Households by provinces

| Province | Sample Size |  |
| :---: | :---: | :---: |
|  | Enumeration Areas (EAs) | Households |
| (1) | (2) | (3) |
| Cambodia | 955 | 28,650 |
| BanteayMeanchey | 41 | 1,230 |
| Battambang | 41 | 1,230 |
| Kampong Cham | 41 | 1,230 |
| Kampong Chhnang | 40 | 1,200 |
| Kampong Speu | 41 | 1,230 |
| Kampong Thom | 40 | 1,200 |
| Kampot | 40 | 1,200 |
| Kandal | 41 | 1,230 |
| Koh Kong | 39 | 1,170 |
| Kratie | 40 | 1,200 |
| MondulKiri | 37 | 1,110 |
| Phnom Penh | 41 | 1,230 |
| PreahVihear | 39 | 1,170 |
| Prey Veng | 41 | 1,230 |
| Pursat | 40 | 1,200 |
| Ratanak Kiri | 39 | 1,170 |
| Siem Reap | 41 | 1,230 |
| Preah Sihanouk | 40 | 1,200 |
| Stung Treng | 39 | 1,170 |
| Svay Rieng | 40 | 1,200 |
| Takeo | 41 | 1,230 |
| OtdarMeanchey | 40 | 1,200 |
| Kep | 35 | 1,050 |
| Pailin | 38 | 1,140 |

### 2.5 Survey design

The sample design for the survey was a stratified two-stage sampling design, where the Enumeration Areas (EAs) were considered as the Primary Sampling Units (PSUs) and the households as Secondary Sampling Units (SSUs).

### 2.5.1 Primary Sampling Units (PSUs)

The EAs or the primary sampling units (PSUs) were well-defined geographic units for which reliable population data are available. The EAs were arranged by geographical codes like province code, district code, commune code, and village code village code and enumeration area code. The sample EAs were then selected using the Linear Systematic Sampling without Replacement (LSSWR).

Selected EAs with less than 40 regular households were discarded and replaced by a neighboring EA of sufficient size. Altogether 12 EAs were replaced in this manner. This procedure was not strictly correct. It meant that the households in the small EAs had no chance of being included in the sample-a violation of the basic principle in sampling. The proper procedure would be to combine the selected EA with a neighboring EA in a random way. However, the number of replacements being so small, it does not significantly affect the quality of the estimates.

Large EAs-the number of households exceeding 150 -were divided into roughly equal sized segments containing approximately $60-80$ households and one segment was selected randomly. In the case of segmenting, the field team recorded the number of segments that were created and the segment that was selected out of them. The EA map prepared clearly indicated the EA and the segments created within the EA.

An important principle followed was that as far as possible the selected sample of EAs should not be tampered with. If a selected EA turned out to have very few households, still this EA was kept in the sample. Still, in a few cases practical considerations might have overruled this principle. There were two cases where whole villages were relocated from one place to another because the old place had to be cleared for development projects (villages 09020103 and 09020302). In these cases it was decided to keep the villages in the sample.

### 2.5.2 Secondary Sampling Units (SSUs)

For the purpose of selection of the secondary sampling unit, a household was defined as follows to guide the field staff:" It is a group of people who presently live together and take food from a common kitchen. By this definition, a household does not include persons who are currently living elsewhere for purposes of study or work. The household includes domestic workers or temporary visitors. And, in practice, we want to select our respondent from among persons in the household who will be available for interview on that same day".

In multi-household dwelling structures (like blocks of flats, compounds with multiple houses, or backyard dwellings for rent, relatives, or household workers), each household was treated as a separate sampling unit.

At this stage, sample households in the sample EA were selected, by Linear Systematic Sampling (LSS) with Random start method as described below:
$\mathrm{R} 1=1$ to I: Random start in range between 01 to Interval ( $\mathrm{R}=1$ to I)
$\mathrm{I}=$ Interval between household to another households in the listing sheet
Where:

$$
\mathbf{I}=\mathbf{M}_{\mathbf{h i}} / \mathbf{m}_{\mathrm{hi}}
$$

Mhi : Actual number households in the list in EA at the time of survey mhi : ( 30 hhs ) the sample of households selected from the selected EA Assume $\mathrm{R}=\mathrm{R} 1$ Random start or the 1 sample household ( $\mathrm{R}=01$ to I ) The 30 sample households are calculated as below


### 2.6 Probability Selection

There was no proportional allocation of the sample at the national level. The spreadsheet containing all sampling parameters and selection probabilities were prepared to facilitate the calculation. Sampling was carried out based on separate sampling probabilities for each sampling stage.

### 2.6.1 Probability 1

The first-stage sampling probability involved in selection of each $\mathrm{i}^{\text {th }}$ EA in $\mathrm{h}^{\text {th }}$ Stratum is:

$$
\mathrm{P}_{\mathrm{hhi}}=\frac{\mathrm{n}_{\mathrm{hi}}}{\mathrm{~N}_{\mathrm{hi}}}
$$

Where:
$\mathrm{n}_{\mathrm{hi}}$ is the number of EAs selected in $\mathrm{h}^{\text {th }}$ stratum. $\mathrm{N}_{\mathrm{hi}}$ is the total number of EAs in the $h^{\text {th }}$ stratum

### 2.6.2 Probability 2

The second-stage sampling probability involved in selection of certain households within the selected EA in stratum $h$ is:

$$
\mathrm{P}_{2 \mathrm{hi}}=\frac{\mathrm{m}_{\mathrm{hi}}}{\mathrm{M}_{\mathrm{hi}} \cdot \mathrm{~S}_{\mathrm{hi}}}
$$

Where:
$m_{\text {hi }}$ is the number of households selected in EA i in stratum $h\left(m_{h i}\right.$ is usually $=30$; will be less than 30 if the EA is very small, having less than 30 households in total). $\mathrm{M}_{\mathrm{h}} \mathrm{i}$ is the number households listed in EA (or segment) i in stratum h .
$\mathrm{S}_{\mathrm{hi}}$ is the number of segments created in the EA (in most cases=1, i.e. when no segmentation has been done. If 3 segments have been created then $S_{h i}$ is equal to 3).

### 2.7 Extrapolation

A spreadsheet containing all sampling parameters and selection probabilities were prepared to facilitate the calculation of sampling weights. Sampling weights were adjusted for household and individual records. The overall selection probability of each household in cluster $i$ of stratum $h$ is the product of the two stages of selection probabilities.

$$
P_{h i}=P_{1 h i} \cdot P_{2 h i}
$$

### 2.7.1 Basic weight

The sampling weight (design weight) for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$
w_{h i}=\frac{1}{P_{h i}}=\frac{1}{P_{1 h i}} \cdot \frac{1}{P_{2 h i}}=w_{1 h i} \cdot w_{2 h i}=\frac{N_{h}}{n_{h}} \cdot \frac{M_{h i} \cdot S_{h i}}{m_{h i}}
$$

### 2.7.2 Adjustment weight

A study of the sizes of the sampled EAs in terms of number of households showed that the EA sizes $\left(\mathrm{M}_{\mathrm{hi}}\right)$ were on the low side. There was probably some confusion in some areas regarding the exact location of the EA boundaries resulting in under listing of households. Furthermore, there could be cases where the EA was segmented but the segmentation was not properly recorded in the sampling sheets. It was therefore decided to introduce an adjustment to the design weights with the effect that the sample households in the EA would not be raised to the EA-total $\left(\mathrm{M}_{\mathrm{hi}}\right)$ but rather to the number of households per EA in the village where the EA is located. The weights became:

$$
w_{h i}=\frac{N_{h}}{n_{h}} \cdot \frac{\bar{M}_{h i}}{m_{h i}}
$$

where $\overline{\mathrm{M}}_{\mathrm{hi}}$ is the number of households per EA in the village where the EA is located.
These weights were used for estimates of household characteristics based on Form B data. The weights can be expressed in terms of first and second stage weights as:

$$
w_{h i}=w_{1 h i} \cdot w_{2 j i}=\frac{N_{h} \cdot \bar{M}_{h i}}{n_{h} \cdot M_{h i}} \cdot \frac{M_{h i}}{m_{h i}}
$$

The first stage weight ( $\mathrm{w}_{1 \mathrm{hi}}$ ) was used for estimates of household characteristics based on the Form A questionnaire. (Form A covered all households in the selected EA so there was no need for the second stage weight).

The sum of the first stage weights over the sample constituted an estimate of the total number of regular households in the country. The estimate of total number of households was short of the number of households reported in the Commune Data Base (CDB). It was therefore decided to adjust the first stage household weights slightly upwards so that the estimates would agree with CDB totals. This "calibration" of the weights was done at the province level by urban/rural. A further adjustment was done in Phnom Penh and Kandal provinces due to the changes in boundaries between the two provinces (20 Kandal communes were transferred to Phnom Penh province in 2011).

### 2.8 Standard Errors and Confidence Intervals

The sample survey is always affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. To minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically. Sampling errors, on the other hand, can be evaluated statistically. It is usually measured in terms of the standard error for a particular statistic (mean, proportion), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. The standard errors are calculated in the SPSS Complex Samples module. The variance of an estimate of a total is:

$$
V(\hat{Y})=\sum_{h=1}^{L}\left[\frac{n_{h}}{n_{h}-1} \sum_{i=1}^{n_{h}}\left(\hat{Y}_{h i}-\frac{\hat{Y}_{h}}{n_{h}}\right)^{2}\right],
$$

where:

$$
\begin{array}{r}
\hat{Y}_{h i}=\sum_{j=1}^{m_{h}} W_{h i}^{\prime} y_{h j} \\
\hat{Y}_{h}=\sum_{i=1}^{n_{n}} \hat{Y}_{h i}
\end{array}
$$

Some of the estimates from the CIPS will be in the form of proportions or percentages. The variance estimator of a ratio can be expressed as follows:

$$
V(\hat{R})=\frac{1}{\hat{X}^{2}}\left[V(\hat{Y})+\hat{R}^{2} V(\hat{X})-2 \hat{R} \operatorname{COV}(\hat{X}, \hat{Y})\right]
$$

where:

$$
\operatorname{COV}(\hat{X}, \hat{Y})=\sum_{h=1}^{L}\left[\frac{n_{h}}{n_{h}-1} \sum_{i=1}^{n_{h}}\left(\hat{X}_{h i}-\frac{\hat{X}_{h}}{n_{h}}\right)\left(\hat{Y}_{h i}-\frac{\hat{Y}_{h}}{n_{h}}\right)\right]
$$

## $V(\hat{Y})$ and $V(\hat{X})$ are calculated according to the formula for the variance of a total.

### 2.8.1 Confidence Intervals

Table 1 provides standard errors, confidence intervals and coefficients of variation for estimated number of people by province. The overall reliable estimate at 95 percent of confidence interval of population figures at national level of the CIPS, 2013 falls between 14,356,392 and 14,996,882. These confidence intervals vary from province to province of Cambodia as may be seen in Table 2.2.

## Table 2.2 Standard Errors, Confidence Intervals and Coefficient of Variation for estimated number of people by Province

| Province | Estimate | Standard Error | 95\% Confidence Interval |  | Coefficient of Variation |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Lower | Upper |  |
| (1) | (2) | (3) | (4) | (5) | (6) |
| Country | 14,676,607 | 163,166 | 14,356,392 | 14,996,822 | . 011 |
| Banteay Meanchey | 729,624 | 38,444 | 654,177 | 805,071 | . 053 |
| Battambang | 1,121,001 | 42,729 | 1,037,145 | 1,204,857 | . 038 |
| Kampong Cham | 1,757,190 | 66,630 | 1,626,427 | 1,887,953 | . 038 |
| Kampong Chhnang | 523,202 | 28,006 | 468,240 | 578,164 | . 054 |
| Kampong Speu | 755,465 | 35,831 | 685,145 | 825,785 | . 047 |
| Kampong Thom | 690,386 | 39,344 | 613,172 | 767,599 | . 057 |
| Kampot | 611,583 | 30,548 | 551,632 | 671,534 | . 050 |
| Kandal | 1,115,959 | 37,863 | 1,041,652 | 1,190,267 | . 034 |
| Koh Kong | 122,258 | 6,417 | 109,664 | 134,853 | . 052 |
| Kratie | 344,195 | 14,053 | 316,615 | 371,775 | . 041 |
| Mondul Kiri | 72,680 | 4,338 | 64,166 | 81,194 | . 060 |
| Phnom Penh | 1,688,040 | 66,892 | 1,556,763 | 1,819,318 | . 040 |
| Preah Vihear | 235,355 | 10,925 | 213,914 | 256,796 | . 046 |
| Prey Veng | 1,156,821 | 34,578 | 1,088,962 | 1,224,680 | . 030 |
| Pursat | 435,562 | 18,288 | 399,672 | 471,453 | . 042 |
| Ratanak Kiri | 183,699 | 15,812 | 152,667 | 214,730 | . 086 |
| Siem Reap | 922,975 | 65,890 | 793,665 | 1,052,285 | . 071 |
| Preah Sihanouk | 250,180 | 19,315 | 212,274 | 288,086 | . 077 |
| Stung Treng | 122,791 | 7,168 | 108,724 | 136,857 | . 058 |
| Svay Rieng | 578,461 | 21,575 | 536,121 | 620,802 | . 037 |
| Takeo | 923,297 | 29,982 | 864,457 | 982,137 | . 032 |
| Otdar Meanchey | 231,387 | 11,328 | 209,156 | 253,618 | . 049 |
| Kep | 38,700 | 842 | 37,047 | 40,353 | . 022 |
| Pailin | 65,795 | 2,407 | 61,071 | 70,520 | . 037 |

# Chapter 3 <br> Population Size, Growth and Distribution 

### 3.1 Population size

According to Cambodia Inter-censal Population Survey 2013 (CIPS 2013), the total population of Cambodia at 00 hour of March 2013 was 14.68 million as against the census count of 13.40 million in 2008. In absolute terms, Cambodia's population has increased by 1.28 million during the half-decade 2008-2013. Population of Cambodia was 5.7 million according to the 1962 Census which was the first official census conducted after the country attained independence from the French rule. Cambodia's demographic scenario had changed completely after that census due to war and unrest.

No census could be organized until 1998, and there were no systematic national surveys until 1993-94. However, the population changes during the 1970s were examined in detail by several demographers and scholars who made different population estimates, and the Government of the People's Republic of Kampuchea carried out population counts in 1979 and 1980.

There was no further confirmed information about Cambodia's population until 1992. The United Nations Transitional Authority in Cambodia (UNTAC) registered 4.28 million voters aged 20 and over. The Socio-Economic Survey of Cambodia conducted by the NIS in April 1994 estimated the country's population as 9.87 million. The NIS carried out the Demographic Survey in March 1996 covering 20,000 households and estimated the population as 10.7 million. This remained as the only source of population until the 1998 Census conducted in March 1998. Cambodia's population according to the census was 11.4 million in 1998. This had increased by about 1.96 million during the decade 19982008 reaching the figure of 13.40 million. During 2008-2013 the country's population had further increased to 14.68 million (Figure 3.1).

Figure 3.1 Population Trends in Cambodia


Source: See text (Paragraph 3.1)

### 3.2 Regional Population

Table 3.1 shows the population size and population growth by Residence (i.e. urban-rural) and Natural Region of Cambodia during 1998-2013. Table 3.1 indicates that there are large regional variations in population distribution. The Plains region has always accounted for the largest population concentration ( 48.9 percent of the country's total population in 2008 and correspondingly 49.19 per cent in 2013) (Table 3.5). Tonle Sap region has the second largest population ( 32.52 percent and 32.16 percent in 2008 and 2013 respectively). The coastal region which comes third in terms of population concentration accounts for 6.97 per cent of the country's population in 2013 as against 11.43 percent in 2008. The Plateau and Mountain region with difficult transportation conditions and large concentration of ethnic minority people accounts only for 11.68 percent of total population in 2013 as against to 11.43 percent in 2008. It may also be noted that during the last five years there was no major change in the share of the population of each region in the country's population.

According to CIPS 2013, the estimated population of Cambodia is 14.68 million. The official population projections for Cambodia as of 1 July 2013, is 14.96 million. By interpolation, as of 3 March 2013, the projected population would be in the order of 14.89 million. Hence in terms of absolute figures the CIPS 2013 estimated population ( 14.68 million) is less than the projected population ( 14.89 million) by about 0.21 million or about 1.4 per cent.

The population of Cambodia as on 3 March 2008 was 13.40 million as per the 2008 General Population Census of Cambodia .Comparing the CIPS 2013 estimate of population of 14.68 million with this, the annual growth rate of population during 2008-2013 works out to 1.83 per cent. However, as was done during the projection exercise, this has to be viewed in the light of under enumeration in the 2008 Census which is officially estimated as 2.77 per cent from the Post Enumeration Survey (PES). Adjusting for this under enumeration in the 2008 Census, the base population in 2008 is given by 13.77 million. Based on this population the growth rate of population as per CIPS 2013 during 2008-2013 is calculated as 1.28 per cent.

Another way of looking at the population growth rate is by comparing with the estimated population from CIPS 2004 ( 13.09 million). If this is done the annual growth rate during the nine years 2004-2013 works out to 1.27 percent. Considering all the aspects, the growth rate of population in Cambodia during 2008-2013 may be the average of the three estimates ( 1.83 per cent, 1.28 percent and 1.27 percent), namely 1.46 per cent.

The population growth rate at national level was projected as 1.54 per cent in 2013 which is slightly higher than 1.46 per cent arrived at as population growth rate during 2008-2013 by the CIPS 2013 estimate. The relatively small difference between the projections and CIPS 2013 estimate may be accounted for by the fact that two different methodologies were adopted in projections and sample survey estimations. Projections are based on several assumptions pertaining to fertility, mortality and migration. Any sample survey is subject to sampling and non-sampling errors. The marginal difference may not, therefore, be considered significant.

The annual exponential growth rate of the population of Cambodia is higher than that of Southeast Asia as a whole ( 1.1 per cent) as per ESCAP Population Data Sheet of 2012. Cambodia's population has increased at a rate very much higher than that of Thailand ( 0.5 per cent) and marginally higher than the growth rate of Viet Nam (1.0 per cent) and marginally lower than the growth rate of Lao PDR (1.7 per cent).

Table 3.1 Population size and growth by Residence and Natural Region, Cambodia 1998-2013 and 2008-2013

| Residence/ Natural Region | Population |  | CIPS 2013 | Growth Rate (Per cent) |  | Annual growth rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998 | 2008 |  | 1998-2008 | 2008-2013 | 1998-2008 | 2008-2013 |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Total | 11,437,656 | 13,395,682 | 14,676,591 | 16.66 | 9.56 | 1.54 | 1.83* |
| Urban | 2,095,074 | 2,614,027 | 3,146,213 | 24.77 | 20.36 | 2.21 | 3.71 |
| Rural | 9,342,582 | 10,781,655 | 11,530,378 | 14.85 | 6.94 | 1.38 | 1.34 |
| Plains Region | 5,878,305 | 6,547,953 | 7,219,724 | 10.55 | 10.26 | 1.00 | 1.95 |
| Tonle Sap region | 3,505,448 | 4,356,705 | 4,719,967 | 22.71 | 8.34 | 2.05 | 1.60 |
| Coastal Region | 844,861 | 960,480 | 1,022,701 | 7.94 | 6.48 | 0.76 | 1.26 |
|  <br> Mountain Region | 1,189,042 | 1,530,544 | 1,714,200 | 24.03 | 12.00 | 2.15 | 2.27 |

Note: * Please see explanation in Paragraph 3.2 on population growth rate.

Having explained the intrinsic annual growth rate of population at the national level as 1.46 per cent the discussion below will confine itself to annual growth rate based on actual count in the 1998 and 2008 Censuses and estimated CIPS 2013 populations. In CIPS 2013 no adjustment of population for under count is possible at Regional and Provincial levels as Post enumeration Survey estimates of under count is not available at Province and regional levels. Moreover for comparison purposes the actual count of population could be used assuming that coverage error could be present in any such large scale count.

Among the Natural regions, the Plateau and Mountain had registered the highest average annual population growth rate mainly due to in-migration of people from other provinces. It is followed by the Plains region which has registered the second highest growth rate, the Tonle Sap region which comes third in respect of growth rate and the coastal region which has the least growth rate during the half decade 2008-2013. Compared to the decade 1998-2008, the average annual population growth rate has increased in all regions except in Tonle Sap region.

Figure 3.2 Population growth rate by Natural Region, Cambodia, 1998-2013 and 2008-2013


It is observed from Table 3.2 that over the years, the comparatively less developed provinces of Preah Vihear, Otdar Meanchey, Ratanak Kiri and Mondul Kiri, have been registering high annual population growth rates. This may be due to absorption of migrant population from other provinces as a result of availability of land for cultivation, better economic opportunities and fresh developments in these areas. The annual population growth rate during 2008-2013 among provinces ranges from negative growth rate of -1.38 percent (Pailin) to as high a growth rate as 6.37 per cent (Preah Vihear). In 2013, the following 11 provinces have recorded an annual population growth rate higher than the national growth rate: Preah Vihear, Otdar Meanchey, Ratanak Kiri, Mondul Kiri, Prey Veng, Svay Rieng, Preah Sihanouk, Phnom Penh, Kampong Chhnang, Stung Treng and Pursat. The remaining 13 provinces have registered each an annual population growth rate lower than that of Cambodia as a whole. However, in respect of the following three provinces, the growth rate differs only slightly from the national average growth rate: Battambang, Kampong Thom, and Pursat. At the extremes, the growth rate of Preah Vihear is 4.5 percentage points higher and that of Pailin 3.2 percentage points lower than the overall growth rate.

When compared to 1998-2008, the annual population growth rate in respect of each of the following fifteen provinces has declined in the half decade 2008-2013: Banteay Meanchey, Battambang, Kampong Speu, Kampot, Kandal, Kratie, Mondul Kiri, Phnom Penh, Ratanak Kiri, Siem Reap, Preah Sihanouk, Stung Treng, Otdar Meanchey, Kep and Pailin. In the remaining nine provinces, the annual population growth rate has increased during the same period, though in varying degrees.

Table 3.2 Population Growth (Percent) in Cambodia and Provinces, 1998-2008 and 2008-2013

| Cambodia/Province | Population |  |  | Annual Growth Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1998 | 2008 | 2013 | 1998-2008 | 2008-2013 |
| (1) | (2) | (3) | (4) | (5) | (6) |
| Cambodia | 11,437,656 | 13,395,682 | 14,676,591 | 1.54 | 1.83* |
| Banteay Meanchey | 577,772 | 677,872 | 729,569 | 1.56 | 1.47 |
| Battambang | 793,129 | 1,025,174 | 1,121,019 | 2.28 | 1.79 |
| Kampong Cham | 1,608,914 | 1,679,992 | 1,757,223 | 0.43 | 0.90 |
| Kampong Chhnang | 417,693 | 472,341 | 523,202 | 1.22 | 2.05 |
| Kampong Speu | 598,882 | 716,944 | 755,465 | 1.79 | 1.05 |
| Kampong Thom | 569,060 | 631,409 | 690,414 | 1.03 | 1.79 |
| Kampot | 528,405 | 585,850 | 611,557 | 1.03 | 0.86 |
| Kandal | 1,075,125 | 1,091,170 | 1,115,965 | 1.62 | 0.45 |
| Koh Kong | 116,061 | 117,481 | 122,263 | 0.12 | 0.80 |
| Kratie | 263,175 | 319,217 | 344,195 | 1.93 | 1.51 |
| Mondul Kiri | 32,407 | 61,107 | 72,680 | 6.34 | 3.47 |
| Phnom Penh | 999,804 | 1,501,725 | 1,688,044 | 2.83 | 2.34 |
| Preah Vihear | 119,261 | 171,139 | 235,370 | 3.61 | 6.37 |
| Prey Veng | 926,042 | 947,372 | 1,156,739 | 0.01 | 3.99 |
| Pursat | 360,445 | 397,161 | 435,596 | 0.69 | 1.85 |
| Ratanak Kiri | 94,243 | 150,466 | 183,699 | 4.67 | 3.99 |
| Siem Reap | 696,164 | 896,443 | 922,982 | 2.52 | 0.58 |
| Preah Sihanouk | 171,735 | 221,396 | 250,180 | 2.54 | 2.44 |
| Stung Treng | 81,074 | 111,671 | 122,791 | 3.20 | 1.90 |
| Svay Rieng | 478,252 | 482,788 | 578,380 | 0.09 | 3.61 |
| Takeo | 790,168 | 844,906 | 923,373 | 0.66 | 1.78 |
| Otdar Meanchey | 68,279 | 185,819 | 231,390 | 8.64 | 4.39 |
| Kep | 28,660 | 35,753 | 38,701 | 2.21 | 1.58 |
| Pailin | 22,906 | 70,486 | 65,795 | 11.24 | -1.38 |

(1)* Please see explanation in Paragraph 3.2 on population growth rate.
(2) The annual exponential growth rate for 1998-2008 is worked out after adding to 1998 rural population, the estimated population in areas (wholly rural) where the 1998 Census could not be conducted due to conflict
(3) Figures in Columns 2,3 and 5 in respect of Koh Kong and Preah Sihanouk provinces are based on the New Frame that emerged after the 2008 Sub-Decree changes of administrative areas.
(4) After the 2008 Census, 20 communes with a population of 410,555 were transferred from Kandal Province to Phnom Municipality. The growth rates in column 6 above for these two areas have been worked out taking this fact into account.

### 3.3 Proportion of Population and Ranking by Province

Table 3.3 provides the population proportion and ranking of the provinces of Cambodia according to CIPS 2013. Kampong Cham and Phnom Penh have maintained the first and second rank respectively in 2008 and 2013. Kep continues to be the last province in terms of population size. Prey Veng has shifted from rank number 5 in 2008 to rank number 3, Preah Vihear from rank number 18 to 17, Stung Treng from 21 to 20 and Mondul Kiri from 23 to 22, while Kandal and Battambang have fallen from ranks 3 and 4 to ranks 4 and 5 respectively.

Table 3.3 Provinces Ranked by Percentage of Population in 1998, 2008 and 2013

| Province | Percentage of Population |  | Rank in |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ | $\mathbf{1 9 9 8}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Kampong Cham | 14.07 | 12.54 | 11.90 | 1 | 1 | 1 |
| Phnom Penh | 8.74 | 11.21 | 11.82 | 3 | 2 | 2 |
| Prey Veng | 8.10 | 7.07 | 7.81 | 4 | 5 | 3 |
| Kandal | 9.40 | 8.15 | 7.67 | 2 | 3 | 4 |
| Battambang | 6.93 | 7.65 | 7.62 | 5 | 4 | 5 |
| Siem Reap | 6.09 | 6.69 | 6.28 | 7 | 6 | 6 |
| Takeo | 6.91 | 6.31 | 6.24 | 6 | 7 | 7 |
| Kampong Speu | 5.24 | 5.35 | 5.12 | 8 | 8 | 8 |
| Banteay Meanchey | 5.05 | 5.06 | 4.97 | 9 | 9 | 9 |
| Kampong Thom | 4.98 | 4.71 | 4.68 | 10 | 10 | 10 |
| Kampot | 4.62 | 4.37 | 4.13 | 11 | 11 | 11 |
| Svay Rieng | 4.18 | 3.60 | 3.91 | 12 | 12 | 12 |
| Kampong Chhnang | 3.65 | 3.53 | 3.55 | 13 | 13 | 13 |
| Pursat | 3.15 | 2.96 | 2.95 | 14 | 14 | 14 |
| Kratie | 2.30 | 2.38 | 2.34 | 15 | 15 | 15 |
| Preah Sihanouk | 1.50 | 1.65 | 1.72 | 16 | 16 | 16 |
| Preah Vihear | 1.04 | 1.28 | 1.59 | 17 | 18 | 17 |
| Otdar Meanchey | 0.60 | 1.39 | 1.58 | 21 | 17 | 18 |
| Ratanak Kiri | 0.82 | 1.12 | 1.24 | 19 | 19 | 19 |
| Stung Treng | 0.71 | 0.83 | 0.84 | 20 | 21 | 20 |
| Koh Kong | 1.01 | 0.88 | 0.83 | 18 | 20 | 21 |
| Mondul Kiri | 0.28 | 0.46 | 0.50 | 22 | 23 | 22 |
| Pailin | 0.20 | 0.53 | 0.46 | 24 | 22 | 23 |
| Kep | 0.25 | 0.27 | 0.26 | 23 | 24 | 24 |

### 3.4 Population Density

Population density, defined as the number of persons per square kilometer, is one of the important indices of population. It is a measure of the concentration of population. According to CIPS 2013, Cambodia's population density is 82 , having increased by 7 points from the level of 75 as per the 2008 Census. However it is much less than 132 for South East Asia, 268 for Viet Nam and 136 for Thailand. It is higher than 27 of Lao PDR. As is to be expected, population density in urban areas is very much higher than that in rural areas. Table 3.4 presents population density by province in 2008 and 2013.

Table 3.4 Population density by Province 2008 and 2013

| Code | Cambodia/Province | Population Density in |  |
| :---: | :---: | :---: | :---: |
|  |  | 2008 | 2013 |
| (1) | (2) | (3) | (4) |
| Cambodia |  | 75 | 82 |
| 01 | Banteay Meanchey | 101 | 109 |
| 02 | Battambang | 88 | 96 |
| 03 | Kampong Cham | 171 | 179 |
| 04 | Kampong Chhnang | 86 | 95 |
| 05 | Kampong Speu | 102 | 108 |
| 06 | Kampong Thom | 46 | 50 |
| 07 | Kampot | 120 | 125 |
| 08 | Kandal | 335 | 343 |
| 09 | Koh Kong | 12 | 12 |
| 10 | Kratie | 29 | 31 |
| 11 | Mondul Kiri | 4 | 5 |
| 12 | Phnom Penh | 2,196 | 2,468 |
| 13 | Preah Vihear | 12 | 17 |
| 14 | Prey Veng | 194 | 237 |
| 15 | Pursat | 31 | 34 |
| 16 | Ratanak Kiri | 14 | 17 |
| 17 | Siem Reap | 87 | 90 |
| 18 | Preah Sihanouk | 114 | 129 |
| 19 | Stung Treng | 10 | 11 |
| 20 | Svay Rieng | 163 | 195 |
| 21 | Takeo | 237 | 259 |
| 22 | Otdar Meanchey | 30 | 38 |
| 23 | Kep | 106 | 115 |
| 24 | Pailin | 88 | 82 |

Note 1: Includes area of Tonle Sap ( $3,000 \mathrm{Km}^{2}$ )

Map 3.1 depicts the variations in population density by province as in 2013. Across the natural regions, population density varies substantially (Table 3.5).The population density in the Plains has been the highest followed by Tonle Sap, Coastal, and Plateau and Mountain regions in that order.

Table 3.5 Distribution of land area, population and population density by region, 2008-2013

| Natural Regions | Area (\%) | Population (\%) |  | Population density <br> (Persons/Sq. Km.) |  |
| :--- | ---: | ---: | :---: | :---: | :---: |
|  |  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ |
| Cambodia | $\mathbf{1 8 1 0 3 5}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{7 5}$ | $\mathbf{8 2}$ |
| Plain | 25,069 | 48.9 | 49.2 | 261 | 288 |
| Tonle Sap | 67,668 | 32.5 | 32.2 | 64 | 70 |
| Coastal | 17,237 | 7.2 | 7.0 | 56 | 59 |
| Plateau and Mountain | 68,061 | 11.4 | 11.7 | 22 | 25 |

Note: *Including the Tonle Sap lake (3,000 Km ${ }^{2}$ )

Figure 3.3 Distribution of Population (Percent) by Natural Region, Cambodia, 2008 and 2013


Map 3.1 Density of Population by Province, Cambodia 2013


### 3.5 Distribution of population by Urban and Rural

Table 3.6 Population by Urban-Rural Residence and Sex, Cambodia 2008 and 2013

| Total/ <br> Urban/ <br> Rural | Population in |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
|  | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 3 , 3 9 5 , 6 8 2}$ | $\mathbf{6 , 5 1 6 , 0 5 4}$ | $\mathbf{6 , 8 7 9 , 6 2 8}$ | $\mathbf{1 4 , 6 7 6 , 5 9 1}$ | $\mathbf{7 , 1 2 1 , 5 0 8}$ | $\mathbf{7 , 5 5 5 , 0 8 3}$ |
| Urban | $2,614,027$ | $1,255,570$ | $1,358,457$ | $3,146,213$ | $1,527,479$ | $1,618,734$ |
| Rural | $10,781,655$ | $5,260,484$ | $5,521,171$ | $11,530,378$ | $5,594,029$ | $5,936,349$ |

Between 2008 and 2013, the national population increased by 1.3 million persons, of which urban areas witnessed an increase of 0.5 million persons (accounting for 41.4 percent) while rural areas saw an increase of 0.8 million persons (accounting for 58.6 percent) (Table 3.6). The percentages of urban population to total population of Cambodia in 2008 and 2013 are 19.5 and 21.4 respectively (Table 3.7). As per the 1998 Census the urban proportion was 18.3 percent. There is, therefore, an increasing trend in urbanization in Cambodia over the years.

During the period 2008-2013, the average annual population growth in urban areas was 3.7 percent, while in rural areas it was only 1.3 percent (Table 3.1). Migration plays an important role in the relatively higher rate of growth of population in urban areas.

The Plains region has a relatively high share of its population in urban areas ( 26.3 percent), compared to 2008 when the figure was less by about 1.5 percentage points ( 24.8 percent) (Table 3.7).This high proportion of urbanites in this region can be explained by the fact that it contains large urban centres like Kampong Cham, Kandal, Takeo, Prey Veng, Svay Rieng and the capital city of Phnom Penh. The coastal region comes second in respect of share of urban population as it contains the port town of Preah Sihanouk. Tonle Sap and Plateau and Mountain regions come third and fourth in this regard.

Table 3.7 Percentage of Urban Population by Sex, Cambodia, and Natural Regions 2008 and 2013

| Natural Regions | Population 2008 |  |  | Population 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female | Total | Male | Female |
| (1) | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Cambodia | $\mathbf{1 9 . 5}$ | $\mathbf{1 9 . 3}$ | $\mathbf{1 9 . 7}$ | $\mathbf{2 1 . 4}$ | $\mathbf{2 1 . 5}$ | $\mathbf{2 1 . 4}$ |
| Plain | 24.8 | 24.3 | 25.2 | 26.3 | 26.3 | 26.3 |
| Tonle Sap | 15.4 | 15.4 | 15.4 | 17.5 | 17.7 | 17.4 |
| Coastal | 18.6 | 18.7 | 18.5 | 24.0 | 23.4 | 24.5 |
| Plateau and Mountain | 9.3 | 9.4 | 9.2 | 10.3 | 10.4 | 10.1 |

### 3.6 Distribution of Population by Religion

In Cambodia, about 97.9 per cent or 14.4 million people are affiliated to Buddhism (Table 3.8). The next largest group is Muslims with 1.1 per cent. Highland tribal groups and a few minority religious groups account for 0.6 per cent. Christians form only 0.5 percent of the population. The pattern of distribution of population by religion is more or less the same in 2008 and 2013.

Table 3.8 Per Cent Distribution of Population by Religion, Residence, Natural Region and Sex, Cambodia 2008 and 2013

| Sex/ Residence Natural Regions | Population 2008 (Per cent) |  |  |  | Population 2013(Per cent) |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Buddhist | Muslim | Christian | Others | Buddhist | Muslim | Christian | Others |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Cambodia | 96.9 | 1.9 | 0.4 | 0.8 | 97.9 | 1.1 | 0.5 | 0.6 |
| Male | 96.9 | 1.9 | 0.4 | 0.8 | 97.9 | 1.1 | 0.5 | 0.6 |
| Female | 97.0 | 1.9 | 0.4 | 0.8 | 97.9 | 1.1 | 0.5 | 0.6 |
| Urban | 97.4 | 1.6 | 0.8 | 0.2 | 98.0 | 0.8 | 1.1 | 0.0 |
| Rural | 96.8 | 2.0 | 0.3 | 0.9 | 97.9 | 1.2 | 0.3 | 0.7 |
| Plains Region | 97.3 | 2.3 | 0.4 | 0.1 | 98.6 | 0.8 | 0.5 | 0.0 |
| Tonle Sap Region | 98.4 | 1.2 | 0.3 | 0.1 | 98.7 | 1.0 | 0.3 | 0.0 |
| Coastal Region | 96.3 | 3.3 | 0.3 | 0.0 | 96.0 | 3.1 | 0.8 | 0.1 |
| Plateau\& Mountain Region | 91.4 | 1.7 | 0.6 | 6.2 | 93.7 | 1.1 | 0.6 | 4.7 |

Table 3.9 Sex Ratio and Percentage of Population by Broad Age Group for each Religion, Cambodia 2013

| Religious Group | Sex Ratio | Percent Distribution by Age Group |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  |  | $\mathbf{0 - 1 4}$ | $\mathbf{1 5 - 5 9}$ | $\mathbf{6 0 +}$ |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ |
| Total | $\mathbf{9 4 . 3}$ | $\mathbf{2 9 . 4}$ | $\mathbf{6 2 . 9}$ | $\mathbf{7 . 6}$ |
| Buddhists | 94.3 | 29.4 | 63.0 | 7.6 |
| Muslims | 91.7 | 29.9 | 62.1 | 8.0 |
| Christians | 100.4 | $\mathbf{2 6 . 3}$ | 67.9 | 5.8 |
| Others | 96.7 | 43.1 | 52.2 | 4.8 |

In 2013 the highest sex ratio is observed among Christians and the lowest among Muslims. The sex ratio of Christians is higher than the national average. The age distributions of Buddhists and Muslims are not very different (Table 3.9).

Table 3.10 Distribution of Population by Place of Birth and Sex, Cambodia 2008-2013

| Place of Birth | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Number | 13,395,682 | 6,516,054 | 6,879,628 | 14,676,591 | 7,121,508 | 7,555,083 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| A. Born in Cambodia | 99.4 | 99.4 | 99.5 | 99.5 | 99.5 | 99.6 |
| I. Within the province of Enumeration | 85.8 | 85.4 | 86.1 | 88.3 | 87.7 | 88.8 |
| (a) born in a place of Enumeration | 75.2 | 74.0 | 76.4 | 74.3 | 72.6 | 75.9 |
| (b) born Elsewhere in the District of Enumeration | 4.7 | 5.2 | 4.2 | 7.6 | 8.2 | 7.0 |
| (c) born in other District of the Province of enumeration | 5.9 | 6.2 | 5.6 | 6.4 | 6.9 | 6.0 |
| 2. Provinces in Cambodia beyond the Province of Enumeration | 13.7 | 14.0 | 13.3 | 11.3 | 11.8 | 10.8 |
| B. Born Abroad | 0.6 | 0.7 | 0.6 | 0.5 | 0.5 | 0.4 |
| 1.In Countries of Asia | 0.6 | 0.6 | 0.5 | 0.5 | 0.5 | 0.4 |
| 2.Other Countries | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

A common trend noticed both in 2008 and 2013 is that a large majority (about 75 per cent) of those enumerated at the Census are born at the place of enumeration (Table3.10). Life time migrants therefore constitute only 25 percent of the population at the national level.

Table 3.11 Distribution of Enumerated Population (other than those born in place of enumeration and abroad) by Place of Birth and Residence, 2013

| Enumerated in | Number | Percent born in |  |
| :--- | :---: | :---: | :---: |
|  |  | Urban | Rural |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ |
| Total | $\mathbf{3 , 7 0 5 , 2 5 3}$ | $\mathbf{1 3 . 9}$ | $\mathbf{8 6 . 1}$ |
| Urban | $1,456,435$ | 15.3 | 84.7 |
| Rural | $2,248,818$ | 44.3 | 55.7 |

Out of about 25 per cent of the population enumerated in places other than their places of birth whose absolute number is about 3.7 million a majority were born in rural areas (Table 3.11). Among those enumerated in urban areas about 85 per cent are rural-born.

### 3.7 Distribution of population by Mother Tongue

In the survey all persons in the selected households were asked to state their mother tongue. This information presented in Table 3.12 shows that Khmer is the predominant mother tongue in the country. Speakers of ethnic minority languages constitute 2.26 percent. Persons with a foreign language as mother tongue (mainly predominant languages of the neighbouring countries) form less than one per cent.

Table 3.12 Percent Distribution of Population by Mother Tongue and Sex, Cambodia 2013

| Sex | Population | Mother Tongue |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Khmer | Viet- <br> names | Chinese | Lao | Thai | Minority <br> Languages | Other |
| $\mathbf{( 1 )}$ |  | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ | $\mathbf{( 8 )}$ | $\mathbf{( 9 )}$ | $\mathbf{( 1 0 )}$ |
| Both Sexes |  | $\mathbf{1 0 0}$ | $\mathbf{9 7 . 0 5}$ | $\mathbf{0 . 4 2}$ | $\mathbf{0 . 0 5}$ | $\mathbf{0 . 1 7}$ | $\mathbf{0 . 0 1}$ | $\mathbf{2 . 2 6}$ | $\mathbf{0 . 0 5}$ |
| Males |  | 100 | 97.08 | 0.41 | 0.05 | 0.17 | 0.01 | 2.21 | 0.06 |
| Females |  | 100 | 97.03 | 0.42 | 0.05 | 0.16 | 0.00 | 2.30 | 0.04 |

The speakers of minority languages, with the exception of Chaams are mostly concentrated in forest and hill areas. The development of these minority ethnic groups forms an important component of National Strategic Development plan of Cambodia.

# Chapter 4 <br> Age Structure, Sex Composition and Marital Status 

### 4.1 Introduction

On-going changes in the size and age structure of populations, at various levels of geographic aggregation, are occurring across most countries of the world. These changes are mostly a function of decline in mortality, in the first instance, and, later, of decline in fertility. The age and sex structure of a population which is determined by the past and current trends in fertility, mortality and migration affect the level of social, economic and political structure of any population. The shifts in the population age structure have had far reaching consequences on a country's work force, economic prospects, public and personal budgets, security risks, cultural organizations and family structures.

Age is such an important characteristic of population that almost all planning for development must take into account this variable. The linkages between sex-age structure and Government policies may be illustrated by an example. In modern times many countries in the developing world like Cambodia have policies to develop human resources and economy by promoting school enrolment and improving the educational attainment of those who enrol.

In order to successfully implement these policies, projections of school-age population at all administrative levels are made from the information on sex-age distribution of the population obtained from the census. On that basis the required numbers of educational institutions in the various parts of the country, buildings, teachers and other infrastructure facilities are planned.

According to the definition laid down by the United Nations, age of a person recorded in a census is "the interval of time between the date of birth and date of the census, expressed in completed solar years". It is also recommended that age information may be obtained by obtaining the date (year, month and day) of birth or by asking directly for age at the respondent's last birth day.

These recommendations were followed in respect of collection of age data in the past censuses and the present survey in Cambodia. Information on age in completed years as on last birthday was obtained from the respondents. Though it is easy enough to ask questions on age, it is somewhat difficult to obtain correct information about age when people are not literate or when they are very old. Suitable steps were taken to collect information on age as accurately as possible from every respondent. Khmer calendar was used by the enumerators in a number of cases to elicit completed age from the respondents who were not able to tell their age. The enumerators were also given a list of events of national and local importance to be used in assisting the respondents to recall their age.

### 4.2 Evaluation of age data of CIPS 2013

As the age data collected may not be hundred per cent correct due to several reasons in spite of all care taken in the field, it is necessary to evaluate them before use. The following standard demographic indices were calculated for this purpose in respect of age data of CIPS 2013.

Table 4.1 Age and Sex data evaluation by residence and sex Cambodia, CIPS 2013

| Sex | Myer's Index | Whipple's Index |  |
| :---: | :---: | :---: | :---: |
|  |  | 0 | 5 |
| (1) | (2) | (3) | (4) |
| Both Sexes | 10.9 | 105 | 109 |
| Male | 9.6 | 102 | 107 |
| Female | 12.1 | 108 | 112 |
| United Nations Age-Sex Accuracy Index |  | 31.6 |  |

## Myer's index

It is a measure of heaping on individual ages or terminal digits. The tendency to record or report certain ages in lieu of others is referred to as age heaping, age preference or digit preference. The theoretical range of Myer's index (on a 0 to 180 scale) extends from the minimum of " 0 " when there is neither preference nor avoidance of any particular digit at all to a maximum of 180 when all ages are reported in a single terminal digit. Myer's index of Cambodia is calculated as 10.9 for CIPS 2013. Hence incidence of age heaping is well within the limit.

## Whipple's index

The age returns were also tested for digit preference and age heaping in terminal digits. The Whipple's indices were calculated for this purpose. Whipple's index is a measure of preference for ages ending in 0 and 5. Its range is from 100, indicating no preference for 0 and 5 up to 500 indicating that only 0 and 5 were reported. Whipple's index for Cambodia worked out to 105 for preference for the digit zero, indicating that there was almost no preference for " 0 ". The index is 109 for preference for the digit five, indicating almost no preference for the digit " 5 " in the survey. It is therefore clear that the collected information on age is free from digit preference.

## United Nations Age-Sex Accuracy Index

The United Nations has proposed an age-sex accuracy index in which the mean of the differences from age to age in reported sex ratios, without regard to sign, is taken as a measure of the accuracy of the observed sex ratios, on the assumption that these age to age changes should approximate to zero. The UN age-sex accuracy index combines the sum of (i) the mean deviation of the age ratio for males from 100 (ii) the mean deviation of the age ratios for females from 100 and (iii) three times the mean of the age to age differences in reported sex ratios. For this purpose age ratio is defined as the ratio of the population in a given age group to one half of the sum of the populations in the preceding and the following age groups.

Adopting this procedure the UN age-sex accuracy index for Cambodia was arrived at as 31.6. An index of 20 or less is considered as indicative of accurate age-sex data. It is to be pointed out that this method does not take into account decline in the sex ratio with increasing age and real irregularities in age distribution due to migration, war etc as well as normal fluctuations in births. Since all these factors affect the age-sex data of Cambodia the index seems to exceed 20.On the basis of the above tests it may be concluded that on the whole the age returns of the CIPS 2013 may be considered fairly reliable despite some irregularities.

### 4.3 Age structure

The age structure of a population is determined by the same three factors which affect the growth rate of any population, namely fertility, mortality and migration. To study the age structure of the population we make use of the percent distribution of the population in different age groups and the graphical presentation called age pyramid which roughly summarizes the demographic history of population.

Figures 4.1, 4.2 and 4.3 depict the population pyramids (for Total, Urban and Rural, Cambodia 2008 and 2013) with the percentage of males and females in five-year age groups, starting with the youngest age group at the bottom, and increasing with age towards the top of the pyramid. The percentage of males is depicted on the left and that of females on the right side of the center of the pyramid. The shaded area shows the population count of the 2008 Census, while the thickly outlined area shows the population count of the CIPS 2013.

A comparison of the age pyramids for 2008 and 2013 shows a fairly consistent pattern in the age distribution. A lower proportion of children in the age group $0-4$ than that in the age group 5-9 is a characteristic feature of the age distribution as a result of improving health status of the country with declining fertility and mortality during the period. The proportion of children (less than 15 years of age) has also declined from 33.7 in 2008 to 29.4 in 2013 indicating fertility decline as the main cause. It is interesting to note that the proportion of children in Cambodia which stood at 42.8 in 1998 declined to 33.7 during the decade 1998-2008 at an average annual rate of 0.91 points and almost continued to do so during the half decade 2008-2013 reaching the proportion of 29.4 in 2013. The age group 10-14 in 2008 and the age group 20-24 in 2013 are the largest cohorts.

Above the age of 10 , the 2008 pyramid shows the usual pattern of gradually decreasing numbers with increasing age with the exception of age group 30-34. In 2013 this pattern is revealed above the age of 20 with the exception of the age group 35-39. The conspicuous decline in the proportion of population in the age group 30-34 in 2008 and five years later in the age group 35-39 may be attributed to the combined effect of low fertility, and high mortality of those born during the Khmer Rouge period (1976-79). The early 1970s saw escalating civil war and in the late 70s during the Khmer Rouge period a large number of killings took place. The sex and age structure beyond age 40 in 2013 as revealed by the age pyramid reflects the high levels of mortality especially among men during the years of turmoil and internal strife in the country.

In general, the pyramids show increase in the working age and aged populations barring age groups $30-$ 34 in 2008 and $35-39$ in 2013. In developed countries the phenomenal rise in the working age population due to demographic transition had proved to be a "demographic dividend" for some time. But in the case of Cambodia, it poses a great challenge to absorb the growing labour force in productive work.

Figure 4.1 Population pyramid, Cambodia-Total: 2008 and 2013


Significant differences in the age structure between urban and rural areas are observed in the pyramids of Figures 4.2 and 4.3 respectively. The rural areas have relatively more young people as well as senior citizens. On the other hand, the urban areas have relatively more people in the economically active working age groups $15-59$ years. This is an indication that young population leaves rural areas in search of economic opportunities in urban areas. The pyramid for the urban areas is rather bulky in the middle and has a relatively narrow apex, implying a large proportion of the working population and a small proportion of the senior citizens. On the contrary, the pyramid for the rural areas has a relatively broader base and an apex which is not as narrow as that of the urban pyramid. This is a demonstration of the relatively higher proportions of both the young and the old populations in the rural areas. These patterns are noted in both the years.

In 2013, both in urban and rural areas, there is narrowing of the population bar of the $0-4$ year olds compared to the 5-9 year olds showing a smaller number of people aged $0-4$ relative to the 5-9 year olds. This phenomenon is more pronounced in rural areas compared to urban areas which may be due to more rapid decline in fertility in urban areas. The urban age pyramid of 2013 shows a rapid decline of youth population, particularly women of age 15-29. One of the main reasons for this phenomenon could be the return to their permanent homes in rural areas of thousands of garment factory workers, mostly young girls, due to closure of these factories during the period following the last census. This may perhaps could be got confirmed from the authorities concerned.

Figure 4.2 Population pyramid, Cambodia-Urban: 2008 and 2013


Figure 4.3 Population pyramid, Cambodia-Rural: 2008 and 2013


The obvious difference in shape between the urban and rural population pyramids, is the distinctly smaller proportion of people in the age group 30-34 years in the rural areas in 2013 and in the age groups 20-24 and 25-29 in 2008. It may be noted that these people were born following the end of Khmer Rouge regime when probably their parents returned to towns which they had previously abandoned.

### 4.4 Population by Broad Age Group, Age Dependency Ratio and Median Age

Cambodia's population has an old age structure with 29.4 per cent of Cambodia's population under 15 years of age and about 8.0 per cent aged 60 years and more. This is also illustrated by the median age, which is 24.5 years in 2013 (Table 4.2). As the median age was only 22.1 years as per the 2008 Census, the population has aged in the five-year period. This was the result of a decreasing proportion of people aged 0-14 years between 2008 and 2013 (due to a reduction in the average number of births per woman), and at the same time an increase of the proportion of people 15-64 years of age.

The proportions of population in the three broad age groups shown in Table 4.2 indicate the general declining trend of percentage of children $(0-14)$ in the population with the rising trend of the working age population (15-64) and marginal increase in the proportion of the elderly population (65+) during the half decade 2008-2013. This is true of both males and females.

Breaking down by residence, urban and rural, the working age group is more concentrated in urban areas whereas children and older people predominate in rural areas. This pattern may be due to movement of persons from rural to urban areas for job purposes.

Table 4.2 Distribution of the population by Broad Age Group, Age Dependency Ratio and Median Age by Sex and Residence, 2008-2013

| Age Group | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Cambodia | 13,395,682 | 6,516,054 | 6,879,628 | 14,676,591 | 7,121,508 | 7,555,083 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 33.7 | 35.5 | 32.0 | 29.4 | 31.2 | 27.8 |
| 15-59 | 55.7 | 55.6 | 55.8 | 58.0 | 58.4 | 57.5 |
| 15-64 | 62.0 | 60.9 | 63.1 | 65.6 | 64.7 | 66.4 |
| $60+$ | 6.3 | 5.3 | 7.3 | 7.6 | 6.3 | 8.9 |
| $65+$ | 4.3 | 3.5 | 5.0 | 5.0 | 4.1 | 5.8 |
| Overall Age dependency ratio | 61.2 | 64.1 | 58.5 | 52.4 | 54.5 | 50.5 |
| Young age dependency ratio | 54.3 | 58.3 | 50.7 | 44.9 | 48.2 | 41.9 |
| Old age dependency ratio | 6.9 | 5.8 | 7.9 | 7.5 | 6.3 | 8.7 |
| Median age (years) | 22.1 | 20.8 | 23.3 | 24.5 | 23.4 | 25.6 |
| Urban | 2,614,027 | 1,255,570 | 1,358,457 | 3,146,213 | 1,527,479 | 1,618,734 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 25.4 | 27.1 | 23.9 | 25.0 | 26.4 | 23.6 |
| 15-59 | 65.5 | 65.5 | 65.5 | 63.2 | 63.8 | 62.7 |
| 15-64 | 71.0 | 70.1 | 71.9 | 70.5 | 69.9 | 71.1 |
| $60+$ | 5.5 | 4.6 | 6.4 | 7.3 | 6.1 | 8.4 |
| $65+$ | 3.6 | 2.8 | 4.2 | 4.5 | 3.7 | 5.2 |
| Overall Age dependency ratio | 40.8 | 42.6 | 39.1 | 41.8 | 43.0 | 40.6 |
| Young age dependency ratio | 35.8 | 38.6 | 33.2 | 35.4 | 37.8 | 33.2 |
| Old age dependency ratio | 5.0 | 4.0 | 5.9 | 6.3 | 5.2 | 7.4 |
| Median age (years) | 24.1 | 23.7 | 24.4 | 26.9 | 25.8 | 27.8 |
| Rural | 10,781,655 | 5,260,484 | 5,521,171 | 11,530,378 | 5,594,029 | 5,936,349 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 35.7 | 37.5 | 33.9 | 30.7 | 32.5 | 29.0 |
| 15-59 | 53.4 | 53.3 | 53.4 | 56.6 | 57.0 | 56.1 |
| 15-64 | 59.9 | 58.8 | 60.9 | 64.3 | 63.3 | 65.1 |
| $60+$ | 6.5 | 5.5 | 7.5 | 7.7 | 6.3 | 9.0 |
| $65+$ | 4.4 | 3.7 | 5.1 | 5.1 | 4.2 | 5.9 |
| Overall Age dependency ratio | 67.1 | 70.2 | 64.2 | 55.6 | 57.9 | 53.5 |
| Young age dependency ratio | 59.6 | 63.9 | 55.7 | 47.7 | 51.3 | 44.4 |
| Old age dependency ratio | 7.4 | 6.3 | 8.4 | 7.9 | 6.6 | 9.1 |
| Median age (years) | 21.3 | 19.8 | 22.8 | 23.9 | 22.8 | 25.1 |

### 4.5 Age Dependency Ratio

A common way to describe a population's age structure is by the index called age dependency ratio, which describes the proportion of the economically dependent component of a country's population to its productive component. This is conventionally expressed as the ratio of the young ( $0-14$ ) plus the old (65+), to the population in the working ages (15-64).

In general, the age-dependency ratio for Cambodia (Table 4.2) has shown a declining trend during 2008-2013 indicating a reduction in the dependency burden. Cambodia's dependency ratio in 2013 was 52: this means that for every 100 persons in the working ages, there were 52 persons in the dependent ages (Table 4.2). The dependency ratio has decreased since the 2008 census when it was 61 . In 1998 it was 86 . The most favourable dependency ratio can be found in urban areas with only 42 dependent persons per 100 persons in their working ages. The dependency ratios are generally higher in the rural areas.

### 4.6 Sex Composition

Sex composition of the human population is one of the basic demographic characteristics, which is extremely vital for any meaningful demographic analysis. Changes in sex composition largely reflect the underlying socio-economic and cultural patterns of a society in different ways. Sex ratio is defined as the number of males per 100 females in a given population. A sex ratio above 100 denotes an excess of males, a sex ratio below 100 denotes an excess females. It is an important social indicator to measure the extent of prevailing equity between males and females in a society. It influences directly the incidence of marriage, birth, migration, economic activities, etc.

Figure 4.4 Age Dependency Ratio by Residence, Cambodia 2008-2013


The basic information made available by the survey is the number of males and females in the population. In both the Census 2008 and CIPS 2013, disaggregated information by males and females has been produced for almost all topics. This is a basic requirement in development planning. It also enables determination of gender impacts of development activities and helps respond effectively to gender issues. Cambodia's population as estimated in the CIPS 2013 is 14.68 million, with 7.12 million or 48.5 percent males and 7.56 million or 51.5 percent females.

### 4.7 Sex Ratio

The number of male births always has an edge over the number of female births. Studies of births have revealed that the natural sex ratio of births varies within a range of 102 to 110 in most of the countries. The estimated Cambodian sex ratio at birth (105) falls within this range.

As may be seen in Figure 4.5, at the time of the first census 1962, the sex ratio of Cambodia was 99.9. It dipped to 86 in the early 1980s owing to heavy male mortality during the Khmer Rouge period. Since then it has been improving gradually reaching 93.0 at the 1998 Census and 94.7 at the 2008 Census.

The estimated sex ratio of 94.3 according to CIPS 2013 is only marginally less than what it was in 2008. In most of the countries of the world sex ratio ranges from 95 to 105 . The low sex ratio of Cambodia may be mainly attributed to its history of war and political instability in the past (second half of the 1970s).

Figure 4.5 Sex Ratio of Cambodia according to different sources


Sources: First Census, 1962, General Demographic Survey 1980, Socio-Economic Survey of Cambodia, 1993-94, Demographic Survey of Cambodia, 1996, Second Census, 1998, Cambodia Inter-censal Population Survey, 2004, Third Census, 2008 and CIPS 2013

Figure 4.6 shows the sex ratio by five year age groups according to the Census 2008 and CIPS 2013. The higher number of males at birth decreases with age mainly due to higher number of male deaths. It may be noted that sex ratios among children in the age groups $0-4,5-9$ and $10-14$ slightly fluctuates during 2008-2013. In the age group 15-19 the sex ratio is almost the same both in 2008 and 2013 at a high level of around 106. In the age group 25-29 the sex ratio is close to 100 both in 2008 and 2013. In the middle and the older ages the number of females very much exceeds the number of males due to higher male mortality. Lower sex ratios from the age group 40-44 onwards in 2008 and from 50-54 onwards in 2013 are the results of higher mortality among males and large scale exodus of adult males from Cambodia during the Khmer Rouge years.

Figure 4.6 Sex Ratios by Five -Year Age Group, Cambodia 2008-2013


### 4.8 Marital status

Marital status is a very important factor in population dynamics as it affects fertility and mortality as well as migration to a lesser extent. Table 4.3below presents the distribution of persons, males and females aged 15 years and above by category of marital status. Responses to question on marital status in CIPS 2013 were grouped into these categories: never married, currently married, widowed, divorced and separated. A person is considered currently married if by law or local custom and tradition, he or she is acknowledged to be married, or living with someone of the opposite sex as husband and wife. It is observed that, the highest proportion, which is about 62 percent of the population aged 15 years and above, are currently married. Never married population accounts for 31.14 percent of population. The proportion of the widowed and divorced/separated population is close to 7 percent. However, there are relatively more widowed and divorced/separated females than males. This is the result of engagement of men in high risky working conditions. Furthermore, it is evident that men tend to remarry more than women in most cases due to many factors, for example men depend on women when it comes to household responsibilities and this is almost a world-wide phenomenon.

The proportions of never married and married males are higher than those for females whereas the opposite trend is noticed in respect of each of the categories widowed, divorced and separated (Table 4.3).

Table 4.3 Percent distribution of Population Aged 15 and over by Marital Status, Sex and Residence, Cambodia, 2008 and 2013

| Residence | Sex | Number | Percentage by Marital status of population |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Never Married | Married | Widowed | Divorced | Separated |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 2008 |  |  |  |  |  |  |  |  |
| Total | Both Sexes | 8,881,890 | 100 | 32.71 | 60.16 | 4.99 | 2.02 | 0.12 |
|  | Males | 4201,248 | 100 | 37.00 | 60.80 | 1.29 | 0.84 | 0.07 |
|  | Females | 4,680,642 | 100 | 28.86 | 59.59 | 8.32 | 3.07 | 0.16 |
| Urban | Both Sexes | 1,949,676 | 100 | 41.54 | 52.38 | 4.06 | 1.89 | 0.13 |
|  | Males | 915,814 | 100 | 44.79 | 53.38 | 0.95 | 0.80 | 0.08 |
|  | Females | 1,033,862 | 100 | 38.67 | 51.50 | 6.81 | 2.85 | 0.17 |
| Rural | Both Sexes | 6,932,214 | 100 | 30.23 | 62.35 | 5.26 | 2.05 | 0.11 |
|  | Males | 3,285,434 | 100 | 34.83 | 62.88 | 1.38 | 0.85 | 0.06 |
|  | Females | 3,646,780 | 100 | 26.08 | 61.87 | 8.75 | 3.14 | 0.16 |
| 2013 |  |  |  |  |  |  |  |  |
| Total | Both Sexes | 10,355,191 | 100 | 31.14 | 61.88 | 5.03 | 1.76 | 0.19 |
|  | Males | 4,901,333 | 100 | 35.31 | 62.53 | 1.30 | 0.75 | 0.11 |
|  | Females | 5,453,862 | 100 | 27.40 | 61.29 | 8.38 | 2.67 | 0.27 |
| Urban | Both Sexes | 2,360,244 | 100 | 36.22 | 56.63 | 4.95 | 1.99 | 0.21 |
|  | Males | 1,123,942 | 100 | 40.70 | 57.16 | 1.35 | 0.68 | 0.11 |
|  | Females | 1,236,302 | 100 | 32.14 | 56.16 | 8.22 | 3.18 | 0.30 |
| Rural | Both Sexes | 7,994,947 | 100 | 29.64 | 63.42 | 5.05 | 1.70 | 0.19 |
|  | Males | 3,777,391 | 100 | 33.70 | 64.13 | 1.29 | 0.77 | 0.11 |
|  | Females | 4,217,560 | 100 | 26.01 | 62.79 | 8.42 | 2.52 | 0.26 |

Figure 4.7 shows that 98.0 percent of males and 91.4 percent of females are single in the age group 1519. By the age of 30-34 the proportion of those never married is reduced to about 12.2 percent in the case of men and almost one percent more than that among women. Beyond the age of 50 the never married population mostly remained single throughout their life time. The extent of non-marriage in population (celibacy level) is higher for females than males in higher ages. However, the proportion of single females falls more steeply around the age of 20 . The proportion of single males is very much higher than the corresponding proportion of single females in every age group below 30 . From the age group 30-34 onwards the already low proportion of single males in each age group is much lower than the corresponding proportion among females.

Figure 4.7 Percentage Never Married, 15 years and older, by Sex and Residence, 2008 and 2013


In general, on a lifetime basis, marriage is more universal among men. Almost all men marry at least once in their life. In the age group $55-59$, less than one percent of males remain never married whereas among women in the same age group about 4 percent are never married. Women tend to marry earlier than men. Overall, the proportion of men aged 15 and over who are never married is almost 7.91 percentage points higher than the proportion among single women ( 35.31 percent compared to 27.40 percent). The divorce rates in Cambodia remain low, but there are important differentials by sex and residence. The proportion divorced among women is higher than among men. For both men and women, divorced rates in urban areas are triple those in rural areas. This may be because economic conditions of people in urban areas, especially of urban women allow greater independence than in rural areas and so divorce is more easily accepted. The separation rate is negligible, and there are almost no differentials by sex, or by urban/rural residence.

Figure 4.8 Percentage Ever Married 15 years and older by Sex 2008 and 2013


The widowhood rate is positively related to age, with the rate slightly increasing as age increases. The widowhood rate among women increases by age more rapidly than for men. Ranging from 8.03 percentto 18.37 percent, men aged 65 and older are widowers, while among women in the same age group, the percentage of widow's ranges from 39.35 to 56.95 percent (Figure 4.9). Data indicate the proportion widowed among women is five times higher than among men. The reason for this differential includes higher male mortality in general and in particular during the Khmer Rouge era combined with the fact that widowers are more likely to remarry than widows.

### 4.9 Average age at marriage

Table 4.4 shows the proportion ever married in the age groups $15-19,20-24$ and $45-49$, and the Singulate Mean Age at (first) marriage (SMAM) which indicates the average number of years that a hypothetical cohort has lived unmarried before they marry for the first time. This indicator is usually calculated separately by sex. The proportion ever married for each young age group 15-19 and 20-24 has not showed significant changes for both men and women between 2008 and 2013.The proportion ever married in the age group 45-49 shows the prevalence of marriage in relation to population reproduction. This proportion among men in 2008 was 88.3 percent and in 2013 it is 86.4 percent. The proportion ever married among women in the age group 45-49 in 2008 was 74.5 percent and in 2013 it has increased to 75.0 percent.

Figure 4.9 Percentage Widowed, Divorced and Separated 15 years and older by Sex 2008 and 2013


However, women marry at younger ages than men. The average age at marriage was 26.2 and 23.7 years for males and females respectively, calculated based on the proportion never married/single by age (SMAM). The higher proportion of young married women compared to men of the same age is a further indication that women generally marry at younger ages than men (Figure 7). As compared to 2008 the average age at marriage has increased by 0.6 years and 0.4 years for males and females respectively.

Urban-rural differential is observed in respect of SMAM. For both men and women, SMAM in urban areas is higher than in rural areas. In 2013, SMAM among urban men was higher than among rural men by 1.1 years. This differential among women was 0.3 years. Urban men seem to have a tendency to marry later than rural men.

A direct question on age at first marriage was also included in the CIPS 2013 (Col. 9 of Form B Household questionnaire Part 2). Based on the answers to this question, the age at first marriage at the national level was derived as follows: Males: 24.05 and Females: 21.15. These figures are less than the corresponding figures derived from the indirect method of SMAM (see Table 4.4). However the SMAM estimate may be adopted as the results of direct question have to be evaluated for assessing content errors. This could be done during further analysis of marital status data.

### 4.10 Adolescent marriage

The proportions of teen age marriage among men and women are nearly the same both 2008 and 2013 at the national level. However, in the urban areas there is a marginal decrease that is matched by a marginal increase in the rural areas. For both men and women, the proportion married among adolescents aged 15-19 in rural areas was higher than that in urban areas (Table 4.4). The proportion ever married among women aged 20-24 in rural areas was more than double that in urban areas.

Table 4.4 Singulate Mean Age at Marriage, Proportion Ever Married by Sex, Age Group and Residence, Cambodia, 2008 and 2013

| Residence | Male |  |  |  | Female |  |  |  | Difference SMAM between male and female |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SMAM <br> (Years) | Percent Ever Married |  |  | SMAM <br> (Years) | Percent Ever Married |  |  |  |
|  |  | 15-19 | 20-24 | 45-49 |  | 15-19 | 20-24 | 45-49 |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Total | 25.6 | 1.7 | 28.5 | 88.3 | 23.3 | 8.4 | 48.9 | 74.5 | 2.3 |
| Urban | 28.0 | 1.1 | 15.5 | 79.2 | 25.5 | 5.0 | 30.8 | 70.5 | 2.5 |
| Rural | 24.8 | 1.8 | 33.1 | 89.3 | 22.5 | 9.4 | 55.9 | 75.6 | 2.3 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Total | 26.2 | 2.0 | 24.2 | 86.4 | 23.7 | 8.1 | 46.1 | 75.0 | 2.5 |
| Urban | 29.1 | 0.4 | 11.0 | 78.9 | 25.8 | 4.3 | 28.8 | 70.3 | 3.3 |
| Rural | 25.4 | 2.4 | 28.0 | 88.8 | 23.0 | 9.1 | 51.0 | 76.4 | 2.4 |

## Chapter 5

Literacy and Education

### 5.1 General

Education is important for personal and national development. It is the birth right of every individual. It is required for the flourishing of many of the human capacities, to eliminate inequality in economic, socio-cultural, familial/interpersonal, legal, political and psychological fields. It is also the exit gate to access jobs and right in decision making. Education affects demographic behavior relating to marriage, fertility, mortality, migration as well as participation in the labour force. Many research studies have established a negative relationship between the educational level of women and their fertility. The age of females at marriage is influenced by the level of educational attainment. Infant mortality is yet another variable affected by the mother's educational status. In general educational attainment is indicative of the quality of the literate population and is very important in the implementation of the development programmes and population policies.

Educated population is a central priority in achieving the CMDGs. They are in a better position to create work for themselves and for others and also to obtain formal employment. Education is stated as crucial to development in Vision of National Strategy Development Plans, updated 2009-2013. To determine the level of education, CIPS 2013 asked questions about school attendance and highest level of education attained. This question was addressed to all persons six years and above. Questions on literacy and educational attainment form an important part of the questionnaire both in the 2008 Census and CIPS 2013.

In order to obtain more complete data on full time education of the population six questions were asked in the survey to collect information on literacy and full time education. The questions related to literacy in Khmer language, literacy in other languages, school attendance, currently attending grade, highest grade completed and main subject of study. All the questions except currently attending grade and major subject of study were asked in the 2008 Census also. The two new questions included in CIPS 2013 were intended to satisfy the requirements of the national educational system.

### 5.2 Literacy Rate

The definition of literacy is the ability to read and write with understanding in any language. A person is a literate when he/she can both read and write a simple message in any language or dialect. A person who cannot both read and write a simple message is considered illiterate. Also to be considered as illiterate is that person who is capable of reading only his/her own name or numbers, as well as persons who can read but not write, or vice versa. The literacy rate is one of the most general measures of educational output and is defined as the percentage of literate people in a given age out of the total population in that age group. In both the censuses of 2008 and CIPS 2013 all children of the age 6 years or less were treated as illiterate by definition even if any such child was going to a school or
might have picked up reading and writing a few odd words in a language. Results of CIPS 2013 presented in Table 5.1 show that the proportion of persons literate in any language among the population aged 7 and older is nearly eighty percent. In the past five years, percentage of females aged 7 years and over who are literate in any language has increased almost by two percentage points while the corresponding proportion among men has increased by little more than one percentage point. However, there is a big male-female gap in literacy rates (currently 85.1 percent for males and 74.8 percent for females). This gap is relatively higher in rural areas. In general, gender inequality in basic education is a major issue in Cambodia requiring immediate attention.

Literacy rates in urban areas are higher than in rural areas due to disparities in level of development between the two areas. Nevertheless, in recent years, because of policies for universal primary education and elimination of illiteracy, the gap in literacy rates between urban and rural areas is narrowing down. It was 13.2 percentage points ( 90.1 percent in urban areas and 76.9 percent in rural areas in 2013) as against the corresponding gap of 14.9 percentage points in 2008 (Table 5.1).

## Table 5.1 Literate Persons and Literacy Rates in any Language and in Khmer Language only by Sex and Residence 2008-2013

| Sex | Residence | Population age 7+ | Literate Population |  | Percentage <br> Literate 2013 |  | Percentage Literate in any language in 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Any <br> Language | Khmer only | Any <br> Language | Khmer only |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Both Sexes | Total | 12,753,622 | 10,173,741 | 8,985,346 | 79.8 | 70.5 | 78.4 |
|  | Urban | 2,792,319 | 2,517,009 | 1,794,078 | 90.1 | 64.3 | 90.2 |
|  | Rural | 9,961,303 | 7,656,732 | 7,191,268 | 76.9 | 72.2 | 75.3 |
| Males | Total | 6,125,512 | 5,214,216 | 4,533,730 | 85.1 | 74.0 | 84.0 |
|  | Urban | 1,348,602 | 1,260,678 | 846,967 | 93.5 | 62.8 | 93.5 |
|  | Rural | 4,776,910 | 3,953,538 | 3,686,764 | 82.8 | 77.2 | 81.6 |
| Females | Total | 6,628,109 | 4,959,525 | 4,451,616 | 74.8 | 67.2 | 73.1 |
|  | Urban | 1,443,717 | 1,256,331 | 947,111 | 87.0 | 65.6 | 87.2 |
|  | Rural | 5,184,392 | 3,703,194 | 3,504,504 | 71.4 | 67.6 | 69.5 |

Table 5.2 gives the percent distributions of literate persons by language of literacy, sex and residence for Cambodia 2008-2013. Among the literate persons, however, barring almost one percent literate in a language other than Khmer, the persons who are literate in Khmer language only accounted about 88.3 percent, 8.0 percent in Khmer and English and almost 3 percent in Khmer and other languages except English (Table 5.2). In 2008 only 5 per cent were literate in Khmer and English and about 2 per cent in Khmer and other languages except English. A slight increase is thus noticed during the five years, 2008-2013 in a small section of Cambodians getting conversant with foreign languages, especially English. However, those who are literate in Khmer combined with other languages are predominant only in urban areas and among them males constitute about 58.1 percent.

Table 5.2 Distributions of Literate Persons by Language, Sex and Residence 2008-2013

| Sex | Residence | Total Literate Population in any <br> Language | Per cent Literate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Khmer <br> Language <br> Only | Khmer and English | Khmer and Other Languages except English | Any <br> Language Other than Khmer |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2008 |  |  |  |  |  |  |
| Both Sexes | Total | 8,959,383 | 92.0 | 4.9 | 2.2 | 1.0 |
|  | Urban | 2,096,641 | 78.5 | 14.8 | 5.0 | 1.7 |
|  | Rural | 6,862,742 | 96.1 | 1.8 | 1.3 | 0.7 |
| Males | Total | 4,629,702 | 91.0 | 5.7 | 2.4 | 0.9 |
|  | Urban | 1,035,208 | 75.0 | 17.8 | 5.5 | 1.7 |
|  | Rural | 3,594,494 | 95.6 | 2.2 | 1.5 | 0.6 |
| Females | Total | 4,329,681 | 93.1 | 4.0 | 1.9 | 1.1 |
|  | Urban | 1,061,433 | 81.8 | 11.9 | 4.6 | 1.7 |
|  | Rural | 3,268,248 | 96.7 | 1.4 | 1.0 | 0.9 |
| 2013 |  |  |  |  |  |  |
| Both Sexes | Total | 10,173,741 | 88.3 | 8.0 | 2.9 | 0.8 |
|  | Urban | 2,517,009 | 71.3 | 21.7 | 5.7 | 1.3 |
|  | Rural | 7,656,732 | 93.9 | 3.5 | 2.0 | 0.6 |
| Males | Total | 5,214,216 | 86.9 | 9.3 | 3.1 | 0.7 |
|  | Urban | 1,260,678 | 67.2 | 25.9 | 5.6 | 1.3 |
|  | Rural | 3,953,538 | 93.3 | 3.9 | 2.3 | 0.5 |
| Females | Total | 4,959,525 | 89.8 | 6.7 | 2.7 | 0.9 |
|  | Urban | 1,256,331 | 75.4 | 17.5 | 5.9 | 1.3 |
|  | Rural | 3,703,194 | 94.6 | 3.0 | 1.6 | 0.7 |

According to CIPS 2013, 7.7 million persons ( 79.8 percent) of age 7 years and more are literate in any language. Figure 5.1 shows the literacy rates of the population 7 years and older by age group. These data indicate that literacy rates in Cambodia have improved substantially in the past few decades. The younger the age group, the higher the literacy rate, and the narrower the male-female gap. The two curves in the figure, referring to male and female literacy rates by age group in younger ages, are very close to each other initially, but become further apart in the age groups starting around 25 years and older, indicating that in the past women were more disadvantaged than men in schooling, but that this inequality has been reduced considerably in recent years.

### 5.3 Adult Literacy Rate

The adult literacy rate or the literacy rate of population aged 15 and more has shown an increasing trend at the national level during 2008-2013 (Figure 5.2). It has increased in the rural areas with females registering a higher percentage of increase than males (Table 5.3). There is no significant change in this regard in urban areas where the adult literacy rate is already more than 90 per cent.

Figure 5.1 Literacy Rates (any language) in Percent by Five year Age Group and Sex, Cambodia 2008 and 2013


Figure 5.2 Adult Literate Population Aged 15 and over by Sex Cambodia 2008 and 2013


Table 5.3 Adult Literate Population Aged 15 and over by Sex Cambodia 2008 and 2013

| Residence | 2008 |  |  | 2013 |  |  | Change between 2008-2013 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
|  | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ | $\mathbf{( 8 )}$ | $\mathbf{( 9 )}$ | $\mathbf{( 1 0 )}$ |
| Total | $\mathbf{7 7 . 6}$ | $\mathbf{8 5 . 1}$ | $\mathbf{7 0 . 9}$ | $\mathbf{7 9 . 7}$ | $\mathbf{8 6 . 4}$ | $\mathbf{7 3 . 6}$ | $\mathbf{2 . 1}$ | $\mathbf{1 . 3}$ | $\mathbf{2 . 7}$ |
| Urban | 90.4 | 94.5 | 86.8 | 90.3 | 94.2 | 86.8 | -0.1 | -0.3 | 0.0 |
| Rural | 74.0 | 82.5 | 66.3 | 76.5 | 84.1 | 69.7 | 2.5 | 1.6 | 3.4 |

### 5.4 School Attendance

The question on school attendance was addressed to both literate and illiterate persons. This included children aged 6 and below. The answer to this question was categorized as:
(i) "Never attended": for those who had never at any time received full-time education,
(ii) "Now": for those who were still receiving full-time education at the time of the survey and
(iii) "Past": for those who received full-time education in the past.

Based on the survey question of whether a person was currently attending school, 74.2 percent and 88.2 per cent of the $05-11$ and 12-14 age groups responded positively. The corresponding proportions were less than this in each case in 2008 (Table 5.4). However, enrolment rates started to decline drastically from the age 15 when more and more students dropped out of school. Almost a quarter of the 25 - year olds never attended a school or any educational institution. Enrolment rate in school of girls starts at a higher level than boys at ages 5-11, tends to be almost equal to that of boys at ages 1214 and begins to be lower than that of boys with the progress of age. This may be due to the traditional attitude of encouraging boys rather than girls to study after a certain age. It is also observed from Table 5.5 that more children in urban areas than those in rural areas are currently attending school at all ages.

Table 5.4 Distribution of population 5 years and older by school attendance, sex and residence 2008-2013

| Region/Sex and Age Group | Attended School Status in 2008 |  |  | Attended School Status in 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Current | Past | Never | Current | Past |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Cambodia | 23.1 | 28.5 | 48.4 | 20.1 | 25.9 | 54.0 |
| 05-11 | 32.3 | 67.2 | 0.5 | 25.2 | 74.2 | 0.7 |
| 12-14 | 7.3 | 86.7 | 6.0 | 5.0 | 88.2 | 6.8 |
| 15-17 | 9.1 | 62.3 | 28.6 | 6.9 | 61.4 | 31.7 |
| 18-24 | 14.5 | 21.3 | 64.2 | 10.0 | 21.5 | 68.5 |
| 25+ | 27.9 | 1.2 | 70.9 | 25.5 | 0.7 | 73.8 |
| Male | 17.9 | 31.4 | 50.8 | 15.3 | 28.3 | 56.4 |
| 05-11 | 32.6 | 66.8 | 0.5 | 26.2 | 73.2 | 0.7 |
| 12-14 | 7.5 | 87.0 | 5.5 | 5.1 | 88.2 | 6.7 |
| 15-17 | 8.8 | 65.6 | 25.6 | 7.2 | 64.1 | 28.7 |
| 18-24 | 11.9 | 26.2 | 61.9 | 9.4 | 25.4 | 65.2 |
| $25+$ | 18.0 | 1.6 | 80.5 | 16.5 | 1.0 | 82.5 |
| Female | 28.0 | 25.8 | 46.2 | 24.6 | 23.7 | 51.7 |
| 05-11 | 32.0 | 67.5 | 0.5 | 24.1 | 75.2 | 0.7 |
| 12-14 | 7.1 | 86.3 | 6.6 | 4.9 | 88.2 | 6.9 |
| 15-17 | 9.4 | 58.8 | 31.8 | 6.6 | 58.7 | 34.7 |
| 18-24 | 17.1 | 16.5 | 66.4 | 10.5 | 17.6 | 71.9 |
| $25+$ | 36.3 | 0.9 | 62.8 | 33.2 | 0.4 | 66.4 |
| Urban | 12.1 | 29.3 | 58.6 | 12.1 | 27.8 | 60.1 |
| 05-11 | 24.7 | 74.6 | 0.6 | 19.9 | 79.4 | 0.7 |
| 12-14 | 3.8 | 91.1 | 5.1 | 1.7 | 92.8 | 5.5 |
| 15-17 | 4.6 | 70.8 | 24.6 | 2.6 | 78.0 | 19.4 |
| 18-24 | 6.1 | 32.5 | 61.4 | 5.5 | 36.9 | 57.6 |
| 25+ | 13.9 | 2.8 | 83.3 | 14.4 | 2.0 | 83.6 |
| Rural | 25.8 | 28.3 | 45.9 | 22.3 | 25.4 | 52.3 |
| 05-11 | 33.6 | 65.9 | 0.5 | 26.3 | 73.0 | 0.7 |
| 12-14 | 7.9 | 85.9 | 6.2 | 5.8 | 87.1 | 7.1 |
| 15-17 | 10.2 | 60.3 | 29.5 | 7.9 | 57.6 | 34.5 |
| 18-24 | 17.5 | 17.3 | 65.2 | 11.2 | 17.2 | 71.6 |
| 25+ | 31.7 | 0.8 | 67.6 | 29.0 | 0.3 | 70.7 |

### 5.5 Educational Attainment

Educational attainment is an important indicator of population quality. In CIPS2013, the highest grade completed of those who ever attended a school or an educational institution, and currently attending grades of those currently attending school or educational institution were collected. The present analysis relates to those who have reported completed level of education. Apart from the category "not completed primary", the completed grades are categorized as follows: (1) Primary, (2) Lower secondary, (3) Secondary/diploma and (6) Beyond Secondary.

At the national level, CIPS 2013 results show ( Table 5.5) that more than 29 percent of those who ever attended school or educational institution had completed primary education, 21 percent of them had lower secondary education, almost4 percent received the secondary/diploma and close to 2 percent
completed tertiary education (beyond secondary). About 41 percent did not complete primary school. Compared to 2008 Census, there is an improvement in educational attainment of the population. Those who did not complete primary education had decreased from about 48.9 to about 40.8 percent and the proportion of those who had completed primary has almost remained stable. Lower secondary education shows an increase from 17.0 to 21.0 percent while secondary/ diploma increased from 1.6 to 3.9 percent and completed tertiary education (beyond secondary) from 1.5 to 1.8 percent.

Table 5.5 Educational Attainment of Literate Persons (in any language) Aged 7 years and older by Age Group and Sex, Cambodia 2008-2013

| Sex and Age Group | Number | Percentage Distribution by Educational Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | None | Primary Not Completed | Primary | Lower Secondary | Secondary <br> / Diploma | Beyond Secondary |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 2008 |  |  |  |  |  |  |  |  |
| Both Sexes | 8,952,720 | 100 | 2.4 | 48.9 | 28.6 | 17.0 | 1.6 | 1.5 |
| 7-14 | 2,067,906 | 100 | 1.7 | 76.5 | 21.0 | 0.9 | - | - |
| 15-19 | 1,459,331 | 100 | 1.3 | 27.0 | 42.8 | 27.8 | 0.6 | 0.5 |
| 20-24 | 1,153,671 | 100 | 1.9 | 33.5 | 31.1 | 25.9 | 3.6 | 4.0 |
| 25+ | 4,271,812 | 100 | 3.2 | 47.2 | 26.8 | 18.8 | 2.2 | 1.8 |
| Males | 4,625,303 | 100 | 2.0 | 45.1 | 29.4 | 19.6 | 2.0 | 1.9 |
| 7-14 | 1,054,993 | 100 | 1.8 | 77.6 | 19.8 | 0.8 | - | - |
| 15-19 | 757,981 | 100 | 1.4 | 26.7 | 42.3 | 28.6 | 0.5 | 0.5 |
| 20-24 | 585,445 | 100 | 1.7 | 29.5 | 29.9 | 30.3 | 4.0 | 4.6 |
| 25+ | 2,226,884 | 100 | 2.4 | 40.0 | 29.4 | 22.7 | 2.9 | 2.6 |
| Females | 4,327,417 | 100 | 2.7 | 53.0 | 27.8 | 14.3 | 1.2 | 1.0 |
| 7-14 | 1,012,913 | 100 | 1.5 | 75.3 | 22.2 | 1.0 | - | - |
| 15-19 | 701,350 | 100 | 1.3 | 27.3 | 43.4 | 27.0 | 0.6 | 0.5 |
| 20-24 | 568,226 | 100 | 2.1 | 37.6 | 32.4 | 21.4 | 3.3 | 3.4 |
| 25+ | 2,044,928 | 100 | 4.1 | 55.1 | 23.9 | 14.5 | 1.4 | 1.0 |
| 2013 |  |  |  |  |  |  |  |  |
| Both Sexes | 10,168,127 | 100 | 3.1 | 40.8 | 29.4 | 21.0 | 3.9 | 1.8 |
| 7-14 | 1,925,492 | 100 | 4.9 | 76.7 | 18.3 | - | - | - |
| 15-19 | 1,437,393 | 100 | 1.0 | 22.3 | 41.4 | 32.6 | 2.5 | 0.2 |
| 20-24 | 1,440,671 | 100 | 1.7 | 22.3 | 32.5 | 30.7 | 9.7 | 3.1 |
| $25+$ | 5,364,571 | 100 | 3.4 | 37.9 | 29.3 | 22.8 | 3.2 | 3.5 |
| Males | 5,209,668 | 100 | 2.8 | 37.5 | 29.4 | 23.4 | 4.5 | 2.4 |
| 7-14 | 977,677 | 100 | 4.9 | 77.5 | 17.6 | - | - | - |
| 15-19 | 729,206 | 100 | 1.1 | 23.6 | 40.9 | 31.8 | 2.4 | 0.2 |
| 20-24 | 730,071 | 100 | 1.5 | 20.7 | 30.2 | 33.1 | 10.9 | 3.7 |
| 25+ | 2,772,713 | 100 | 2.9 | 31.5 | 30.4 | 26.8 | 3.9 | 4.5 |
| Females | 4,958,460 | 100 | 3.4 | 44.3 | 29.3 | 18.5 | 3.2 | 1.3 |
| 7-14 | 947,812 | 100 | 4.9 | 76.0 | 19.1 | 0.1 | 0.0 | 0.0 |
| 15-19 | 708,186 | 100 | 0.9 | 20.9 | 41.8 | 33.4 | 2.7 | 0.3 |
| 20-24 | 710,597 | 100 | 1.9 | 24.0 | 34.8 | 28.3 | 8.5 | 2.6 |
| 25+ | 2,591,867 | 100 | 4.0 | 44.7 | 28.1 | 18.4 | 2.4 | 2.4 |

Note: Excluding educational levels "other" and "Not reported"

Breaking down by age group, this table shows that almost 77 percent of population in age 7-14 has not completed primary school and more than 18 percent had completed primary level and above. It is observed that 22.3 percent of those in the age group age 15-19 has still not completed primary level, may be due to late admission, repeating or dropping out. In the same age group 15-19, there are 41.4 per cent and 32.6 percent persons who had completed primary level and lower secondary respectively. It is also noted that about 2.5 and 0.2 percent of population in this age group had level of education of secondary/diploma and tertiary education (beyond secondary).

Among population in the age group 20-24 the category not completed primary level forms 32.5 percent, had completed primary level 32.5 percent, lower secondary 30.7 percent and secondary/ diploma and tertiary education (beyond secondary) 9.7 and 3.1 percent respectively. Considering the levels education of literate population aged 25 and more, it is observed that the proportion of primary not completed predominates. Compared to 2008, the education level of population shows much improvement with significant decrease in the levels of not completed primary school and completed primary school and increase beyond lower secondary level. Proportions of educational attainment were slightly higher for males than for females at the secondary and higher levels.

Figure 5.3 Educational Attainment of Literate Population (in any language) Aged 7 years and older and Aged 25 years and older, Cambodia 2008-2013


Though the proportions among literate population who are qualified with Secondary School/Diploma and Beyond Secondary, have shown improvements during the five years 2008-2013 (Figure 5.3), there is a long way to go as only a very small proportion of those aged 25 years and more have qualified beyond secondary level in 2013.

### 5.6 Main Subjects of Study

As already mentioned in Paragraph 5.1, a question on main subject of study was included in the section on full time education in the Household questionnaire of CIPS 2013 (Form B Part 2, Column17d). The information was collected both from those who are currently studying and those who had completed levels of education above Technical/vocational/pre-secondary diploma/certificate course. The details of the courses may be seen in the foot note to the question 17d in Form B questionnaire at Appendix 2. The main subject was recorded by the enumerator as returned. It was later coded at NIS according to a code structure developed in consultation with the Statistics and Information Office of the Ministry of Education. About 160 subjects were given codes. However, only 132 subjects were returned in the survey.

For the present report the main subjects returned by those who had completed the educational levels are analyzed. The subjects returned were further grouped into 24 broad groups and classified according to educational level. It is observed that the estimated number of persons (about 0.44 million) who had returned their main subjects of study exceeds the number of persons who had completed the following courses: Technical diploma (both pre and post-secondary)/certificate, Graduate degree, Master's Degree, Ph.D. degree and other. It is possible that those who had completed Upper Secondary Diploma/Certificate/Baccalaureate level would have also returned their subjects of study which the enumerators had recorded. The level of completed education has therefore been broadly classified as Below Bachelor's degree, Bachelor's degree, Master's degree/Ph.D. and Other for the purpose of studying the distribution of persons who had completed these levels, by their main subjects of study.
Tables 5.6, 5.7 and 5.8 present this distribution in percentage. It is observed from Table 5.6 that there are eight subjects each of which has qualified persons numbering 20,000 or more. They are: 1 . Banking, Finance and Accounting, 2.Engineering and Technology, 3.Education, 4.Language Studies, 5.Development studies, 6.Computer Science/Information Technology, 7.Medical related subjects, and 8.Law. Persons who had studied these subjects account for about 72 per cent. In respect of subjects at $1,2,4,5,6,7$ and 8 mentioned above, more than thirty per cent each are degree holders. It has to be mentioned here that the subject grouping includes both junior and senior professionals and hence there can be persons who have completed below degree level even in engineering and medical related subjects. The number of women is less that of men in all subjects except Banking, Finance and accounting (Tables 5.7 and 5.8) where the percentage of women is about 62 per cent. There are a few interesting results like the percentage of graduates being cent per cent in food and nutrition for males and social science for females. Further in-depth study may be necessary on main subjects of study which could be made in the analytical report on Education or as a special follow-up study.

Table 5.6 Per Cent Distribution of Persons under each Main Subject of Study by completed Level of Education, Cambodia 2013

| No. | Main Subject | Number of Persons | Total | Below <br> Bachelor's <br> Degree <br> Course | Bachelor's <br> Degree <br> Course | $\begin{aligned} & \text { Master's } \\ & \text { Degree/ } \\ & \text { PhD } \end{aligned}$ | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| Both Sexes |  |  |  |  |  |  |  |
|  | Total | 444,576 | 100 | 56.67 | 35.66 | 6.49 | 1.18 |
| 1 | Banking, Finance and accounting | 106,326 | 100 | 57.44 | 39.08 | 3.45 | 0.04 |
| 2 | Communication | 5,204 | 100 | 48.75 | 29.52 | 21.73 | - |
| 3 | Agriculture and related subjects | 18,655 | 100 | 60.42 | 35.43 | 4.15 | - |
| 4 | Engineering and Technology | 24,303 | 100 | 56.58 | 35.49 | 4.83 | 3.10 |
| 5 | Archaeology | 1,663 | 100 | 45.70 | 31.69 | 22.61 | - |
| 6 | Architecture | 2,023 | 100 | 55.96 | 44.04 | - | - |
| 7 | Education | 20,215 | 100 | 74.09 | 23.69 | 2.22 | - |
| 8 | Science subjects | 10,890 | 100 | 52.15 |  | 3.76 | - |
| 9 | Religious studies | 1,497 | 100 | 20.91 | 72.68 | - | 6.41 |
| 10 | Business administration | 10,963 | 100 | 50.12 | 31.65 | 18.22 | - |
| 11 | Language studies | 29,562 | 100 | 51.05 | 42.71 | 6.24 | - |
| 12 | Health related subjects | 6,923 | 100 | 67.30 | 28.92 | 0.22 | 3.57 |
| 13 | Development studies | 52,143 | 100 | 53.14 | 39.18 | 6.92 | 0.76 |
| 14 | Computer science and IT | 27,689 | 100 | 63.44 | 31.37 | 5.19 | - |
| 15 | Medical related subjects | 34,495 | 100 | 51.33 | 32.28 | 9.54 | 6.86 |
| 16 | Management studies | 18,686 | 100 | 52.11 | 31.29 | 14.37 | 2.23 |
| 17 | Food and nutrition | 239 | 100 | 50.21 | 49.79 | - | - |
| 18 | Art subject | 12,557 | 100 | 50.26 | 34.90 | 13.29 | 1.54 |
| 19 | Hotel and tourism | 6,919 | 100 | 63.51 | 19.51 | 10.19 | 6.79 |
| 20 | Law | 25,792 | 100 | 57.80 | 30.80 | 11.15 | 0.24 |
| 21 | Marketing | 19,014 | 100 | 58.85 | 40.57 | 0.58 | - |
| 22 | Social science | 1,813 | 100 | 12.74 | 73.75 | 13.51 | - |
| 23 | Veterinary | 1,025 | 100 | 46.15 | 53.85 | 0.00 | 0.00 |
| 24 | Any other | 5,980 | 100 | 81.17 | 8.98 | 6.20 | 3.65 |
| Males |  |  |  |  |  |  |  |
|  | Total | 273,404 | 100 | 53.70 | 36.80 | 8.10 | 1.40 |
| 1 | Banking, Finance and accounting | 40,005 | 100 | 49.85 | 44.20 | 5.94 | - |
| 2 | Communication | 2,963 | 100 | 53.43 | 31.29 | 15.29 | - |
| 3 | Agriculture and related subjects | 13,535 | 100 | 59.80 | 34.63 | 5.57 | - |
| 4 | Engineering and Technology | 19,781 | 100 | 53.15 | 38.60 | 5.94 | 2.31 |
| 5 | Archaeology | 978 | 100 | 51.12 | 12.68 | 36.20 | - |
| 6 | Architecture | 2,023 | 100 | 55.96 | 44.04 | - | - |
| 7 | Education | 13,907 | 100 | 74.06 | 22.83 | 3.11 | - |
| 8 | Science subjects | 7,315 | 100 | 52.54 | 41.86 | 5.60 | - |
| 9 | Religious studies | 1,112 | 100 | 16.91 | 74.46 | - | 8.63 |
| 10 | Business administration | 7,615 | 100 | 49.59 | 28.54 | 21.88 | - |
| 11 | Language studies | 18,219 | 100 | 46.18 | 46.53 | 7.29 | - |
| 12 | Health related subjects | 5,213 | 100 | 68.89 | 26.09 | 0.29 | 4.74 |
| 13 | Development studies | 37,714 | 100 | 52.80 | 40.31 | 5.84 | 1.05 |
| 14 | Computer science and IT | 22,847 | 100 | 61.84 | 31.98 | 6.18 | - |


| No. | Main Subject | Number of Persons | Total | Below Bachelor's Degree Course | Bachelor's <br> Degree <br> Course | $\begin{aligned} & \text { Master's } \\ & \text { Degree/ } \\ & \text { PhD } \end{aligned}$ | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 15 | Medical related subjects | 17,786 | 100 | 44.95 | 36.76 | 9.86 | 8.43 |
| 16 | Management studies | 12,827 | 100 | 45.01 | 30.93 | 20.82 | 3.25 |
| 17 | Food and nutrition | 119 | 100 | - | 100.00 | - - | - |
| 18 | Art subject | 8,765 | 100 | 42.65 | 40.73 | 14.41 | 2.21 |
| 19 | Hotel and tourism | 4,100 | 100 | 80.05 | 7.59 | 6.61 | 5.76 |
| 20 | Law | 19,493 | 100 | 53.16 | 31.75 | 14.76 | 0.32 |
| 21 | Marketing | 12,178 | 100 | 55.48 | 43.62 | 0.90 | - |
| 22 | Social science | 1,112 | 100 | 20.77 | 57.19 | 22.03 | - |
| 23 | Veterinary | 174 | 100 | 100.00 | 0.00 | 0.00 | 0.00 |
| 24 | Any other | 3,623 | 100 | 71.32 | 12.42 | 10.24 | 6.02 |
| Females |  |  |  |  |  |  |  |
|  | Total | 171,181 | 100 | 61.41 | 33.84 | 3.91 | 0.84 |
| 1 | Banking, Finance and accounting | 66,326 | 100 | 62.02 | 35.98 | 1.94 | 0.06 |
| 2 | Communication | 2,241 | 100 | 42.57 | 27.18 | 30.25 | - |
| 3 | Agriculture and related subjects | 5,118 | 100 | 62.04 | 37.55 | 0.41 | - |
| 4 | Engineering and Technology | 4,523 | 100 | 71.55 | 21.87 | - | 6.59 |
| 5 | Archaeology | 684 | 100 | 38.01 | 58.77 | 3.22 | - |
| 6 | Architecture | - | 100 | - | - | - | - |
| 7 | Education | 6,311 | 100 | 74.17 | 25.59 | 0.24 | - |
| 8 | Science subjects | 3,575 | 100 | 51.38 | 48.62 | - | - |
| 9 | Religious studies | 384 | 100 | 32.55 | 67.45 | - | - |
| 10 | Business administration | 3,346 | 100 | 51.37 | 38.73 | 9.89 | - |
| 11 | Language studies | 11,344 | 100 | 58.87 | 36.59 | 4.54 | - |
| 12 | Health related subjects | 1,711 | 100 | 62.48 | 37.52 | - | - |
| 13 | Development studies | 14,428 | 100 | 54.02 | 36.26 | 9.72 | - |
| 14 | Computer science and IT | 4,844 | 100 | 71.00 | 28.49 | 0.52 | - |
| 15 | Medical related subjects | 16,709 | 100 | 58.11 | 27.51 | 9.20 | 5.18 |
| 16 | Management studies | 5,861 | 100 | 67.67 | 32.08 | 0.26 | - |
| 17 | Food and nutrition | 120 | 100 | 100.00 | - - | - | - |
| 18 | Art subject | 3,791 | 100 | 67.84 | 21.45 | 10.71 | - |
| 19 | Hotel and tourism | 2,821 | 100 | 39.49 | 36.83 | 15.38 | 8.29 |
| 20 | Law | 6,298 | 100 | 72.17 | 27.83 | - | - |
| 21 | Marketing | 6,837 | 100 | 64.85 | 35.15 | - | - |
| 22 | Social science | 701 | 100 | - | 100.00 | - | - |
| 23 | Veterinary | 851 | 100 | 35.14 | 64.86 | 0.00 | 0.00 |
| 24 | Any other | 2,357 | 100 | 96.31 | 3.69 | - | - |

# Chapter 6 <br> Labour and Employment 

### 6.1 General

Analysis of economic activities of population from censuses and surveys enables formation of the basis for economic policy and development plans. This is mainly due to the fact that such programmes relate to issues like the improvement of qualities of manpower, increasing productivity and minimizing unemployment and under employment.

The CIPS 2013 has collected information on activity status in respect of each inmate of a household through the following columns in Form B Household Questionnaire Part 2: Col. 19 Main Activity, Col. 20 Employment Period, Col. 21 Occupation, Col. 22 Employment Status, Col. 23 Industry, Trade or Service, Col. 24 Sector of Employment and Col. 25 Secondary economic activity (for all persons employed, unemployed and economically inactive).

The main objective of the survey questions was to classify the population into two categories, namely: economically active (those that belong to the labour force) and economically inactive (those who are outside the labour force). Further questions were asked to allow the breakdown of the employed population by major groups of occupation, industry, sector and status in employment.

The reference period for the survey was the one year preceding the survey date of March 3, 2013. In the survey, a person was regarded as having worked, if he/she had worked at least 6 months ( 183 days) or more during reference period. Economically active or labour force refers to the persons who are either employed or unemployed.

Employed persons included: (1) persons who were in paid employment in public or private organization (2) persons who did some work for wages, salary, profit or family gains in cash or kind during the difference period (3) persons who did not do any work for pay or profit during the reference period although they had a job to which they could return e.g. off season workers like farmers or fishermen, those on sick leave or leave without pay, those who could not work due to strike or lockout in the organization they were working and (4) persons who were self-employed e.g. running a shop by himself or herself, selling eatables, practicing as doctors, lawyers. Unemployed persons were classified into: those who were employed any time before and those who were never employed any time before.

Persons who were economically inactive were grouped into five categories: (1) home maker referring to person who was mostly engaged during the reference period in household duties in his or her home (2) student who is a person mostly attending school/ educational institution (3) dependent, referring to infants and children not attending school, persons permanently disabled and hence cannot do any work and persons who cannot work because of illness or old age. Also included is a person who cannot be categorized in any of the inactive category and is dependent on others. However if such a person was
seeking or available for work he or she is categorized as unemployed and not as dependent (4) rentreceiver, retired or other income recipients is a person who had retired from service and for most of the time was doing no other work [i.e. mostly not employed again in some work or not engaged in some other work such as cultivation, business, trade etc. or a person who was for most of the time a rentreceiver or a person living on agricultural or non-agricultural royalty, rent or dividend who was neither employed nor unemployed, or any other person of independent means for securing which he/she did not have to work would come under this category] and (5) Other (specify) category includes all persons not economically active for most of the time and who may not come under any of the above four categories. This chapter focuses mainly on the persons aged 15 years and above in order to conform with the international standards set by the International Labour Organization (ILO).

### 6.2 Economically Active population or Labour Force

The labour force participation rate is the number of persons in the labour force (Employed and Unemployed) at a given age and sex and/or place of residence, divided by the corresponding total population with the same characteristics, multiplied by 100 .


As may be seen from Table 6.1 the overall economic activity rate at the national level has increased by about four percentage points during 2008-2013. In the case of males the percentage of increase (4.5) is higher than that for females (2.8).

Table 6.1 Labour Force Participation Rates (Percent) by Sex and Residence for the Population aged 5 and Older, Cambodia 2008 and 2013

| Activity Status | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total |  |  |  |  |  |  |
| Labour Force Participation Rates | 58.7 | 59.3 | 58.1 | 62.3 | 63.8 | 60.9 |
| Employed | 57.7 | 58.4 | 57.0 | 60.8 | 62.4 | 59.3 |
| Unemployed | 1.0 | 0.9 | 1.1 | 1.5 | 1.4 | 1.7 |
| Not Economically Active | 41.3 | 40.7 | 41.9 | 37.7 | 36.2 | 39.1 |
| Urban |  |  |  |  |  |  |
| Labour Force Participation Rates | 68.3 | 87.4 | 53.6 | 57.8 | 62.3 | 53.6 |
| Employed | 66.7 | 86.1 | 51.8 | 55.2 | 60.0 | 50.6 |
| Unemployed | 1.6 | 1.3 | 1.8 | 2.6 | 2.3 | 3.0 |
| Not Economically Active | 31.7 | 12.6 | 46.4 | 42.2 | 37.7 | 46.4 |
| Rural |  |  |  |  |  |  |
| Labour Force Participation Rates | 59.9 | 59.4 | 60.4 | 63.5 | 64.2 | 62.9 |
| Employed | 59.3 | 58.8 | 59.8 | 62.3 | 63.0 | 61.6 |
| Unemployed | 0.6 | 0.6 | 0.6 | 1.2 | 1.2 | 1.3 |
| Not Economically Active | 40.1 | 40.6 | 39.6 | 36.5 | 35.8 | 37.1 |

Table 6.2 Age-Specific Labour Force Participation Rates (Percent) by Sex and Broad Age Group, 2008 and 2013

| Age group | Economic Activity Rates |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  | Urban |  |  | Rural |  |  |
|  | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Age 5 + | 58.7 | 59.3 | 58.1 | 53.6 | 58.8 | 49.0 | 59.9 | 59.4 | 60.4 |
| Above 15 | 78.3 | 80.8 | 76.0 | 65.8 | 73.4 | 59.1 | 81.8 | 82.9 | 80.8 |
| Under 15 | 3.1 | 3.0 | 3.2 | 1.8 | 1.5 | 2.1 | 3.3 | 3.3 | 3.4 |
| 15-24 | 60.1 | 57.1 | 63.2 | 50.3 | 46.4 | 53.8 | 63.2 | 60.1 | 66.4 |
| 25-64 | 91.1 | 96.5 | 86.4 | 78.4 | 91.8 | 66.2 | 94.5 | 97.8 | 91.8 |
| 15-64 | 79.9 | 81.6 | 78.5 | 67.6 | 74.6 | 61.4 | 83.5 | 83.6 | 83.4 |
| $65+$ | 54.5 | 68.4 | 45.2 | 29.4 | 44.4 | 20.1 | 59.4 | 72.8 | 50.2 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Age 5 + | 62.3 | 63.8 | 60.9 | 57.8 | 62.3 | 53.6 | 63.5 | 64.2 | 62.9 |
| Above 15 | 79.8 | 83.1 | 76.7 | 70.9 | 77.9 | 64.5 | 82.4 | 84.7 | 80.3 |
| Under 15 | 2.4 | 2.4 | 2.4 | 1.6 | 1.1 | 2.1 | 2.6 | 2.7 | 2.4 |
| 15-24 | 62.4 | 60.7 | 64.1 | 47.7 | 46.6 | 48.8 | 66.3 | 64.5 | 68.2 |
| 25-64 | 91.9 | 97.1 | 87.2 | 84.1 | 94.5 | 74.9 | 94.3 | 98.0 | 91.1 |
| 15-64 | 82.2 | 84.5 | 80.0 | 73.2 | 79.5 | 67.4 | 84.8 | 86.0 | 83.7 |
| $65+$ | 48.1 | 61.3 | 39.3 | 34.9 | 48.6 | 25.8 | 51.3 | 64.3 | 42.6 |

Table 6.2 shows that women continue to enter and exit the labour force at an earlier age than men. The male economic activity rate remains higher than that for females in all ages from age 25 . The economic activity rates have always been higher in the rural areas than in the urban areas both in respect of males and females presumably due to higher participation of persons in agriculture in rural areas and higher school enrolment of both boys and girls in urban areas. Both in the urban and rural areas of the country, the economic activity rates for males are higher than that for females though the gap between the malefemale participation rates is much less in rural areas than in the urban areas.

The economic activity rate or the labour force participation rate (LPR) among children under 15 has decreased from 3.1 in 2008 to 2.4 in 2013 which may be regarded as a development. The working ages 15-64 have shown an all-round improvement in 2013 compared to 2008. The participation rates of 82.2 for sexes, 84.5 for males and 80.0 for females in Cambodia are much higher compared to the neighbouring countries. For example the LPR of males and females are 79.5 and 71.3 respectively in Viet Nam and 78.1 and 75.6 respectively in Lao PDR.

Figure 6.2 Age-Specific Labour Force Participation Rates by Sex Cambodia 2008-2013


### 6.3 Employment and Unemployment

Employment is an important indicator for assessing socio-economic development. Analysis of the changing dynamics of employment allows us to assess the impact of socio-economic transition and propose employment policies appropriate with socio-economic conditions of the nation. Cambodia's economy has undergone important changes in the past few decades. These important changes combined with improvements in education of the labour force in recent years have changed the structure and distribution of employed labour.

A majority of the labour force has employment; the number unemployed accounts for only a small share. Therefore, analysis of the basic characteristics of the employed labour force such as age, sex,
marital status, sector of employment, status in employment and the like may throw light on the general status of the labour force in the country.

The employment rate which is defined as the percentage of employed to the total number of persons in the labour force works out as 98.3 per cent and 97.6 per cent for Cambodia in 2008 and 2013 respectively. Correspondingly the unemployment rates are 1.7 per cent and 2,4 per cent respectively. There is therefore an increase the unemployment rate in the country during the half decade. In 2013 the unemployment rates among men and women are 2.2 per cent and 2.8 per cent respectively.

Figure 6.3 Age-Specific Employment Rates by Sex, Cambodia 2008-2013


Figure 6.4 Age-Specific Unemployment Rates by Sex Cambodia 2008-2013


### 6.4 Employment Status

An analysis of the status in employment reveals that unpaid family workers and own account workers together constitute about 78 percent of the employed population in Cambodia in 2013 (Table 6.3). The corresponding proportion in 2008 was about 83 per cent. The fall in the proportion during the five years is more due to fall in the proportion of unpaid family workers especially among rural women. With paid employment constituting only about 22 per cent, most of the workers in Cambodia are in the informal sector. The proportion of women in the informal sector is higher than that of males. Half the number of male employed persons are own account workers. In the case of females the highest proportion is that of unpaid family workers ( 53.3 per cent). The proportion of own account workers has also declined and the proportion of paid employees has increased considerably. In 2013 as well as in 2008 the proportion of paid employees among males is higher than that of females.

In 2013, in the urban areas, paid employees among the total employed population constitute the highest proportion ( 47 percent) followed by own account workers ( 37.8 percent). In the case of urban employed males proportion of paid employees is much higher than that of own account workers in 2013. In the case of their female counterparts, however, the two proportions are almost the same. In the rural areas proportion of own account workers among males is more than the proportion of unpaid family workers whereas the opposite trend is noticed in respect of females.

Table 6.3 Distribution of Employed Persons*by Status in Employment, Sex and Residence, Cambodia 2008 and 2013

| Year | Number | Status in Employment |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total Employed Persons | Employer | Paid <br> Employee | Own Account Worker | Unpaid family Worker | Other |
| (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| Cambodia-Total |  |  |  |  |  |  |  |
| Bother Sexes |  |  |  |  |  |  |  |
| 2008 | 6,934,759 | 100 | 0.2 | 17.2 | 39.1 | 43.5 | 0.1 |
| 2013 | 8,124,243 | 100 | 0.3 | 22.0 | 39.5 | 38.2 | 0.1 |
| Males |  |  |  |  |  |  |  |
| 2008 | 3,392,344 | 100 | 0.2 | 20.6 | 53.9 | 25.3 | 0.1 |
| 2013 | 4,020,697 | 100 | 0.4 | 26.1 | 50.6 | 22.8 | 0.1 |
| Females |  |  |  |  |  |  |  |
| 2008 | 3,542,415 | 100 | 0.1 | 14.0 | 25.0 | 60.9 | 0.0 |
| 2013 | 4,103,546 | 100 | 0.3 | 17.9 | 28.5 | 53.3 | 0.1 |
| Cambodia-Urban |  |  |  |  |  |  |  |
| Bother Sexes |  |  |  |  |  |  |  |
| 2008 | 1,232,963 | 100 | 0.3 | 51.8 | 33.3 | 14.5 | 0.1 |
| 2013 | 1,605,238 | 100 | 0.5 | 47.0 | 37.8 | 14.5 | 0.1 |
| Males |  |  |  |  |  |  |  |
| 2008 | 651,190 | 100 | 0.37 | 55.8 | 35.5 | 8.3 | 0.1 |
| 2013 | 847,159 | 100 | 0.66 | 55.0 | 36.8 | 7.3 | 0.2 |
| Females |  |  |  |  |  |  |  |
| 2008 | 5,701,796 | 100 | 0.1 | 9.7 | 40.4 | 49.7 | 0.0 |
| 2013 | 6,519,006 | 100 | 0.3 | 15.8 | 39.9 | 44.0 | 0.1 |
| Cambodia-Rural |  |  |  |  |  |  |  |
| Bother Sexes |  |  |  |  |  |  |  |
| 2008 | 2,741,154 | 100 | 0.1 | 12.2 | 58.3 | 29.3 | 0.1 |
| 2013 | 3,173,538 | 100 | 0.3 | 18.4 | 54.4 | 26.9 | 0.1 |
| Males |  |  |  |  |  |  |  |
| 2008 | 2,741,154 | 100 | 0.1 | 12.2 | 58.3 | 29.3 | 0.1 |
| 2013 | 3,173,538 | 100 | 0.3 | 18.4 | 54.4 | 26.9 | 0.1 |
| Females |  |  |  |  |  |  |  |
| 2008 | 2,960,642 | 100 | 0.1 | 7.4 | 23.8 | 68.6 | 0.0 |
| 2013 | 3,345,468 | 100 | 0.2 | 13.3 | 26.2 | 60.2 | 0.1 |

*Excluding Not Reported Status

### 6.5 Sectors of Employment

The employed population is distributed in percentage terms into eight sectors of employment in Table 6.4. Sector of employment refers to sectors like Government, private, foreign-owned etc. to which the institution or establishment of the employed person belongs. In 2013 most of the population at the national level is employed in local private enterprises ( 87.2 per cent).Government jobs and jobs in foreign enterprises like foreign banks etc. account for 11.8 per cent percent of the employed. This leaves hardly one percent for all the other five sectors. The urban scenario is somewhat different with higher proportions in government and foreign enterprise sectors than in the rural parts.

Table 6.4 Distribution of Employed Persons* by, Sex and Sector of Employment, Cambodia 2008 and 2013

| Year | Number of <br> Employed Persons | Total | Sector of Employment |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Govern -ment | State Owned Enterprise | Cambodia Private Enterprise | Foreign Enterprise | Non- <br> Profit Institution | Household Sector | Embassy International Institution | Other |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| Cambodia- Total |  |  |  |  |  |  |  |  |  |  |
| Both Sexes |  |  |  |  |  |  |  |  |  |  |
| 2008 | 6,935,017 | 100 | 4.4 | 0.3 | 90.3 | 4.4 | 0.1 | 0.3 | 0.2 | 0.0 |
| 2013 | 8,125,238 | 100 | 5.2 | 0.3 | 87.2 | 6.6 | 0.1 | 0.5 | 0.1 | 0.0 |
| Males |  |  |  |  |  |  |  |  |  |  |
| 2008 | 3,392,545 | 100 | 6.9 | 0.4 | 89.5 | 2.6 | 0.1 | 0.3 | 0.3 | 0.0 |
| 2013 | 4,021,539 | 100 | 7.7 | 0.5 | 86.3 | 4.9 | 0.1 | 0.4 | 0.1 | 0.0 |
| Females |  |  |  |  |  |  |  |  |  |  |
| 2008 | 3,542,472 | 100 | 2.0 | 0.1 | 91.1 | 6.1 | 0.0 | 0.4 | 0.2 | 0.0 |
| 2013 | 4,103,698 | 100 | 2.7 | 0.2 | 88.1 | 8.3 | 0.1 | 0.6 | 0.1 | 0.0 |
| Cambodia- Urban |  |  |  |  |  |  |  |  |  |  |
| Both Sexes |  |  |  |  |  |  |  |  |  |  |
| 2008 | 1,233,080 | 100 | 12.1 | 0.7 | 70.3 | 14.6 | 0.2 | 1.0 | 1.0 | 0.0 |
| 2013 | 1,605,271 | 100 | 13.8 | 0.7 | 73.6 | 10.7 | 0.3 | 0.8 | 0.2 | 0.0 |
| Males |  |  |  |  |  |  |  |  |  |  |
| 2008 | 651,268 | 100 | 17.0 | 1.1 | 71.7 | 8.2 | 0.2 | 0.6 | 1.2 | 0.1 |
| 2013 | 847,192 | 100 | 18.7 | 1.0 | 70.5 | 8.7 | 0.4 | 0.5 | 0.2 | 0.0 |
| Females |  |  |  |  |  |  |  |  |  |  |
| 2008 | 81,812 | 100 | 6.6 | 0.4 | 68.7 | 21.9 | 0.2 | 1.5 | 0.8 | 0.0 |
| 2013 | 758,079 | 100 | 8.3 | 0.2 | 77.0 | 12.9 | 0.2 | 1.2 | 0.2 | 0.1 |
| Cambodia- Rural |  |  |  |  |  |  |  |  |  |  |
| Both Sexes |  |  |  |  |  |  |  |  |  |  |
| 2008 | 5,701,937 | 100 | 2.7 | 0.2 | 94.7 | 2.2 | 0.0 | 0.2 | 0.1 | 0.0 |
| 2013 | 6,519,968 | 100 | 3.0 | 0.2 | 90.6 | 5.6 | 0.1 | 0.4 | 0.0 | 0.0 |
| Males |  |  |  |  |  |  |  |  |  |  |
| 2008 | 2,741,277 | 100 | 4.5 | 0.2 | 93.7 | 1.2 | 0.1 | 0.2 | 0.1 | 0.0 |
| 2013 | 3,174,347 | 100 | 4.8 | 0.3 | 90.5 | 3.9 | 0.1 | 0.4 | 0.0 | 0.1 |
| Females |  |  |  |  |  |  |  |  |  |  |
| 2008 | 2,960,660 | 100 | 1.1 | 0.1 | 95.5 | 3.0 | 0.0 | 0.2 | 0.1 | 0.0 |
| 2013 | 3,345,620 | 100 | 1.4 | 0.1 | 90.6 | 7.3 | 0.0 | 0.4 | 0.0 | 0.0 |

*Excluding Not Reported Sector

### 6.6 Employment by Industrial and Occupational Classifications

The nature of industry and service as well as the occupation returned in the CIPS 2013 by employed persons and unemployed persons (employed before) were coded in the office adopting the latest International Standard Industrial Classification and the International Standard Classification of Occupations. Tables 6.5 and 6.6 present the distribution of employed persons by Occupational and Industrial classifications and by sex. It is observed that agriculture is predominant in terms of occupation and industry.

Based on Table 6.6, the proportions of the employed population in the three industrial sectors of employment, namely Primary (or Agriculture), Secondary (or Industry) and Tertiary (Services) are shown in Table 6.7.

Table 6.5 Distribution of Employed Population by Occupational Composition and Sex Cambodia 2008-2013

| Group of Occupation |  | Major Percentage of Employed Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2008 |  |  | 2013 |  |  |
| Major Group | Description | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 1 | Managers | 0.6 | 0.9 | 0.2 | 0.6 | 1.0 | 0.2 |
| 2 | Professionals | 1.7 | 2.2 | 1.3 | 3.0 | 3.5 | 2.5 |
| 3 | Technicians and associate Professionals | 2.3 | 3.4 | 1.2 | 1.3 | 1.7 | 1.0 |
| 4 | Clerical Support Workers | 1.5 | 2.0 | 1.0 | 2.3 | 3.1 | 1.6 |
| 5 | Services and Sales Workers | 9.0 | 7.0 | 10.8 | 11.9 | 8.7 | 15.0 |
| 6 | Skilled Agricultural, Forestry and Fishing | 71.3 | 68.7 | 73.8 | 62.9 | 61.2 | 64.5 |
| 7 | Craft and Related Workers | 7.2 | 6.2 | 8.2 | 10.1 | 9.2 | 11.0 |
| 8 | Plant and Machine Operators and Assemblers | 1.8 | 3.4 | 0.2 | 1.9 | 3.7 | 0.2 |
| 9 | Elementary Occupations | 4.7 | 6.2 | 3.3 | 6.0 | 7.9 | 4.1 |

Note: Excluding not reported.

Table 6.6 Distribution of Employed Population by Industrial Composition and Sex Cambodia 2008-2013

| Industrial Section |  | Percentage of Employed Persons |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2008 |  |  | 2013 |  |  |
| Section | Description | Both Sexes | Males | Females | Both Sexes | Males | Females |
|  | Total | 100 | 100 | 100 | 100 | 100 | 100 |
| A | Agriculture, Forestry and Fishing | 72.3 | 69.4 | 75.1 | 64.3 | 62.3 | 66.3 |
| B | Mining and Quarrying | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| C | Manufacturing | 6.2 | 4.1 | 8.2 | 8.1 | 5.8 | 10.3 |
| D | Electricity, Gas, Stream and AirCon Supply | 0.1 | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 |
| E | Water Supply, Sewerage, Waste Management and Remediation Activities | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| F | Construction | 2.0 | 3.5 | 0.6 | 3.2 | 5.4 | 1.0 |
| G | Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles | 7.8 | 5.8 | 9.6 | 10.1 | 7.4 | 12.7 |
| H | Transportation and Storage | 2.2 | 4.2 | 0.4 | 2.4 | 4.5 | 0.3 |
| I | Accommodation and Food Services Activities | 0.9 | 0.7 | 1.1 | 2.0 | 1.6 | 2.5 |
| J | Information and Communication | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 |
| K | Finance and Insurance Activities | 0.2 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 |
| L | Real Estate | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| M | Professional, Scientific and Technical Activities | 0.2 | 0.3 | 0.1 | 0.4 | 0.4 | 0.4 |
| N | Administrative and Support Service Activities | 0.8 | 1.0 | 0.6 | 1.1 | 1.5 | 0.8 |
| O | Public Administration and Defense, Social Security | 2.7 | 4.8 | 0.7 | 3.3 | 5.6 | 1.0 |
| P | Education | 1.6 | 2.1 | 1.2 | 1.7 | 2.1 | 1.4 |
| Q | Human Health and Social Work Activities | 0.5 | 0.5 | 0.4 | 0.6 | 0.6 | 0.6 |
| R | Art, Entertainment and Recreation | 0.3 | 0.3 | 0.3 | 0.3 | 0.5 | 0.2 |
| S | Other Service Activities | 1.6 | 2.1 | 1.1 | 1.5 | 1.2 | 1.7 |
| T | Use Activities of Household as Employers | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| U | Activities of Extraterritorial Organization and Bodies | 0.2 | 0.3 | 0.2 | 0.4 | 0.5 | 0.3 |

Note: Excluding not reported.

Table 6.7 Distribution of Employed Population by Industrial Sectors, Sex and Residence 2008-2013

| Industry Sectors | Total |  |  | Urban |  |  | Rural |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Male | Female | Both Sexes | Male | Female | Both Sexes | Male | Female |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Primary | 72.3 | 69.4 | 75.1 | 14.0 | 13.6 | 14.6 | 84.9 | 82.6 | 87.0 |
| Secondary | 8.5 | 8.1 | 9.0 | 25.3 | 22.1 | 28.9 | 4.9 | 4.7 | 5.1 |
| Tertiary | 19.2 | 22.6 | 15.9 | 60.7 | 64.3 | 56.6 | 10.2 | 12.7 | 7.9 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Primary | 64.3 | 62.3 | 66.3 | 13.5 | 12.7 | 14.3 | 76.8 | 75.5 | 78.1 |
| Secondary | 11.5 | 11.6 | 11.5 | 18.1 | 18.8 | 17.3 | 9.9 | 9.7 | 10.1 |
| Tertiary | 23.8 | 25.6 | 21.9 | 67.0 | 66.8 | 67.1 | 13.1 | 14.7 | 11.7 |

Note: Excluding not reported. The Primary Sector relates to Industrial Section A (see Table 6.6). The Secondary sector includes B to F Industrial Sections and the Tertiary Sector covers the Industrial Sectors G to U.

The proportion of population in the primary sector has continued to decline during the five years 20082013. The decline is sharper in the case of women than men. The proportions in the Secondary and Tertiary sectors have increased. This confirms that concentration of workers in the agricultural sector is gradually declining and the employment is becoming diversified. However as of 2013, it is the tertiary sector which absorbs more than two-thirds of the work force in the urban areas whereas in rural areas more than three-fourths of the population is in the primary sector.

Figure 6.5 Distribution of Employed Population by Industrial Sectors and Residence 2008-2013


### 6.7 Secondary Economic Activity

The objective of the question on secondary economic activity in CIPS 2013 is, as in the case of 2008 census, to ascertain whether each person had a second job or a secondary economic activity during the one year preceding the survey which gave him/her additional income or some income in cash or kind. The secondary economic activity referred to secondary or additional job in the case of those who were mainly employed in the reference period of one year. In respect of those who were mainly economically inactive (e.g. homemaker, student etc.) or unemployed in the reference period, it referred to their marginal economic activity in the one year period.

The pattern of employed persons participating in secondary economic activity is more or less the same both in 2008 and 2013 though there are differences in numbers. According to Table 6.8, in 2013, about 42 percent of the total employed population in Cambodia is having a secondary activity besides their main activity. The most favored secondary occupation is unpaid livestock farming ( 16.7 percent) followed by unpaid crop farming ( 7.6 percent). In other words about 57 percent of the employed population who have a secondary economic activity is engaged only in unpaid family enterprises. The distribution by secondary activity is more or less similar in respect of both males and females for Cambodia as a whole with the following notable exceptions: In fishing and construction, males have a higher proportion than females. In unpaid live-stock farming and trade, females have a higher proportion.

In the rural areas the percentage of employed persons with secondary economic activity is higher (49.7 percent) and in urban areas it is lower ( 12.2 percent) than the country average (Tables 6.8). Both in the urban and rural parts, unpaid live-stock farming and unpaid crop farming account for most of the employed persons albeit at different proportions. As derived from the CIPS 2013 priority Table C6 (not given here), only about 14 per cent of the not economically active population in Cambodia has a secondary activity in 2013. Mostly the secondary economic activity of students and home makers is unpaid family enterprise.
Table 6.8 Percent Distribution of Employed Persons* with Secondary Economic Activity by Categories,

| Year | Total | Persons with No Secondary Activity | Persons with Secondary Activity |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Unpaid Crop Farming | Paid <br> Crop <br> Farming | Unpaid Live-stock Farming | Paid Live-stock Farming | Fishing | Household <br> Production/ Service | Construction | Trade | Transport | Other Paid Employment |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
| ( Cambodia-Total |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 47.7 | 52.3 | 15.7 | 3.2 | 26.4 | 0.3 | 1.6 | 1.7 | 0.9 | 1.8 | 0.3 | 0.6 |
| 2013 | 100 | 57.7 | 42.3 | 7.6 | 4.9 | 16.7 | 1.2 | 2.4 | 2.4 | 2.8 | 2.3 | 0.7 | 1.3 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 48.5 | 51.5 | 15.7 | 3.4 | 24.0 | 0.3 | 2.3 | 1.8 | 1.6 | 1.2 | 0.6 | 0.7 |
| 2013 | 100 | 55.7 | 44.3 | 8.1 | 5.0 | 14.3 | 1.2 | 3.8 | 2.6 | 4.9 | 1.7 | 1.3 | 1.5 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 46.9 | 53.1 | 15.6 | 3.0 | 28.7 | 0.2 | 0.8 | 1.7 | 0.2 | 2.3 | 0.1 | 0.5 |
| 2013 | 100 | 59.6 | 40.4 | 7.1 | 4.8 | 19.1 | 1.2 | 1.1 | 2.3 | 0.7 | 2.9 | 0.1 | 1.1 |
| Both Sexes Cambodia-Urban |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 86.9 | 13.1 | 3.7 | 1.0 | 4.2 | 0.2 | 0.4 | 0.6 | 0.5 | 1.4 | 0.3 | 0.8 |
| 2013 | 100 | 87.8 | 12.2 | 4.2 | 0.7 | 1.9 | 0.2 | 0.5 | 0.7 | 1.0 | 1.5 | 0.7 | 1.0 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 86.7 | 13.3 | 3.7 | 1.0 | 3.9 | 0.2 | 0.5 | 0.6 | 0.8 | 1.1 | 0.5 | 0.9 |
| 2013 | 100 | 86.7 | 13.3 | 4.4 | 0.7 | 1.5 | 0.1 | 0.8 | 0.9 | 1.7 | 0.9 | 1.2 | 1.2 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 87.1 | 12.9 | 3.8 | 0.9 | 4.5 | 0.2 | 0.2 | 0.6 | 0.2 | 1.8 | 0.1 | 0.7 |
| 2013 | 100 | 89.0 | 11.0 | 3.9 | 0.6 | 2.3 | 0.2 | 0.2 | 0.6 | 0.2 | 2.2 | 0.1 | 0.7 |
| Both Sexes |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 39.2 | 60.8 | 18.3 | 3.6 | 31.2 | 0.3 | 1.8 | 2.0 | 1.0 | 1.8 | 0.3 | 0.5 |
| 2013 | 100 | 50.3 | 49.7 | 8.4 | 5.9 | 20.4 | 1.5 | 2.9 | 2.9 | 3.3 | 2.5 | 0.7 | 1.4 |
| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 39.4 | 60.6 | 18.6 | 3.9 | 28.8 | 0.3 | 2.7 | 2.0 | 1.8 | 1.3 | 0.6 | 0.6 |
| 2013 | 100 | 47.5 | 52.6 | 9.1 | 6.1 | 17.8 | 1.5 | 4.6 | 3.0 | 5.8 | 1.9 | 1.3 | 1.6 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2008 | 100 | 39.0 | 61.0 | 18.0 | 3.4 | 33.5 | 0.3 | 0.9 | 1.9 | 0.3 | 2.3 | 0.1 | 0.5 |
| 2013 | 100 | 52.9 | 47.1 | 7.8 | 5.8 | 22.9 | 1.5 | 1.3 | 2.7 | 0.9 | 3.1 | 0.1 | 1.1 |

### 6.8 Educational Levels of Workers

Table 6.9 shows that in 2013, little over two-thirds of the employed literate persons in Cambodia have the educational level of either primary not completed or primary. Those who have qualifications of Lower Secondary and more, account for more than 29 per cent in 2013 as against about 21 percent in 2008. This shows that there is a general improvement in the educational level of the labour force during the five -year period. About 3 percent of the employed persons have no educational qualification at all both in 2008 and 2013. They may be labourers mostly found in elementary occupations. The level of education of employed males is higher than that of females in general.

### 6.9 School Attendance by young workers

It may be of interest to know whether the employed population in the age group 5 to 24 are attending school now (i.e. at the time of the survey), attended in the past or never attended at all. Table 6.10 provides the information. The proportion of employed children and youth in the ages 5 to 24 who have never attended any educational institution has declined during 2008-2013 showing improvement in schooling of the workers in this age group. If employed children in the ages up to 14 are considered, most of them have either never attended school or attended in the past. This shows that most of them had either never enrolled or had dropped out before they completed even the primary level. In the ages 15 to 24 most of the employed persons have attended school in the past. The pattern of school attendance among the employed population in the age group 5 to 24 is more or less the same for both males and females. Both in 2008 and 2013 the proportion never attended school is much higher in rural areas compared to urban areas in the ages 5 to 24 .

Table 6.9 Distribution of Employed Literate Population (any language) by Level of Education, Sex and Residence, Cambodia 2008-2013

| Sex and Residence | Percentage Distribution by Educational Level |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | None | Primary Not Completed | Primary | $\begin{array}{c\|} \hline \text { Lower } \\ \text { Secondary } \\ \hline \end{array}$ | Secondary / Diploma | Beyond Secondary |
| 2008 |  |  |  |  |  |  |  |
| Total | 100 | 2.7 | 45.9 | 30.2 | 17.9 | 1.9 | 1.4 |
| Both Sexes | 100 | 2.7 | 45.9 | 30.2 | 17.9 | 1.9 | 1.4 |
| Males | 100 | 2.3 | 40.2 | 31.7 | 21.5 | 2.4 | 1.9 |
| Females | 100 | 3.1 | 52.4 | 28.5 | 13.7 | 1.3 | 0.8 |
| Urban | 100 | 2.9 | 27.1 | 29.4 | 30.1 | 4.9 | 5.7 |
| Both Sexes | 100 | 2.9 | 27.1 | 29.4 | 30.1 | 4.9 | 5.7 |
| Males | 100 | 2.7 | 21.9 | 27.6 | 34.6 | 5.9 | 7.5 |
| Females | 100 | 3.2 | 33.3 | 31.5 | 24.8 | 3.7 | 3.6 |
| Rural | 100 | 2.6 | 51.0 | 30.5 | 14.5 | 1.1 | 0.2 |
| Both Sexes | 100 | 2.6 | 51.0 | 30.5 | 14.5 | 1.1 | 0.2 |
| Males | 100 | 2.2 | 45.3 | 32.9 | 17.8 | 1.4 | 0.4 |
| Females | 100 | 3.1 | 57.5 | 27.8 | 10.8 | 0.7 | 0.1 |
| 2013 |  |  |  |  |  |  |  |
| Total | 100 | 2.7 | 35.7 | 32.5 | 23.3 | 3.2 | 2.7 |
| Both Sexes | 100 | 2.7 | 35.7 | 32.5 | 23.3 | 3.2 | 2.7 |
| Males | 100 | 2.5 | 31.2 | 32.5 | 26.6 | 3.8 | 3.3 |
| Females | 100 | 2.9 | 40.7 | 32.4 | 19.6 | 2.5 | 1.9 |
| Urban | 100 | 2.7 | 19.4 | 26.0 | 34.2 | 8.6 | 9.1 |
| Both Sexes | 100 | 2.7 | 19.4 | 26.0 | 34.2 | 8.6 | 9.1 |
| Males | 100 | 2.5 | 15.4 | 24.3 | 36.8 | 9.8 | 11.1 |
| Females | 100 | 3.0 | 24.1 | 28.0 | 31.1 | 7.2 | 6.7 |
| Rural | 100 | 2.7 | 40.5 | 34.4 | 20.1 | 1.6 | 0.8 |
| Both Sexes | 100 | 2.7 | 40.5 | 34.4 | 20.1 | 1.6 | 0.8 |
| Males | 100 | 2.5 | 36.0 | 35.0 | 23.5 | 2.0 | 1.0 |
| Females | 100 | 2.9 | 45.5 | 33.7 | 16.2 | 1.2 | 0.5 |

Note: Excluding other and not reported.

Table 6.10 Distribution of Employed Population by Broad Age Group, School Attendance, Sex and Residence Cambodia 2008-2013

| Age Group and Residence | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never Attended | Current <br> Attending | Past Attended | Never <br> Attended | Current <br> Attending | Past Attended |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Cambodia | 19.0 | 2.6 | 78.4 | 13.3 | 1.6 | 85.1 |
| 05-11 | 57.8 | 13.2 | 29.0 | 68.1 | 10.7 | 21.2 |
| 12-14 | 33.9 | 7.2 | 58.9 | 25.1 | 6.1 | 68.8 |
| 15-17 | 19.9 | 3.9 | 76.2 | 16.1 | 1.6 | 82.3 |
| 18-24 | 17.6 | 1.9 | 80.5 | 12.0 | 1.4 | 86.5 |
| Male | 17.4 | 3.0 | 79.6 | 13.7 | 1.7 | 84.7 |
| 05-11 | 57.3 | 13.2 | 29.5 | 73.5 | 6.9 | 19.7 |
| 12-14 | 34.8 | 8.0 | 57.1 | 25.2 | 5.8 | 69.0 |
| 15-17 | 20.5 | 4.5 | 75.0 | 18.0 | 1.2 | 80.8 |
| 18-24 | 15.2 | 2.3 | 82.5 | 12.1 | 1.6 | 86.3 |
| Female | 20.6 | 2.2 | 77.3 | 12.9 | 1.6 | 85.5 |
| 05-11 | 58.3 | 13.3 | 28.5 | 59.8 | 16.6 | 23.6 |
| 12-14 | 33.0 | 6.3 | 60.7 | 24.9 | 6.4 | 68.7 |
| 15-17 | 19.3 | 3.3 | 77.4 | 14.4 | 2.1 | 83.5 |
| 18-24 | 19.8 | 1.6 | 78.6 | 12.0 | 1.3 | 86.7 |
| Urban | 8.1 | 2.6 | 89.2 | 8.0 | 3.5 | 88.5 |
| 05-11 | 30.0 | 11.9 | 58.1 | 27.9 | 0.0 | 72.1 |
| 12-14 | 19.8 | 6.6 | 73.6 | 0.9 | 4.3 | 94.8 |
| 15-17 | 11.2 | 2.8 | 86.0 | 8.4 | 2.7 | 88.9 |
| 18-24 | 7.4 | 2.5 | 90.1 | 8.1 | 3.6 | 88.4 |
| Male | 8.0 | 3.4 | 88.6 | 9.8 | 3.9 | 86.3 |
| 05-11 | 31.2 | 12.5 | 56.4 | 45.8 | 0.0 | 54.2 |
| 12-14 | 21.4 | 8.2 | 70.4 | 1.8 | 11.5 | 86.7 |
| 15-17 | 12.4 | 3.7 | 84.0 | 10.3 | 4.2 | 85.5 |
| 18-24 | 7.2 | 3.2 | 89.6 | 9.8 | 3.7 | 86.5 |
| Female | 8.2 | 2.1 | 89.7 | 6.3 | 3.1 | 90.5 |
| 05-11 | 28.7 | 11.4 | 59.9 | 20.1 | 0.0 | 79.9 |
| 12-14 | 18.7 | 5.6 | 75.8 | 0.5 | 1.0 | 98.5 |
| 15-17 | 10.5 | 2.3 | 87.3 | 7.0 | 1.7 | 91.3 |
| 18-24 | 7.6 | 1.9 | 90.5 | 6.3 | 3.4 | 90.2 |
| Rural | 21.5 | 2.6 | 75.9 | 14.2 | 1.3 | 84.5 |
| 05-11 | 59.7 | 13.3 | 27.0 | 73.5 | 12.1 | 14.4 |
| 12-14 | 35.1 | 7.2 | 57.7 | 28.0 | 6.3 | 65.7 |
| 15-17 | 21.1 | 4.0 | 74.8 | 16.9 | 1.5 | 81.5 |
| 18-24 | 20.2 | 1.8 | 78.0 | 12.8 | 1.0 | 86.2 |
| Male | 19.2 | 3.0 | 77.8 | 14.3 | 1.3 | 84.4 |
| 05-11 | 59.1 | 13.2 | 27.7 | 75.2 | 7.3 | 17.5 |
| 12-14 | 35.8 | 8.0 | 56.2 | 27.0 | 5.4 | 67.6 |
| 15-17 | 21.5 | 4.6 | 74.0 | 18.8 | 0.9 | 80.3 |
| 18-24 | 17.0 | 2.1 | 80.9 | 12.5 | 1.2 | 86.3 |
| Female | 23.7 | 2.2 | 74.1 | 14.1 | 1.3 | 84.6 |
| 05-11 | 60.5 | 13.4 | 26.1 | 70.2 | 21.0 | 8.8 |
| 12-14 | 34.4 | 6.4 | 59.1 | 29.0 | 7.3 | 63.7 |
| 15-17 | 20.8 | 3.5 | 75.7 | 15.3 | 2.1 | 82.6 |
| 18-24 | 23.2 | 1.5 | 75.3 | 13.1 | 0.8 | 86.0 |

# Chapter 7 <br> Fertility and Mortality 

### 7.1 Introduction

Demographic and health surveys are being conducted with regular frequency in Cambodia ever since the first modern population census of the country was completed in 1998. The various demographic enquiries consist of the Cambodia Demographic and Health Survey (CDHS) 2000, Cambodia Inter-censal Population Survey (CIPS) 2004, CDHS 2005, Population Census 2008, CDHS 2010 and CIPS 2013.

Although the basic aim of these enquiries is to collect demographic and related data and produce estimates based on them, they differ in terms of coverage, length of data collection and the amount of training given to enumerators depending on the focus of the survey. For example, while the censuses and Inter-censal surveys are designed to capture a snap-shot of the population and related characteristics and do not produce much in-depth information, the demographic and health surveys collect more detailed information on the fertility, health and mortality conditions focusing on women of reproductive ages. As such, estimates of even the basic measures of fertility and mortality derived from these various enquiries should be taken with the above-mentioned facts in view, particularly when comparing the estimates based on them.

Registration of births and deaths in Cambodia is generally considered to be incomplete. Therefore, censuses and surveys have become the main sources of demographic estimates in Cambodia as in other countries with deficient vital registration systems. Because the questions about fertility and mortality, especially infant and child mortality are very sensitive questions to be asked of the respondents in any survey, it requires tact and a great deal of experience to obtain correct answers from the respondents. A census or an Inter-censal survey is a large operation conducted to collect information on a wide variety of topics. Therefore, in a census or a survey it is not possible to give the enumerators much detailed training, nor is it possible to devote a long period of time to data collection activities. Therefore, information related to fertility and child mortality collected in a census or a survey is liable to be incomplete.

This is true also of the 2013 Cambodia Inter-censal Population Survey (CIPS 2013). Therefore, different demographic techniques have to be applied for estimating fertility and early age mortality from data collected at CIPS 2013. Some of the data collected require the application of the so called indirect techniques to estimate measures of fertility and early age mortality while some other data collected at CIPS 2013 can, in theory at least provide directly calculated measures of fertility and early age mortality. However, the data for direct measurements are generally regarded as incomplete. The indirect techniques of estimating fertility and early age mortality were first developed by the late William Brass during the 1970s while studying the demography of subSaharan Africa (United Nations 1983). The method of estimating fertility basically utilises information collected at a census or survey on the number of children ever born to women classified by age of women and reported number of child births during a fixed period prior to the census or survey, also classified by age of women. The method originally developed by Brass relied on the
assumption that fertility had remained constant in the period leading up to the census or the survey. This assumption does not hold true, because most developing countries of the world have been experiencing fertility decline. Therefore, Brass's original method has been modified by several demographers to take declining fertility into account. These modified methods include the Arriaga one-census method, Arriaga two-census method and the Relational-Geompertz model.

The information on children ever born, together with information on children surviving (or children dead) classified by age of women is used for estimating early age mortality (under the age of five years) by the Child-Survivorship method developed by Brass, which like the method on fertility estimation has also undergone some modification, notably by Trusell and by Polloni.

There are a few other indirect methods of estimating fertility. One such method, developed by Rele (1967) converts information on child-woman ratio obtained from tabulations of population agedistribution, to total fertility rates.

### 7.2 Source and quality of data

The main source of data for this analytical report is the 2013 Cambodia Inter-censal Population Survey (CIPS 2013). Where appropriate other sources such as the 2008 Population census, the Cambodian Demographic and Health Surveys of 2000, 2005 and 2010 and the 2004 Inter-censal Population Survey have also been used.

No post enumeration survey (PES) was conducted after the CIPS 2013. Therefore, there is no way of knowing the extent of enumeration in the survey. The quality of overall age-sex reporting has been found to be good as indicated by the calculated values of Whipple's index ( 107 for males and 112 for females on a scale of 100 to 500), indicating almost no preference or digits 0 and 5), Myer's index ( 9.6 for males and 12.1 for females on a scale of 0 to 180 , indicating almost no digit preference) and the UN-age-sex accuracy index (31.6, indicating reasonable accuracy). Thus it can be assumed that the quality of data on age and sex collected at CIPS 2013 is good in general. However, large scale under-reporting of births and deaths when direct questions were asked about the occurrence of these events in the households in the past 12 months, cannot be ruled out.

### 7.2.1. Age-patterns of the average number of children ever born and surviving.

The average number of children ever born (CEB) by age-group of women shows the expected increasing pattern with women's age. The sex-ratios of CEB by age-group of women in the reproductive ages 15-49 (Table 7.1) reveal that, except for the youngest age-groups 15-19 and 2024 , the sex-ratios are in the acceptable range of 105 to 107 male children for every 100 female children. The sex-ratio of CEB for the age-group 15-19 is unusually low at 83 male for 100 female children, while the sex-ratio for the age-group 20-24 is also low at 99 male children for 100 female children. Sex-ratios at birth in the age-group 15-49 should be well over 100 (Mathews and Brady 2005). If the sex-ratios of CEB in the age-groups 15-19 and 20-24 are assumed to be equal to 105 , then the male children ever born may be considered to have been under-reported by mothers of these two age-groups by $26 \%$ and $6.4 \%$ respectively ${ }^{1}$. Taken together, the adjustments in these two

[^0]age-groups would amount to an overall under-reporting of children ever born (and children surviving) by about 9 percent ${ }^{2}$.

Table 7.1 Number of children ever born by age-group of women, Cambodia-Total 2013

| Age-group | Number of women | Number of children ever born (CEB) |  |  | Sex ratio of CEB <br> (Males per 100 Females) | Average number of CEB per woman |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Both sexes | Males | Females |  |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 15-19 | 769,818 | 33,567 | 15,242 | 18,326 | 83.2 | 0.044 |
| 20-24 | 802,710 | 393,656 | 195,535 | 198,121 | 98.7 | 0.490 |
| 25-29 | 676,517 | 870,424 | 450,244 | 420,180 | 107.2 | 1.287 |
| 30-34 | 629,941 | 1,283,541 | 662,869 | 620,672 | 106.8 | 2.038 |
| 35-39 | 373,794 | 1,030,264 | 529,753 | 500,511 | 105.8 | 2.756 |
| 40-44 | 455,941 | 1,527,464 | 788,347 | 739,116 | 106.7 | 3.350 |
| 45-49 | 406,380 | 1,527,195 | 790,079 | 737,116 | 107.2 | 3.758 |
| Total | 4,115,101 | 12,888,096 | 6,607,124 | 6,280,972 | 105.2 | 3.132 |

Source: Population Census of Cambodia, 2013. Priority Table F3. Females aged 15 and over by Parity, Total Children Ever Born, 5-year Age Group and Educational level.

The average number of children ever born (CEB) by age-group of women shows the expected increasing pattern with age of women at both the 2008 Census and 2013 CIPS. A comparison of the CEB between 2008 and 2013 confirms a general decline in fertility in the last five years since the 2008 Census (Figure 1).

Figure 7.1 Average number of children ever born (CEB) by age-group of women, Cambodia-Total 2008 and 2013.


Source: Drawn from and Priority Table F5, 2008 Census, and Priority Table F, 2013 CIPS

[^1]Similarly, the pattern of the average number of children surviving by age-group of women show the expected increasing pattern with women's age (Figure 7.2). However, in both the graphs, the rising shape of the curves of children ever born and children surviving indicates the continuation of fertility till very late in the reproductive span.

Figure 7.2 Average number of children surviving (CS) by age-group of women, Cambodia-Total 2008 and 2013.


Source: Drawn from and Priority Table F5, 2008 Census, and Priority Table F, 2013 CIPS

### 7.2.2 Childlessness

Childlessness or, the proportions of women having had no live birth decreases with age from age 15-19. Almost all of the women still childless at age 45-49 are childless due to their incapability to produce a live birth. In other words, the proportion of women childless at age 45-49 indicates primary sterility.

Table 7.2 Percent of all women with zero children ever born ("childless women") by age-group. Cambodia Total 1998-2013

| Age-group | $\mathbf{1 9 9 8}$ <br> Census | CDHS <br> $\mathbf{2 0 0 0}$ | $\mathbf{2 0 0 4}$ CIPS | CDHS 2005 | $\mathbf{2 0 0 8}$ <br> Census | CDHS <br> $\mathbf{2 0 1 0}$ | $\mathbf{2 0 1 3}$ <br> CIPS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ | $\mathbf{( 1 )}$ |
| $15-19$ | 93.9 | 94.4 | 94.6 | 94.8 | 95.3 | 94.7 | 96.1 |
| $20-24$ | 51.4 | 56.2 | 55.3 | 51.5 | 61.4 | 53.8 | 63.8 |
| $25-29$ | 23.0 | 20.4 | 25.3 | 23.3 | 30.9 | 22.2 | 32.1 |
| $30-34$ | 13.3 | 12.1 | 13.1 | 11.0 | 16.4 | 11.6 | 17.2 |
| $35-39$ | 9.1 | 8.1 | 10.2 | 9.3 | 10.9 | 8.5 | 10.6 |
| $40-44$ | 7.6 | 7.6 | 8.0 | 8.7 | 8.9 | 7.7 | 8.3 |
| $45-49$ | 6.6 | 8.2 | 7.5 | 7.2 | 8.0 | 8.3 | 7.3 |
| Total | $\mathbf{3 7 . 6}$ | $\mathbf{3 6 . 9}$ | $\mathbf{3 9 . 6}$ | $\mathbf{3 6 . 9}$ | $\mathbf{4 2 . 2}$ | $\mathbf{3 5 . 9}$ | $\mathbf{4 2 . 9}$ |

Sources: Drawn from priority Table D3 1998 census, CDHS 2000, 2004 CIPS,
CDHS 2005, Priority Table F3 2008 Census, CDHS 2010 and Priority Table F, 2013 CIPS

The proportions childless have remained fairly stable between the 1998 Census and the 2005 CDHS in most of the age-groups, but show considerable increases in 2008 and 2013, particularly in the age-groups 20-24 and above (Table 7.2). This could reflect a genuine tendency for a larger percentage of women to not have children, but this could also indicate under-reporting of children ever born, especially if those children are not living. Such under-reporting would have an impact on both the fertility and mortality estimates. It may be noted that the CDHS 2010 data present a picture more in line with the previous CDHS figures; in fact all the CDHS figures show on average lower levels of childlessness compared to either the Census or the inter-censal surveys. Without much more information at hand, these differences could be attributed to differences in sampling methods for the CDHS on the one hand and the census or inter-censal surveys on the other.

Figure 7.3 Percent childless women by age. Cambodia, Total, 1998-2013


Sources: Drawn from Priority Table D3 1998 census, 2004 CIPS, Priority Table F3 2008 Census and Priority Table F CIPS 2013.

Childlessness percentages at the census and inter-censal surveys from 1998 to 2013, which follow similar sampling and data collection methods in terms of the duration of fieldwork, are show in Figure 7.3. An interesting pattern to be noted is that the percentage of childlessness by age is very close between the 1998 Census and the 2004 CIPS, and between the 2008 Census and the 2013 CIPS. The comparison of childlessness percentages in the period 1998-2013 indicates that the major divergence in the percentage of childlessness appears between the prime reproductive ages of 20 and 35 years, which is another indication of fertility decline in Cambodia.

### 7.3 Estimates of fertility

At the 2013 Cambodia Inter-censal Population Survey (CIPS 2013), as in previous censuses and CIPS, two types of data were collected that were specifically related to fertility, namely:

- Number of children ever born to women. When tabulated by five year age-group of women this information can provide indirect estimates of fertility, and
- Births occurring to women in during the 12 months immediately preceding the census. When tabulated by five year age-group of women, this information can provide direct measures of fertility.

As mentioned earlier, there are several indirect techniques which can be applied to data on children ever born for estimating age specific and total fertility rates. Again, as already mentioned, some of the indirect techniques require certain assumptions regarding the past course of fertility. For example, the Brass P/F Ratio method requires fertility to have remained unchanged. If this method is applied to data when fertility has been declining, as is currently the case in Cambodia, it overestimates current fertility. This was also the case with the estimate of total fertility rate based on the 1998 Population census data. Data on the number of births during the last 12 months provide direct measures of age-specific and total fertility rates but, as commonly observed in most developing country, these data tend to under-report the number of children born in the past 12 months and therefore, underestimate fertility.

In addition, the following fertility related information can be derived from data collected at CIPS 2013:

Child-woman ratio (CWR): Rele (1967) found a linear relationship between CWR and gross reproduction rate (GRR) for given levels of life expectancy at birth between 20 and 70 years. The GRR, which is the total fertility rate for female birth only, can be converted to total fertility rate (TFR) for both sexes combined by assuming a suitable sex ratio at birth. Two types of CWR can be used for estimating TFR: (i) CWR as a ratio of the number of children (both sexes) aged 0-4 years to the number of women aged 15 to 49 years, and (ii) the ratio of children (both sexes) aged 5-9 years to the number of women aged 20 to 54 years. In the present analysis, the CWR used is the ratio of the number of children aged $0-4$ to the number of women aged 15-49. The reference period of fertility estimates based on the CWR is five years preceding the census or survey. However, the TFR based on the Rele method is liable to be underestimated because the population aged $0-4$ is generally under-enumerated (NIS, 2005).

### 7.3.1 Estimates of fertility at the national level-Overall fertility

Table 7.3 gives the estimates of Cambodian fertility based on the 2013 for Cambodia Total. The tables also provide estimates of Cambodian fertility for other periods from other sources for comparative purposes. Table 7.3 shows that the estimates of TFR for Cambodia Total, based on Arriaga Brass P/F Ratio, Arriaga-Arretx (Children Ever Born), the Rele and the RelationalGeompertz methods are $2.17,2.34,2.25$ and 2.71 respectively. The average of these is 2.37 . Based on reported births in the last 12 months the TFR works out to be 2.05 , which is an underestimate. The other indirect estimates are also considered somewhat underestimates because of the reasons mentioned above.

One of the impacts of fertility decline in a population is the shrinking of the base of the age pyramid (the 0-4 age-group). The age pyramids of the population of Cambodia in 1998 and 2008 show that the proportion of the population aged 0-4 has declined from 12.8 percent in 1998 to 10.3 percent in

2008 and to 8.9 percent in 2013, indicating a continuation of fertility decline which has started before 1998. This is true notwithstanding possible under enumerations of the population aged 0-4 years. An approximate idea of the extent of decline in fertility during 2008-2013 may be obtained from the quinquennial percentage decline in the proportion of the population age $0-4$ years between 2008 and 2013, which works out to be about 13.3 percent. The 2010 CDHS gave a TFR of 3.0 for Cambodia Total, which is centered on mid-2008. A 13.3 percent decline over five years would imply a TFR of 2.6 centered on mid - 2013.

Therefore, taking into account the above arguments and the declining trend in fertility in Cambodia since 2000, it may be concluded that the total fertility rate in Cambodia during 2008-2013 falls within the range 2.6 to 3.0 , or an average of the two, namely 2.8 . The directly calculated total fertility rate based on births in the household in the last 12 months is 2.05 . This means that the estimated total fertility rate is 1.37 times higher than the directly calculated total fertility rate ( 2.8 divided by 2.05 or 1.37 ).

Assuming that the pattern of fertility by age of women is correctly reflected in the reported number of births in the last 12 months (this assumption is the basis of the indirect techniques of fertility estimation based on Brass type methods or their modifications), the directly calculated age-specific fertility rates (ASFRs) are inflated by the factor of 1.37 and shown below in Table 7.3a.

Table 7.3 Estimates of fertility based on the Cambodia Intercensal Population Survey 2013 (CIPS 2013): Cambodia Total

| Method | Estimated Total Fertility Rate (TFR) per woman | Estimated crude birth rate per 1,000 population | Reference Period | Reference Point |
| :---: | :---: | :---: | :---: | :---: |
| Based on 2013 CIPS |  |  |  |  |
| Arriaga Brass P/F Ratio | 2.17 | N.A. | March 2012-March 2013 | Sept 2012 |
| Arriaga-Arretx (Children Ever Born) | 2.34 | N.A. | March 2012-March 2013 | Sept 2012 |
| $\begin{aligned} & \text { Rele (CWR 0-4,15-49); } \\ & \left(\mathrm{e}_{0}=66.4\right) \end{aligned}$ | 2.25 | N.A | March 2008-March 2013 | Sept 2010 |
| Relational Geompertz Model (3+3 point, average of age 20 to 35 ) | 2.71 | N.A. | March 2012-March 2013 | Sept 2012 |
| Direct estimate (based on reported births in the past 12 months) | 2.05 | 18.45 | March 2007-March 2008 | Sept 2007 |
| Other estimates |  |  |  |  |
| 2010 CDHS | 3.0 | 24.2 | 2007-2010 | June 2008 |
| 2005 CDHS | 3.4 | N.A | 2002-2005 | June 2004 |

Source: Based on computations of direct and indirect estimates of fertility from data obtained from Priority Tables (Total)

Table 7.3a Directly calculated and adjusted age-specific fertility rates (ASFRs), Cambodia 2013. Total, Urban and Rural

| Age-group of women | Age-specific fertility rate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before adjustment |  |  | After adjustment |  |  |
|  | Total | Urban | Rural | Total | Urban | Rural |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 15-19 | 0.022 | 0.01 | 0.03 | 0.030 | 0.01 | 0.03 |
| 20-24 | 0.115 | 0.07 | 0.14 | 0.157 | 0.10 | 0.17 |
| 25-29 | 0.117 | 0.07 | 0.15 | 0.160 | 0.11 | 0.18 |
| 30-34 | 0.088 | 0.09 | 0.11 | 0.120 | 0.13 | 0.13 |
| 35-39 | 0.043 | 0.04 | 0.05 | 0.059 | 0.06 | 0.06 |
| 40-44 | 0.020 | 0.01 | 0.03 | 0.027 | 0.01 | 0.03 |
| 45-49 | 0.005 | 0.01 | 0.01 | 0.006 | 0.01 | 0.01 |
| Total fertility rate | 2.05 | 1.45 | 2.52 | 2.80 | 2.15 | 3.05 |

Source: Calculated from priority Table F1, 2013 CIPS.
Figure 7.4 shows a comparison of the age-specific fertility rates for Cambodia (Total) based on data from the Cambodia Demographic and Health Surveys of 2005 and 2010, the Cambodian Population Census of 2008 and the Cambodia Inter-censal Population Survey 2013 (CIPS 2013). While the levels of the curves indicate a decline in fertility in Cambodia over time, it may also be noted that the CDHS 2010 and CIPS 2013 data suggest a peaking of women's childbearing at ages 25-29 years, indicating a tendency among Cambodian women to start to postpone their child birth, particularly in the recent past.

Figure 7.4 Age specific fertility rates (ASFR) Cambodia-Total


Tables 7.3 and 7.4 present the estimates of fertility for Cambodia Urban and Cambodia Rural respectively according to the same indirect techniques that have been used for Cambodia Total. Following similar arguments as those for Cambodia Total, the directly calculated TFRs for Cambodia Urban and Cambodia Rural (Tables 7.4 and 7.5 ) are adjusted upwards by multiplying them with the factor 1.37. These estimates are shown in Table 7.3a above.

Table 7.4 Estimates of fertility based on the Cambodia Inter-censal Population Survey 2013 (CIPS 2013) Cambodia-Urban

| Method | Estimated Total Fertility Rate (TFR) per woman | Estimated crude birth rate per 1,000 population | Reference Period | Reference Point |
| :---: | :---: | :---: | :---: | :---: |
| Based on 2008 census |  |  |  |  |
| Arriaga Brass P/F Ratio | 2.06 | N.A. | March 2012-March 2013 | Sept 2012 |
| Arriaga-Arretx (Children Ever Born) | 2.53 | N.A | March 2012-March 2013 | Sept 2012 |
| Rele (CWR 0-4,15-49); $\left(e_{0}=66.4\right)$ | 1.77 | N.A | March 2008-March 20138 | Sept 2010 |
| Relational Geompertz Model ( $3+3$ point, average of age 20 to 35) | 2.71 | N.A. | March 2012-March 2013 | Sept 2012 |
| Direct estimate (based on reported births in the past 12 months) | 1.45 | 14.3 | March 2012-March 2013 | Sept 2012 |
| Other estimates |  |  |  |  |
| 2010 CDHS | 2.2 | N.A | 2007-2010 | June 2008 |
| 2005 CDHS | 2.8 | N.A | 2002-2005 | June 2004 |

Source: Based on computations of direct and indirect estimates of fertility from data obtained from Priority Tables F (Urban)

Table 7.5 Estimates of fertility based on the Cambodia Inter-censal Population Survey 2013 (CIPS 2013) Cambodia-Rural

| Method | Estimated Total Fertility Rate (TFR) per woman | Estimated crude birth rate per 1,000 population | Reference Period | Reference Point |
| :---: | :---: | :---: | :---: | :---: |
| Based on 2008 census |  |  |  |  |
| Arriaga Brass P/F Ratio | 2.28 | N.A. | March 2012-March 2013 | Sept 2012 |
| Arriaga-Arretx (Children Ever Born) | 2.34 | N.A | March 2007-March 2008 | Sept 2007 |
| Rele (CWR 0-4,15-49); $\left(e_{0}=63.94\right)$ | 2.39 | N.A | March 2008-March 2013 | Sept 2010 |
| Relational Geompertz Model (3+3 point, average of age 20 to 35 ) | 2.99 | N.A. | March 2012-March 2013 | Sept 2012 |
| Direct estimate (based on reported births in the past 12 months) | 2.52 | 19.6 | March 2012-March 2013 | Sept 2012 |
| Other estimates |  |  |  |  |
| 2010 CDHS | 3.3 | N.A | 2007-2010 | June 2008 |
| 2005 CDHS | 3.5 | N.A | 2002-2005 | Sep 2007 |

Source: Based on computations of direct and indirect estimates of fertility from data obtained from Priority Tables F1 to F4. (Rural)

### 7.4 Estimates of early age mortality-Total, Urban and Rural

The following mortality related data are available from the 2013 Inter-censal Population Survey (CIPS 2013):

- Number of children ever born and surviving to women of reproductive ages 15 and above, classified by 5 year age-group of women. This can provide indirect estimates of early age mortality.
- Deaths occurring in the household during the 12 months immediately preceding the survey, classified by age of the deceased. This type of data can provide direct estimates of early age and adult mortality. These data also included information on deaths of women of reproductive ages due to maternal causes, i.e., deaths related to pregnancy and child birth, and their sequelae for up to 42 days after delivery. This type of data can provide direct estimate of maternal mortality.

In the present analysis, estimates of early age mortality, comprising infant and child mortality (for both sexes combined and by sex), and maternal mortality will be presented.

The method of indirectly estimating infant and child mortality from information on children ever born and children surviving, classified by age-group of women consists of calculating the proportions of children dead (as a complement of the proportions of children surviving) and converting them to measures of probability of dying under various ages under 5 with use of multipliers developed by Brass (see United Nations, 1983: for a description of the method). The software QFIVE of MORTPAK 4.3, developed by the United Nations has been used for estimating early age mortality in Cambodia.

The estimates of infant mortality for both sexes combined, derived by the Trussell (Model West) variant and the Polloni-Heligman (UN General Model) variant of the Brass method from information on children ever born and children surviving for Cambodia Total, Urban and Rural are of the order of 22-23, 7-8 and 25-26 per 1,000 live births respectively (Tables 7.6, 7.7 and 7.8). The approximate measure of infant mortality obtained by taking the ratio of the deaths under the age of one year to the number of live births in past 12 months shows a figure of 25,7 and 29 infant deaths per 1,000 live births for Cambodia Total, urban and rural respectively (Table 7.6). These estimates are rather low, as are the estimates of child and under-five mortality, particularly in the context of the immediately past declines in early age mortality indicated by the 2000, 2005 and 2010 Cambodian Demographic and Health Survey, and the estimates of early age mortality derived from the 2008 Population Census.
Table 7.6 Estimates of early age mortality and crude death rate based
on the Cambodia Inter-censal Population Survey 2013 (CIPS 2013) Cambodia-Total

| Method | Infant mortality rate ( $1_{1} q_{0}$ ) | Child mortality rate (4 $\mathbf{q}_{1}$ ) | Under five mortality ( $5 q_{0}$ ) | Crude death rate per 1,000 population | Reference Period | Reference Point |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Based on CIPS 2013: Children Ever Born and Children Surviving (Brass type methods) |  |  |  |  |  |  |
| (i) Palloni-Heligman: UN General Model | 0.022 | 0.005 | 0.027 | N.A | N.A | Feb 2011 |
| (ii) Trussell: Coale-Demeny West Model | 0.023 | 0.007 | 0.027 | N.A | N.A | March 2011 |
| Direct estimate (based on reported births in the past 12 months) |  |  |  |  |  |  |
| Direct estimate | 0.025 | N.A | 0.040 | 3.95 | March 2012-March 2013 | Sept 2012 |
| Other estimates |  |  |  |  |  |  |
| 2010 CDHS | 0.045 | 0.009 | 0.054 |  | Mar 2006-Mar 2010 | March 2008 |
| Based on 2008 Census: |  |  |  |  |  |  |
| First estimates based on Children Ever Born and Children Surviving (Brass type methods) |  |  |  |  |  |  |
| (i) Palloni-Heligman: UN General Model | 0.026 | 0.006 | 0.027 | N.A | N.A | Jan 2006 |
| (ii) Trussell: Coale-Demeny West Model | 0.026 | 0.007 | 0.044 | N.A | N.A | Feb 2006 |
| Final estimates based on 2008 Census |  |  |  |  |  |  |
| Final estimate | 60 | NA | NA | NA | Mar 2007-Sep 2008 | Sep 2007 |
| 2005 CDHS | 0.066 | 0.019 | 0.083 |  | 1995-2005 | June 2000 |

Table 7.7 Estimates of early age mortality, and crude death rate based
on the Cambodia Inter-censal Population Survey 2013 Cambodia Urban

| Method | Infant mortality rate ( $\mathbf{1}_{\mathbf{q}}^{0}$ ) | Child mortality rate $\left({ }_{4} \mathbf{q}_{1}\right)$ | Under five mortality (5 $\mathrm{q}_{0}$ ) | Crude death rate per 1,000 population | Reference Period | Reference Point |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Based on CIPS 2013: Children Ever Born and Children Surviving (Brass type methods) |  |  |  |  |  |  |
| (i) Palloni-Heligman: UN General Model | 0.007 | 0.002 | 0.009 | N.A | N.A | Feb 2011 |
| (ii) Trussell: Coale-Demeny West Model | 0.008 | 0.001 | 0.009 | N.A | N.A | March 2011 |
| Direct estimate (based on reported births in the past 12 months) |  |  |  |  |  |  |
| Direct estimate | 0.007 | N.A | 0.011549.A | 2.48 | March 2012-March 2013 | Sep 2012 |
| Other estimates |  |  |  |  |  |  |
| 2010 CDHS | 0.022 | 0.007 | 0.029 | N.A | 2000-2010 | March 2005 |
| Based on 2008 Census: |  |  |  |  |  |  |
| First estimates based on Children Ever Born and Children Surviving (Brass type methods) |  |  |  |  |  |  |
| (i) Palloni-Heligman: UN General Model | Less than 0.024 | 0.005 | 0.021 | N.A | N.A | Jan 2006 |
| (ii) Trussell: Coale-Demeny West Model | 0.017 | 0.002 | 0.022 | N.A | N.A | Feb 2006 |
| Final estimates based on 2008 Census |  |  |  |  |  |  |
| Final estimates | 35 | NA | NA | NA | Mar 2007-Mar 2008 | Sep 2007 |
| 2005 CDHS | 0.065 | 0.012 | 0.076 | N.A | 1995-2005 | June 2000 |

Table 7.8 Estimates of early age mortality, and crude death rate based on the Cambodia Inter-censal Population Survey 2013: Cambodia Rural


The trends in infant mortality according to the CDHS 2000, 2005 and 2010 are shown in Figure 7.5. This figure also shows the fitted trend line and the forecast for the period corresponding to CIPS 2013. The trend line is third degree polynomial, which provides a perfect fit as indicated by the $R^{2}$ value of 1 . The forecast based on this trend line gives an expected IMR of about 34 per 1,000 live births for the period corresponding to CIPS 2013.

Figure 7.5 Line graph and trend line infant mortality rate (IMR) CDHS 2000, 2005, 2010


Source: Drawn from data obtained from the various surveys mentioned above.
Figure 7.6 shows the trends in infant mortality in Cambodia according to the CDHS 2000, CDHS 2005, Census 2008 and CDHS 2010, and a fitted Power trend line. The forecast based on this power trend line gives an expected IMR of about 32 per 1,000 live births for the period corresponding to CIPS 2013.

Figure 7.6 Line graph and trend line IMR CDHS 2000-2005, Census 2008, CDHS 2010


Source: Drawn from data obtained from the various surveys mentioned above.

The average of these two expected values of IMR (i.e., 34 and 32 ) is 33.0 , which may be taken as the infant mortality rate for Cambodia Total as of CIPS 2013. The reference period for this rate is March 2012-March 2013 and the reference point is September 2012. The ratio of this value (33) to the directly estimated IMR of 25 is 1.32 , which may be used as the correction factor for the directly calculated IMR for urban and rural areas and the directly calculated under five mortality rates (U5MR) for total, urban and rural areas (see Table 7.6).

Thus the plausible estimates of infant mortality for both sexes combined for Cambodia 2013, Total, Urban and Rural areas can be stated as follows:

Table 7.9 Adjusted infant mortality rates and under five mortality rates per 1,000 live birth, Cambodia 2013 (Both sexes combined) (Reference period: March 2012-March 2013)

| (Adjustment factor = 1.32) |  |  |
| :--- | :---: | :---: |
| Infant Mortality Rate |  |  |
|  | Before adjustment | After adjustment |
| Total | $\mathbf{2 5}$ | $\mathbf{3 3}$ |
| Urban | 7 | 9 |
| Rural | 29 | 38 |
| Under Five Mortality Rate |  |  |
| Before adjustment |  |  |
| Total | $\mathbf{4 0}$ | After adjustment |
| Urban | 12 | $\mathbf{5 3}$ |
| Rural | 46 | 15 |

Source: Calculated from Tables 10, 11 and 12 based on adjustment factor discussed above
The estimate of under-five mortality (U5MR) from CDHS 2010 for Cambodia (Total, both sexes combined) is 54 per 1,000 live births for the period 2005-2010. The estimates of U5MR for Urban and Rural areas from CDHD 2010 are 29 and 75 per 1,000 live births for the period 2000-2010. Therefore, the adjusted estimated of U5MR from CIPS 2013 appear to be consistent with the trend implied by the CDHS 2010 estimates. However, even though the urban and rural U5MR appear to have recorded declines from 29 and 75 to 15 and 60 respectively, the Total U5MR seems to have declined from 54 to only 53 . This is being further investigated.

### 7.5 Conclusion

The best source of information on fertility and mortality is a complete and accurate vital registration system. Until such time as a vital registration system is fully operational in Cambodia, data collected at censuses and surveys have to be depended upon for estimating fertility and mortality. In surveys such as the Demographic and Health Survey, sufficient resources and time can be devoted to training the enumerators and to data collection which helps in the collection of good quality data. However, this simply cannot be done in a census, or an inter-censal survey. As such, estimates of fertility and mortality based on the CIPS 2013 data should be interpreted as providing indications of trends in these demographic parameters and of the range in which the values of parameters could lie.

Considering all the factors mentioned above and taking into account the trends in demographic parameters from other sources and various estimates derived in this chapter, it may be concluded that the total fertility rate in Cambodia derived from the CIPS 2013 data is around 2.80, 2.15 and 3.05 for Total, Urban and Rural areas respectively (with a reference period of March 2012-March 2013), the infant mortality rate is around 33,9 and 38 per 1,000 live births for the Total, Urban and Rural areas respectively (reference period March 2012-March 2013), the under-five mortality rate (U5MR) is around 53, 15 and 60 per 1,000 live births for Total, Urban and Rural areas respectively

Figure 7.7 Trend in total fertility rate, Cambodia-Total. CDHS 2000 - CIPS 2013


Figure 7.8 Trend in infant mortality rate, Cambodia-Total. CDHS 2000 - CIPS 2013


## Chapter 8 <br> Migration

### 8.1 Definition of Migration

Migration is defined as the process of changing residence from one geographical location to another. In combination with fertility and mortality, migration determines the size and the rate of population growth as well as its structure and characteristics. This topic is of great importance and interest not only to demographers but also to economists, sociologists, human geographers, political scientists, law and policy makers, planners and public administrators.

The place of birth data enables classification of enumerated persons as (i) life-time migrants defined as persons who were enumerated in a place which is different from the place where they were born and (ii) life-time non-migrants defined as persons who were enumerated in their places of birth. While estimating migration on the basis of information on place of birth only a single movement directly from the place of birth to the place of enumeration is assumed. Actually some persons might have moved into the place of enumeration from some place other than the birth place. Further, it also assumed that all persons enumerated at their places of birth are non-migrants. This may not be necessarily true as some of these persons might have moved out of their places of birth for some time and moved back to their places of birth. It is necessary to include such return-migrants in the category of migrants. In order to obtain information on the last move, it is essential to ask in the census about place of previous residence.

In accordance with UN recommendations, the 2008 census questionnaire of Cambodia had included questions on place of birth as well as place of previous residence for studying the migration characteristics of the population. The same approach was made in CIPS 2013 also with the collection of information on the movement of population through the following questions: (Part B Household Questionnaire Part 2: Individual Particulars): Col. 12 Birth Place, Col. 13 Previous Residence, Col. 14 Duration of Stay (How long has the person lived in this village) and Col. 15 Reason for Migration.

The data on place of birth has already been analyzed in Chapter 3 as part of the classification of population according to place of birth. In this chapter information collected on previous residence will be analyzed. For the purpose of this analysis a migrant refers to a person who has moved to the place of enumeration from another village (or another country) which was the person's last previous residence.

### 8.2 Migrant Population

Table 8.1 provides a comparative picture of the absolute numbers of migrants and non-migrants in Cambodia in 2008 and 2013. The number of migrants has increased by about 19 percent during the five years. The rate of increase of male migrants ( 19.2 percent) is only marginally less than that of female migrants (19.6 percent).
Table 8.1 Population by Sex Classified as Non-Migrants and Migrants, Cambodia 2008 and 2013

| Year | Both Sexes |  |  | Males |  |  | Females |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Non Migrants | Migrants | Total | Non Migrants | Migrants | Total | Non Migrants | Migrants |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| Cambodia-Both Sexes |  |  |  |  |  |  |  |  |  |
| 2013 | 14,676,591 | 10,434,898 | 4,241,693 | 7,121,508 | 4,984,314 | 2,137,194 | 7,555,083 | 5,450,584 | 2,104,499 |
| 2008 | 13,395,682 | 9,843,337 | 3,552,345 | 6,516054 | 4,723,429 | 1,792,625 | 6,879,628 | 5,119,908 | 1,759,720 |
| Cambodia-Urban |  |  |  |  |  |  |  |  |  |
| 2013 | 3,146,212 | 1,591,972 | 1,554,240 | 1,527,479 | 784,380 | 743,099 | 1,618,734 | 807,593 | 811,141 |
| 2008 | 2,614,027 | 1,099,780 | 1,514,247 | 1,255,570 | 537,790 | 717,780 | 1,358,457 | 561,990 | 796,467 |
| Cambodia-Rural |  |  |  |  |  |  |  |  |  |
| 2013 | 11,530,378 | 8,842,925 | 2,687,453 | 5,594,029 | 4,199,934 | 1,394,095 | 5,936,349 | 4,642,991 | 1,293,358 |
| 2008 | 10,781,655 | 8,743,557 | 2038098 | 5,260,484 | 4,185,639 | 1,074,845 | 5,521,171 | 4,557,918 | 963,253 |

The proportions of migrant and non-migrant population to total population are shown in Table 8.2.The percentage of migrants at national level (28.9 per cent) is slightly higher than the corresponding proportion in 2008 ( 26.5 per cent). As is to be expected, the proportion of migrants in urban areas is much higher than that in rural areas. About 71 percent of the population of Cambodia, with females forming a slightly higher proportion, is nonmigrants. They never had residence other than their respective places of enumeration in 2013(Table 8.1).
Table 8.2 Proportions of Non-Migrant and Migrant Populations by Sex and Residence, Cambodia 2008 and 2013

Table 8.3 shows the distribution of migrants according to the location of previous residence, namely within the province of enumeration, in another province or outside Cambodia. There is no spectacular change in the pattern of distribution during 2008-2013. However, the proportion of migrants within the province of enumeration has increased by four percentage points and the proportion of migrants from another province has declined by the same percentage in 2013 when compared to 2008. The proportion of international migrants continues to remain low at about 2.5 per cent.

Table 8.3 Distribution of Migrants by Place of Previous Residence, Cambodia 2008-2013

| Previous Residence |  | $\mathbf{2 0 0 8}$ |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  |  | Males | Females | Both Sexes | Males | Females |  |
| Total | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |  |
| Within the province of enumeration | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |  |
| In another Province | 51.3 | 52.3 | 50.4 | 55.4 | 55.9 | 54.8 |  |
| Outside Cambodia | 46.0 | 45.0 | 47.0 | 42.1 | 41.7 | 42.5 |  |

### 8.3 Internal migration

Table 8.4 Internal Migrant Population by Place of last Residence, Sex and Residence, Cambodia 2008-2013

| Previous <br> Residence | Place of Enumeration |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total |  |  | Urban |  |  | Rural |  |  |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| Urban | 21.6 | 21.2 | 22.0 | 35.4 | 36.0 | 34.9 | 11.3 | 11.3 | 11.3 |
| Rural | 78.4 | 78.8 | 78.0 | 64.6 | 64.0 | 65.1 | 88.7 | 88.7 | 88.7 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Total | 100 | 82.83 | 100 | 100 | 75.67 | 100 | 100 | 86.61 | 100 |
| Urban | 17.1 | 16.2 | 18.0 | 32.9 | 32.1 | 33.6 | 8.1 | 7.9 | 8.3 |
| Rural | 82.9 | 66.6 | 82.0 | 67.1 | 43.5 | 66.4 | 91.9 | 78.8 | 91.7 |

As may be seen from Table 8.3 internal migrants constitute 97.4 per cent of all migrants in Cambodia in 2013, showing a marginal increase from the corresponding proportion of 97.2 per cent five years earlier. In the urban areas, most of the persons enumerated had migrated from the rural areas. On the other hand a large majority of migrants in the rural areas are from other rural areas (Table 8.4). Nearly two-thirds of migrants in the urban areas have been from rural areas both in 2008 and 2013.

Table 8.5 Distribution of Internal Migrants by Migration Stream and Sex, Cambodia 2008-2013

| Stream of Migration | $\mathbf{2 0 0 8}$ |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| Rural to Rural | 50.9 | 53.3 | 48.5 | 58.4 | 60.3 | 56.5 |
| Rural to Urban | 27.5 | 25.6 | 29.5 | 24.5 | 23.5 | 25.5 |
| Urban to Rural | 6.5 | 6.8 | 6.2 | 5.1 | 5.1 | 5.1 |
| Urban to Urban |  | 15.1 | 14.4 | 15.9 | 12.0 | 11.1 |

Among the internal migrants, rural to rural migrants predominate both in 2008 and 2013 with an increased proportion in 2013 (Table 8.5). The proportions of rural to urban migrants as well as that of urban to urban migrants have each declined by three percentage points during the five years with the former constituting nearly one quarter of all internal migrants and the latter accounting for almost half of that in 2013.

### 8.4 Reason for Migration

Table 8.6 Distribution of Migrants by Reason for Migration and Sex Cambodia 2008-2013

| Reason for Migration | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Transfer of work place | 9.2 | 13.8 | 4.5 | 5.2 | 6.8 | 3.5 |
| In search of employment | 21.5 | 24.2 | 18.8 | 13.2 | 15.4 | 10.9 |
| Education | 2.7 | 3.5 | 1.9 | 1.4 | 1.6 | 1.2 |
| Marriage | 14.6 | 18.6 | 10.6 | 21.8 | 28.7 | 14.8 |
| Family Moved | 37.9 | 27.3 | 48.7 | 42.2 | 33.2 | 51.3 |
| Repatriation/Return after displacement | 1.2 | 1.3 | 1.1 | 1.0 | 0.9 | 1.1 |
| Natural calamities | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 |
| Insecurity | 1.9 | 1.8 | 2.1 | 2.4 | 2.2 | 2.7 |
| Orphaned | 5.6 | 5.2 | 6.4 | 10.2 | 8.5 | 11.9 |
| Lost land/lost home | 0.4 | 0.4 | 0.3 | 0.2 | 0.2 | 0.2 |
| Visiting only | 3.7 | 2.7 | 4.7 | 1.2 | 1.2 | 1.2 |
| Other | 1.0 | 1.2 | 0.8 | 1.0 | 1.0 | 1.0 |

Note: Excluding not reported
The percentage distribution of migrants by reason for migration and sex is presented in Table 8.6. Migrants who have changed their residence for the reason "family moved" continue to be the highest during the decade. This reason for migration applies to a member of a family who had to move to the place of enumeration from a previous residence because the entire family had moved. For instance if one of the members migrated to another place because his/her place of work is shifted the reason for his migration is "Transfer of work place". For the other members of this family who had to also move with him the reason for migration is "Family Moved". As for other reasons, marriage, in search of employment and orphaned have each proportions more than 10. Females who had migrated as they were orphaned form a higher proportion than that of males who had migrated for the same reason.

Figure 8.1 Reasons for Migration, Cambodia 2008 and 2013


### 8.5 Duration of Residence of Migrants

Table 8.7 Distribution of Internal Migrants by Duration of Residence in Place of Enumeration and Residence, Cambodia 2008-2013

| Residence | Duration of Residence |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | <1 year | 1-4 years | 5-9years | 10-19 years | 20+ years |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2008 |  |  |  |  |  |  |
| Total | 100 | 8.9 | 26.8 | 18.3 | 21.5 | 24.5 |
| Urban | 100 | 10.6 | 31.8 | 17.0 | 21.6 | 19.0 |
| Rural | 100 | 7.6 | 23.1 | 19.3 | 21.4 | 28.6 |
| 2013 |  |  |  |  |  |  |
| Total | 100 | 3.8 | 16.1 | 16.1 | 24.7 | 39.3 |
| Urban | 100 | 3.9 | 17.4 | 18.3 | 25.3 | 35.1 |
| Rural | 100 | 3.7 | 15.3 | 14.9 | 24.4 | 41.7 |

As per CIPS 2013, about 36 percent of the internal migrants to the place of enumeration have stayed there for less than ten years. The remaining 64 percent are long term residents for 10 years and more (Table 8.7). The proportion of migrants who have stayed in the place of enumeration for less than five years in 2013, is higher in urban areas ( 21.3 per cent) than in rural areas (19.0 percent).A similar situation existed in 2008 also though the proportions were higher with 42.4 per cent in urban areas and 30.7 in rural areas.

### 8.6 Migrants by Age Group

Table 8.8 Percent Distribution of Migrants by Five-Year Age Group and Sex, Cambodia 2008-2013

| Age Group | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total Number of Migrants Aged 10 + | 100 | 100 | 100 | 100 | 100 | 100 |
| 10-14 | 5.8 | 5.9 | 5.7 | 3.2 | 3.4 | 2.9 |
| 15-19 | 9.8 | 9.4 | 10.2 | 5.1 | 4.9 | 5.4 |
| 20-24 | 13.1 | 12.8 | 13.4 | 9.3 | 9.3 | 9.2 |
| 25-29 | 13.5 | 14.3 | 12.7 | 10.4 | 11.4 | 9.5 |
| 30-34 | 8.4 | 9.1 | 7.8 | 11.3 | 12.0 | 10.5 |
| 35-39 | 10.8 | 11.6 | 10.0 | 8.5 | 9.4 | 7.6 |
| 40-44 | 9.5 | 10.0 | 9.0 | 10.8 | 11.0 | 10.6 |
| 45-49 | 8.5 | 8.6 | 8.5 | 10.1 | 10.7 | 9.5 |
| 50-54 | 6.5 | 5.8 | 7.2 | 9.2 | 8.9 | 9.5 |
| 55-59 | 4.9 | 4.5 | 5.3 | 7.1 | 6.2 | 8.1 |
| 60-64 | 3.2 | 3.0 | 3.5 | 5.4 | 4.8 | 6.0 |
| 65-69 | 2.4 | 2.2 | 2.6 | 3.7 | 3.1 | 4.3 |
| 70-74 | 1.6 | 1.4 | 1.9 | 2.7 | 2.2 | 3.1 |
| 75+ | 1.9 | 1.5 | 2.3 | 3.2 | 2.6 | 3.7 |

In 2008 the age group 25-29 had the highest proportion of migrants closely followed by the age group 20-24. These two age groups together accounted for little more than a quarter of the total migrants in 2008. Five years later, in 2013, as is to be expected, the age group 30-34 has the highest proportion of migrants (Table8.8). The age groups 40-44, 25-29, 45-49 and 50-54 come next in that order. These five age groups together account for nearly 52 percent of total internal migrants in Cambodia. The age-wise migration trends are depicted in Figure 8.2. The proportion of migrants steeply falls in the age group $30-34$ in 2008 and the age group $35-39$ in 2013. This is due to the disturbed conditions in the country in 1976-1979 when movement of people was restricted. Another notable feature is that the proportion of female migrants is more than that of males in every age group beyond 50 both in 2008 and 2013.

Figure 8.2 Distribution of Migrants by Five Year Age Group and Sex, Cambodia 2008-2013

Table 8.9 Distribution of Migrants 10 years of Age and older by Sex, Usual Activity Status and Educational Level, Cambodia 2008 and 2013

| Usual Activity Status | Total | Illiterate | Literate | Literate by Educational Level |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | None | $\begin{gathered} \text { Primary } \\ \text { Not } \\ \text { Completed } \end{gathered}$ | Primary | Lower Secondary | Secondary <br> / Diploma | Beyond Secondary |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Both Sexes | 100 | 19.0 | 81.0 | 2.9 | 38.7 | 28.5 | 23.2 | 3.3 | 3.5 |
| Employed | 100 | 19.5 | 80.5 | 2.9 | 39.2 | 29.2 | 22.7 | 3.1 | 3.0 |
| Employed any time before | 100 | 19.7 | 80.3 | 6.8 | 38.2 | 29.6 | 21.1 | 1.9 | 2.4 |
| Never employed any time before | 100 | 17.2 | 82.8 | 3.8 | 32.7 | 29.9 | 28.9 | 3.7 | 1.0 |
| Not Economically Active | 100 | 17.5 | 82.5 | 2.9 | 37.6 | 26.2 | 24.4 | 3.6 | 5.4 |
| Males | 100 | 12.5 | 87.5 | 2.3 | 33.8 | 29.1 | 26.3 | 4.0 | 4.5 |
| Employed | 100 | 13.1 | 86.9 | 2.4 | 33.9 | 30.0 | 26.2 | 3.8 | 3.7 |
| Employed any time before | 100 | 13.5 | 86.5 | 5.7 | 33.1 | 30.8 | 24.9 | 2.5 | 3.0 |
| Never employed any time before | 100 | 4.4 | 85.6 | 3.3 | 26.6 | 28.9 | 32.3 | 4.3 | 4.5 |
| Not Economically Active | 100 | 9.3 | 90.7 | 1.6 | 33.9 | 24.9 | 26.6 | 4.8 | 8.2 |
| Females | 100 | 25.6 | 74.4 | 3.6 | 44.5 | 27.7 | 19.4 | 2.4 | 2.4 |
| Employed | 100 | 27.2 | 72.8 | 3.5 | 46.9 | 28.0 | 17.6 | 2.2 | 1.8 |
| Employed any time before | 100 | 26.2 | 73.8 | 8.1 | 44.2 | 28.2 | 16.6 | 1.2 | 1.7 |
| Never employed any time before | 100 | 18.4 | 81.6 | 4.1 | 35.4 | 29.4 | 25.7 | 3.1 | 2.3 |
| Not Economically Active | 100 | 22.4 | 77.6 | 3.7 | 40.2 | 27.0 | 22.8 | 2.8 | 3.4 |
| Both Sexes | 2013 |  |  |  |  |  |  |  |  |
| Employed | 100 | 19.2 | 80.8 | 3.0 | 33.2 | 29.2 | 25.6 | 4.6 | 4.4 |
| Employed any time before | 100 | 24.6 | 75.4 | 3.4 | 44.6 | 26.4 | 20.6 | 2.7 | 2.3 |
| Never employed any time before | 100 | 30.3 | 69.7 | 4.6 | 23.6 | 29.0 | 31.7 | 9.7 | 1.5 |
| Not Economically Active | 100 | 23.5 | 76.5 | 4.3 | 36.1 | 24.8 | 23.9 | 9.7 | 1.1 |
| Males | 100 | 12.5 | 87.5 | 2.8 | 29.3 | 28.8 | 27.9 | 6.4 | 4.6 |
| Employed | 100 | 12.8 | 87.2 | 2.8 | 28.6 | 29.7 | 28.4 | 5.2 | 5.2 |
| Employed any time before | 100 | 16.5 | 83.5 | 5.3 | 33.7 | 29.6 | 25.0 | 2.3 | 4.2 |
| Never employed any time before | 100 | 24.4 | 75.6 | 4.6 | 16.7 | 32.2 | 33.4 | 10.6 | 2.5 |
| Not Economically Active | 100 | 9.0 | 90.9 | 2.7 | 34.1 | 22.8 | 24.8 | 14.2 | 1.3 |
| Females | 100 | 28.1 | 71.9 | 3.9 | 39.2 | 27.7 | 22.1 | 4.6 | 2.5 |
| Employed | 100 | 26.9 | 73.1 | 3.3 | 39.9 | 28.4 | 21.5 | 3.7 | 3.2 |
| Employed any time before | 100 | 32.2 | 67.7 | 1.2 | 57.3 | 22.7 | 15.5 | 3.2 | 0.1 |
| Never employed any time before | 100 | 33.4 | 66.6 | 4.5 | 27.8 | 27.0 | 30.7 | 9.1 | 0.8 |
| Not Economically Active | 100 | 30.7 | 69.3 | 5.4 | 37.4 | 26.1 | 23.3 | 6.8 | 0.9 |

[^2]
### 8.7 Economic Activity and Educational Levels of Migrants

According to CIPS 2013, out of 4,175,550 migrants in Cambodia, the numbers of persons employed, unemployed any time before and unemployed never employed any time before, were $3,214,655 ; 33,365$; and 54,854 respectively. This gives the percentage of economically active persons among migrants as 79 and that of economically inactive persons as 21 (Table 8.9). In 2008 the percentage of economically inactive persons among these migrants was little higher ( 24 per cent). The economically inactive persons among migrants may be mostly family members accompanying the economically active members of the family. From CIPS 2013 data it is observed that women form two-thirds of the economically inactive persons among migrants. The corresponding proportion in 2008 was slightly less with 63 per cent.

Table 8.10 Distribution of Economically Active Migrants aged 5 Year and Older by Major Group of Occupation and Sex 2008-2013

| Major group of Occupation |  | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major group | Description | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|  | Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 0 | Armed Forces | 1.8 | 3.0 | 0.2 | 1.4 | 2.4 | 0.3 |
| 1 | Managers | 1.0 | 1.4 | 0.5 | 1.0 | 1.5 | 0.4 |
| 2 | Professionals | 2.6 | 3.1 | 2.0 | 4.5 | 4.9 | 3.9 |
| 3 | Technicians and Associate Professionals | 4.1 | 5.3 | 2.5 | 2.2 | 2.4 | 1.9 |
| 4 | Clerical Support Workers | 3.1 | 3.8 | 2.3 | 3.8 | 4.8 | 2.6 |
| 5 | Service and Sales Workers | 15.8 | 11.8 | 20.8 | 17.7 | 12.4 | 24.2 |
| 6 | Skilled Agricultural, Forestry and Fishery Workers | 49.1 | 47.1 | 51.4 | 50.4 | 49.3 | 51.7 |
| 7 | Craft and Related Workers | 11.5 | 9.7 | 13.7 | 9.3 | 9.1 | 9.6 |
| 8 | Plant and Machine Operators and Assemblers | 3.4 | 5.8 | 0.4 | 3.0 | 5.3 | 0.2 |
| 9 | Elementary Occupations | 7.8 | 9.2 | 6.2 | 6.7 | 8.0 | 5.2 |

Table 8.10 presents the percent distribution of economically active migrants by major group of occupation from 2008 Census and CIPS 2013. In 2008, skilled agricultural, forestry and fishery workers formed 49 percent of such migrants. In 2013 it has slightly increased to 50.4 per cent. In both the years the occupational categories which have the second and third highest proportions of migrant economically active workers are Service and Sales workers, and Craft and related workers. These three categories together form about 76 percent and 77 per cent of the economically active migrants in 2008 and 2013 respectively. The combined proportions of these categories were 70.1 for males and 85.5 for females in 2013.There is a slight decline in the proportions of elementary operations during the five years.
The educational levels of the migrants are fairly higher than the educational levels of the total population. For example the percentages $25.3,5.6$, and 3.7 of migrants qualified with Lower Secondary, Secondary and beyond secondary levels are higher than the corresponding proportions among the total population, namely, 21.0, 3.9 and 1.8 respectively ( See Chapter 5).

# Chapter 9 <br> Population with Disability 

### 9.1 Distribution of Persons with Disability

In Part 2 of the Household Questionnaire of CIPS 2013 (Appendix 2), question 18 related to "Physical / Mental disability, if any". This question was addressed to every individual interviewed. The definition of disabled population adopted for CIPS 2013 was an improved version of the definition used for the topic at the 2008 Census. While the definitions for the disabled in seeing, in speech, in hearing and in movement was the same in both the exercises, the question on mental disability was asked separately in CIPS 2013 for mental retardation and mental illness. Two new questions on multiple- disability and any other disability were added in this questionnaire of CIPS 2013 for the first time. In 2013 information was not collected separately for disability "since birth" or "after birth". The instructions to enumerators including the definition adopted for collecting the information in the survey are given in Appendix IV.

In accordance with the definition adopted the percentage of the disabled population in 2013 at the national level was 2.1.The proportion is slightly higher in the case of males. The percentage of disabled females has increased from 44 to 48 per cent during 2008-13. The incidence of disability continues to be higher in the rural areas than in the urban areas. The gap between the proportions of disabled males and females is less in the urban areas than in the rural areas (Table 9.1).

Table 9.1 Distribution of Disabled Population by Sex and Residence, Cambodia 2008-2013

| Residence/ Regions | Total Population |  |  | Disabled Population |  |  | Percent Disabled |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Cambodia | 13,395,682 | 6,516,054 | 6,879,628 | 192,538 | 108,468 | 84,070 | 1.4 | 1.7 | 1.2 |
| Urban | 2,614,027 | 1,255,570 | 1,358,457 | 28,434 | 15,838 | 12,596 | 1.1 | 1.3 | 0.9 |
| Rural | 10,781,655 | 5,260,484 | 5,521,171 | 164,104 | 92,630 | 71,474 | 1.5 | 1.8 | 1.3 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Cambodia | 14,676,591 | 7,121,508 | 7,555,083 | 301,629 | 157,007 | 144,622 | 2.1 | 2.2 | 1.9 |
| Urban | 3,146,212 | 1,527,479 | 1,618,734 | 41,649 | 21,886 | 19,763 | 1.3 | 1.4 | 1.2 |
| Rural | 11,530,378 | 5,594,029 | 5,936,349 | 259,980 | 135,122 | 124,859 | 2.3 | 2.4 | 2.1 |

Table 9.2 gives the overall distribution of the disabled persons in Cambodia by type of disability both at the time of the 2008 Census and CIPS 2013. The disabled population has increased by about 57 per cent at the national level during the five years 2008-2013. The increase in urban areas is by about 46 per cent and in the rural areas by about 58 per cent. It is observed both in 2008 and 2013 that among the disabled population those who have difficulty in seeing predominate followed by those having movement difficulty.

Figure 9.1 Distribution of Disabled Population by Type of Disability, Cambodia 2013


Table 9.2 Percentage Distribution of Disabled Persons in Total, Urban and Rural Areas by Type of Disability and Sex, Cambodia 2008 and 2013

| Type of Disability | Percentage Distribution |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  |  | 2013 |  |  |
|  | Total | Urban | Rural | Total | Urban | Rural |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Both Sexes |  |  |  |  |  |  |
| Total number of Disabled persons | 192,538 | 28.434 | 164,104 | 301,629 | 41,649 | 259,981 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Type of Disabled |  |  |  |  |  |  |
| In seeing | 29.97 | 34.05 | 29.27 | 34.83 | 41.69 | 33.73 |
| In speech | 8.68 | 9.85 | 8.47 | 5.38 | 4.70 | 5.49 |
| In hearing | 7.93 | 6.57 | 8.16 | 9.04 | 10.19 | 8.85 |
| In Movement | 40.83 | 36.97 | 41.51 | 33.42 | 26.06 | 34.60 |
| Mental | 12.59 | 12.56 | 12.59 | 12.18 | 15.31 | 15.76 |
| Mental Retardation | - | - | - | 5.18 | 6.89 | 4.90 |
| Mental illness | - | - | - | 7.00 | 5.28 | 7.28 |
| Any Other | - | - | - | 3.52 | 3.14 | 3.58 |
| Multiple Disabilities | - | - | - | 1.62 | 2.05 | 1.56 |
| Males |  |  |  |  |  |  |
| Total number of Disabled persons | 108,468 | 15,838 | 92,630 | 157,008 | 21,886 | 135,123 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Type of Disabled |  |  |  |  |  |  |
| In seeing | 26.48 | 30.89 | 25.73 | 31.35 | 38.20 | 30.24 |
| In speech | 8.07 | 9.14 | 7.88 | 4.39 | 2.31 | 4.73 |
| In hearing | 6.79 | 5.62 | 7.00 | 7.40 | 12.86 | 6.52 |
| In Movement | 46.95 | 41.99 | 47.79 | 41.44 | 28.80 | 43.48 |
| Mental | 11.71 | 12.36 | 11.60 | 9.82 | 15.35 | 13.46 |
| Mental Retardation | - | - | - | 3.64 | 6.67 | 3.15 |
| Mental illness | - | - | - | 6.18 | 6.30 | 6.17 |
| Any Other | - | - | - | 3.90 | 2.38 | 4.15 |
| Multiple Disabilities | - | - | - | 1.70 | 2.48 | 1.57 |
| Females |  |  |  |  |  |  |
| Total number of Disabled persons | 84,070 | 12,596 | 71,474 | 144,622 | 19,765 | 124,858 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Type of Disabled |  |  |  |  |  |  |
| In seeing | 34.48 | 38.02 | 33.86 | 38.61 | 45.56 | 37.51 |
| In speech | 9.46 | 10.75 | 9.23 | 6.46 | 7.35 | 6.32 |
| In hearing | 9.39 | 7.76 | 9.67 | 10.81 | 7.23 | 11.38 |
| In Movement | 32.96 | 30.66 | 33.37 | 24.73 | 23.03 | 25.00 |
| Mental | 13.71 | 12.81 | 13.87 | 14.73 | 15.26 | 18.25 |
| Mental Retardation | - | - | - | 6.84 | 7.13 | 6.80 |
| Mental illness | - | - | - | 7.89 | 4.14 | 8.48 |
| Any Other | - | - | - | 3.11 | 3.99 | 2.97 |
| Multiple Disabilities | - | - | - | 1.55 | 1.57 | 1.54 |

### 9.2 Sex Ratio and Age Distribution of the Disabled Population

The sex ratio of the disabled population as derived from Table 9.3 is 109 in 2013. It is higher than the sex ratio of the general population (94.3). The sex ratio is relatively low among disabled children (age less than 15) at 96.It rises to as high as 143 in the age group 45-49 and then declines reaching a low figure of 64 among the very old persons (age 75+).

The age distribution of the disabled population (Table 9.3) is like the general population, characterized by lesser proportion of population in the age group $0-4$ compared to the age group 5 9. It is also noted that there is a sharp decline in the number of disabled population in the age group 30-34 in 2008 and in the age group 35-39 in 2013 due to fertility decline and high mortality during the years of their birth as a result of the political situation then. The median age of the disabled population works out to 45.8 years ( 44.9 for males and 47.0 for females). This is much higher than that of the general population ( 24.5 for both sexes, 23.4 for males, and females 25.8 ). The disabled population in Cambodia may, therefore, be described as an "older population" compared to the general population.

It is observed that in 2013 the percentage of the disabled among children to total disabled population is somewhat modest around 5 or less than 5 per cent and then it rises reaching a high level in the age group 20-24. In the middle and higher ages it stays high with the exception of age 35-39. The proportion of disabled among the oldest persons (age 75+), especially among women, is as is to be expected, very high.

As may be seen from Table 9.4, nearly one third each in the categories of difficulty in seeing are concentrated in the age groups $60+$. Majority of those having movement difficulty are aged 45 and more. The proportion is the highest with about 48 percent in the age group 15-29 in respect of those having difficulty in speech. Nearly 50 per cent of those having hearing problem are aged 60 and more. One third of mentally ill and mentally retarded are in the age group 15 to 29 . Those aged 45 and more account for most of those having multiple disabilities.

Table 9.3 Percent Distribution of Disabled by Five year Age Group, Cambodia 2008 and 2013

| Age Group | Percentage of disabled population |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes |  |  |  | Males |  |  |  | Females |  |  |  |
|  | 2008 |  | 2013 |  | 2008 |  | 2013 |  | 2008 |  | 2013 |  |
|  | No. | \% | No. | \% | No. | \% | No. | \% | No. | \% | No. | \% |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| Total | 192,538 | 100 | 301,629 | 100 | 108,468 | 100 | 157,008 | 100 | 84,070 | 100 | 144,622 | 100 |
| 0-4 | 7,952 | 4.13 | 7,018 | 2.33 | 4,281 | 3.95 | 2,898 | 1.85 | 3,671 | 4.37 | 4,121 | 2.85 |
| 5-9 | 11,201 | 5.82 | 10,712 | 3.55 | 6,233 | 5.75 | 4,685 | 2.98 | 4,968 | 5.91 | 6,026 | 4.17 |
| 10-14 | 14,775 | 7.68 | 14,326 | 4.75 | 8,609 | 7.94 | 8,122 | 5.17 | 6,166 | 7.33 | 6,208 | 4.29 |
| 15-19 | 17,865 | 9.27 | 20,184 | 6.69 | 10,163 | 9.37 | 11,719 | 7.46 | 7,702 | 9.17 | 8,465 | 5.85 |
| 20-24 | 16,270 | 8.45 | 27,794 | 9.21 | 9,128 | 8.42 | 13,110 | 8.35 | 7,142 | 8.50 | 14,685 | 10.15 |
| 25-29 | 14,596 | 7.58 | 18,101 | 6.00 | 8,075 | 7.44 | 9,995 | 6.37 | 6,521 | 7.76 | 8,105 | 5.60 |
| 30-34 | 9,526 | 4.95 | 17,164 | 5.69 | 5,394 | 4.97 | 8,567 | 5.46 | 4,132 | 4.91 | 8,597 | 5.94 |
| 35-39 | 14,350 | 7.45 | 14,063 | 4.66 | 8,936 | 8.24 | 8,518 | 5.43 | 5,414 | 6.44 | 5,544 | 3.83 |
| 40-44 | 15,493 | 8.05 | 17,891 | 5.93 | 9,800 | 9.03 | 11,051 | 7.04 | 5,693 | 6.77 | 6,837 | 4.73 |
| 45-49 | 15,888 | 8.25 | 23,553 | 7.81 | 10,345 | 9,53 | 14,271 | 9.09 | 5,543 | 6.59 | 9,281 | 6.42 |
| 50-54 | 13,013 | 6.76 | 22,731 | 7.54 | 7,811 | 7.20 | 12,957 | 8.25 | 5,202 | 6.19 | 9,777 | 6.76 |
| 55-59 | 10,581 | 5.50 | 23,805 | 7.89 | 5,790 | 5.34 | 14,835 | 9.45 | 4,791 | 5.70 | 8,970 | 6.20 |
| 60-64 | 7,911 | 4.11 | 19,828 | 6.57 | 3,999 | 3.69 | 9,438 | 6.01 | 3,912 | 4.65 | 10,392 | 7.19 |
| 65-69 | 7,173 | 3.73 | 19,311 | 6.40 | 3,405 | 3.14 | 8,494 | 5.41 | 3,768 | 4.48 | 10,817 | 7.48 |
| 70-74 | 6,284 | 3.26 | 17,425 | 5.78 | 2,742 | 2.53 | 7,555 | 4.81 | 3,542 | 4.21 | 9,871 | 6.83 |
| 75+ | 9,669 | 5.02 | 27,718 | 9.19 | 3,757 | 3.46 | 10,794 | 6.87 | 5,903 | 7.02 | 16,926 | 11.70 |

Table 9.4 Percent Distribution of Disabled Persons in each Category of Disability by sex and Five years Age Group, Cambodia 200 and 2013

| Age Group | Percentage of each Category of Disability in |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2008 |  |  |  |  |  | 2013 |  |  |  |  |  |  |  |  |
|  |  | $\begin{aligned} & \text { en } \\ & \stackrel{\rightharpoonup}{\ddot{0}} \\ & \stackrel{0}{\Xi} \\ & \end{aligned}$ |  |  | $=\frac{\stackrel{\rightharpoonup}{E}}{E}$ |  |  |  |  |  | $=\frac{\stackrel{\rightharpoonup}{E}}{E}$ |  |  | ジ |  |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) |
| Both Sexes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No.of Disabled | 192,538 | 57,709 | 16,703 | 15,261 | 78,633 | 24,232 | 301,629 | 105,059 | 16,237 | 27,260 | 100,819 | 15,613 | 21,122 | 10,620 | 4,899 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 17.62 | 21.90 | 29.15 | 13.03 | 12.13 | 20.20 | 10.63 | 11.33 | 23.78 | 5.86 | 6.99 | 17.82 | 12.32 | 13.77 | 10.53 |
| 15-29 | 25.31 | 24.12 | 40.12 | 24.46 | 20.64 | 33.62 | 21.91 | 17.72 | 47.49 | 17.22 | 18.52 | 34.23 | 37.47 | 25.67 | 22.14 |
| 30-44 | 20.45 | 18.51 | 15.97 | 18.58 | 23.05 | 20.90 | 16.28 | 16.81 | 6.94 | 11.17 | 17.76 | 25.28 | 16.29 | 10.18 | 16.25 |
| 45-59 | 20.51 | 17.74 | 9.23 | 18.42 | 26.92 | 15.38 | 23.24 | 22.08 | 14.26 | 15.94 | 31.13 | 14.31 | 17.73 | 22.15 | 23.44 |
| 60+ | 16.12 | 17.73 | 5.53 | 25.51 | 17.27 | 9.90 | 27.94 | 32.07 | 7.53 | 49.81 | 25.59 | 8.35 | 16.19 | 28.23 | 27.64 |


| Males |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No.of <br> Disabled | 108,468 | 28,727 | 8,749 | 7,370 | 50,920 | 12,702 | 157,008 | 49,216 | 6,898 | 11,621 | 65,059 | 5,717 | 9,710 | 6,124 | 2,663 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 17.63 | 23.60 | 31.16 | 15.90 | 11.24 | 21.45 | 5.21 | 6.20 | 11.58 | 2.28 | 2.74 | 8.19 | 6.49 | 7.09 | 5.11 |
| 15-29 | 25.23 | 25.40 | 40.63 | 26.66 | 19.62 | 35.89 | 11.55 | 7.92 | 18.53 | 5.71 | 12.53 | 15.67 | 22.17 | 17.40 | 11.63 |
| 30-44 | 22.25 | 19.69 | 15.11 | 18.39 | 25.73 | 21.21 | 9.33 | 8.97 | 4.53 | 5.24 | 13.00 | 8.17 | 3.78 | 7.38 | 9.28 |
| 45-59 | 22.08 | 17.59 | 8.30 | 16.01 | 29.88 | 13.96 | 13.95 | 11.15 | 3.52 | 9.12 | 23.27 | 3.20 | 6.86 | 15.22 | 14.09 |
| $60+$ | 12.82 | 13.72 | 4.80 | 23.04 | 13.54 | 7.49 | 12.03 | 12.62 | 4.31 | 20.28 | 12.99 | 1.38 | 6.69 | 10.58 | 11.91 |
| Females |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No.of Disabled | 84,070 | 28,982 | 7,954 | 7,891 | 27,713 | 11,530 | 144,622 | 55,843 | 9,339 | 15,639 | 35,760 | 9,896 | 11,412 | 4,497 | 2,236 |
| Total | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |
| 0-14 | 17.61 | 20.22 | 26.94 | 10.35 | 13.77 | 18.81 | 5.42 | 5.13 | 12.20 | 3.58 | 4.26 | 9.64 | 5.83 | 6.68 | 5.42 |
| 15-29 | 25.41 | 22.86 | 39.56 | 22.41 | 22.51 | 31.11 | 10.36 | 9.80 | 28.96 | 11.52 | 5.99 | 18.56 | 15.30 | 8.26 | 10.51 |
| 30-44 | 18.13 | 17.33 | 16.91 | 18.76 | 18.11 | 20.56 | 6.96 | 7.84 | 2.40 | 5.93 | 4.76 | 17.10 | 12.51 | 2.81 | 6.96 |
| 45-59 | 18.48 | 17.89 | 10.25 | 20.67 | 21.47 | 16.95 | 9.29 | 10.93 | 10.73 | 6.82 | 7.85 | 11.11 | 10.88 | 6.94 | 9.36 |
| 60+ | 20.37 | 21.70 | 6.34 | 27.82 | 24.13 | 12.57 | 15.92 | 19.45 | 3.23 | 29.53 | 12.61 | 6.98 | 9.51 | 17.67 | 15.74 |

### 9.3 Literacy and Educational Levels

As may be seen from Table 9.5, the general literacy rate among the disabled population was 58 per cent in 2013 as against 62 percent in 2008. The literacy level of the disabled population in 2013 (57.9) is much lower than that of the general population (79.8). The literacy rate among the disabled males (69.1) is very much less than the male literacy rate among the general population (85.1). In the case of females the literacy rate of the disabled (45.5) is far below that among the females in the general population (74.8). Moreover in 2013, as it was in 2008, the gap between the male and female literacy rates was much higher in the case of the disabled population. In 2013 this difference was about 10 percentage points among the general population as against about 24 percentage points in the case of the disabled population.

Table 9.5 Distribution of Disabled Population by General and Adult Literacy Rates and Sex, Cambodia 2008-2013

| Residence | Literate Rate Aged $7+$ |  |  | Literate Rate Aged 15+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Male | Female | Both Sexes | Male | Female |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2008 |  |  |  |  |  |  |
| Cambodia | 62.2 | 70.5 | 51.5 | 62.4 | 71.7 | 50.4 |
| Urban | 75.1 | 81.4 | 67.2 | 75.9 | 82.6 | 67.4 |
| Rural | 60.0 | 68.7 | 48.7 | 60.0 | 69.8 | 47.3 |
| 2013 |  |  |  |  |  |  |
| Cambodia | 58.0 | 68.6 | 46.2 | 57.9 | 69.1 | 45.5 |
| Urban | 72.1 | 73.4 | 70.5 | 72.7 | 73.5 | 71.8 |
| Rural | 55.8 | 67.9 | 42.4 | 55.5 | 68.4 | 41.2 |

Note: Excluding not reported
Table 9.6 Distribution Disabled Population by Literacy in any language, Level of Education, and Sex 2008-2013

| Sex <br> Type of Disables | Percentage Distribution by Educational Level |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | None | Primary Not Completed | Primary | Lower Secondary | Secondary / Diploma | Beyond Secondary | Others |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (1) | (2) |
| 2008 |  |  |  |  |  |  |  |  |
| Both Sexes | 100.0 | 14.0 | 46.5 | 21.8 | 15.5 | 1.2 | 0.6 | 0.4 |
| Males | 100.0 | 10.2 | 45.9 | 24.0 | 17.5 | 1.3 | 0.7 | 0.4 |
| Females | 100.0 | 20.8 | 47.6 | 17.8 | 11.9 | 1.0 | 0.4 | 0.4 |
| 2013 |  |  |  |  |  |  |  |  |
| Both Sexes | 100 | 6.3 | 49.2 | 25.0 | 17.0 | 1.6 | 0.9 | 0.0 |
| Males | 100 | 8.1 | 39.6 | 19.2 | 33.1 | 0.0 | 0.0 | 0.0 |
| Females | 100 | 2.2 | 52.9 | 24.1 | 19.8 | 1.0 | 0.0 | 0.0 |

Note: Excluding not reported educational level
The adult literacy rates among the general population at the national level are: 79.7 for both sexes, 86.4 for males and 73.6 for females (see Chapter 5). These rates are also much higher than the corresponding rates for the disabled population (see Table 9.6). In summary the level of literacy among
the disabled population, in particular among women, is very much lower than the level among the general population.
Among the literate disabled population nearly half the number has not completed even the primary level. The proportion of those who have completed Primary level of education and Lower secondary level among the disabled (see Table 9.6) are lower than the corresponding levels of education of the general population ( 29.4 percent and 21.0 percent respectively). Those who have the educational qualification of beyond secondary level among the disabled population constitute hardly one percent whereas it is nearly 2 per cent among the general population. The literacy and educational levels of female disabled persons are generally lower than those of male disabled population.

### 9.4 Usual Activity Rates

Table 9.7 Percent distribution of Disabled Population by Sex and Broad Age group and Main Activity, Cambodia 2008-2013

| Broad Age Group | Number | Total | Employed | Unemployed | Economically Inactive |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 2008 |  |  |  |  |  |
| Both Sexes | 192,538 | 100 | 52.4 | 4.0 | 44.7 |
| 0-14 | 33,928 | 100 | 3.9 | 0.6 | 95.5 |
| 15-59 | 127,582 | 100 | 68.1 | 5.4 | 26.5 |
| 60+ | 31,028 | 100 | 40.7 | 1.9 | 57.5 |
| Males | 108,468 | 100 | 57.8 | 4.4 | 39.4 |
| 0-14 | 19,123 | 100 | 3.9 | 0.6 | 95.5 |
| 15-59 | 75,442 | 100 | 72.5 | 5.9 | 21.6 |
| $60+$ | 13,903 | 100 | 51.9 | 2.1 | 46.0 |
| Females | 84,070 | 100 | 45.4 | 3.4 | 51.6 |
| 0-14 | 14,805 | 100 | 3.9 | 0.6 | 95.5 |
| 15-59 | 52,140 | 100 | 61.7 | 4.8 | 33.6 |
| 60+ | 17,125 | 100 | 31.5 | 1.7 | 66.8 |
| 2013 |  |  |  |  |  |
| Both Sexes | 301,629 | 100 | 48.0 | 5.7 | 46.3 |
| 0-14 | 32,057 | 100 | 3.0 | 0.3 | 96.6 |
| 15-59 | 185,288 | 100 | 64.3 | 6.7 | 29.0 |
| 60+ | 84,284 | 100 | 29.3 | 5.4 | 65.3 |
| Males | 157,007 | 100 | 56.6 | 5.8 | 37.6 |
| 0-14 | 15,703 | 100 | 4.9 | 0.5 | 94.5 |
| 15-59 | 105,026 | 100 | 70.3 | 6.6 | 23.0 |
| 60+ | 36,279 | 100 | 39.2 | 5.8 | 55.0 |
| Females | 144,622 | 100 | 38.7 | 5.5 | 55.9 |
| 0-14 | 16,354 | 100 | 1.2 | 0.1 | 98.6 |
| 15-59 | 80,262 | 100 | 56.4 | 6.8 | 36.8 |
| 60+ | 48,005 | 100 | 21.7 | 5.1 | 73.1 |

Table 9.8 Economic Activity Rates of Disabled Population of Age 15-64 by Sex and Residence Cambodia, 2008-2013

| Residence and Sex | Number of Disabled | Number of economically Active Population | Economic Activity Rates |
| :---: | :---: | :---: | :---: |
| (1) | (2) | (3) | (4) |
| 2008 |  |  |  |
| Cambodia | 135,493 | 96,573 | 71.28 |
| Males | 79,441 | 60,181 | 75.76 |
| Females | 56,052 | 36,392 | 64.93 |
| Urban | 21,452 | 12,764 | 59.50 |
| Males | 12,383 | 8,149 | 65.81 |
| Females | 9,069 | 4,615 | 50.89 |
| Rural | 114,041 | 83,809 | 73.49 |
| Males | 67,058 | 52,032 | 77.59 |
| Females | 46,983 | 31,777 | 67.64 |
| 2013 |  |  |  |
| Cambodia | 205,116 | 142,131 | 69.3 |
| Males | 114,462 | 87,181 | 76.2 |
| Females | 90,655 | 54,950 | 60.6 |
| Urban | 28,441 | 16,785 | 59.0 |
| Males | 14,695 | 9,293 | 63.2 |
| Females | 13,747 | 7,493 | 54.5 |
| Rural | 176,675 | 125,346 | 70.9 |
| Males | 99,767 | 77,888 | 78.1 |
| Females | 76,908 | 47,457 | 61.7 |

### 9.5 Economic Activity Rates

As may be seen from Table 9.7, in 2013 the economic activity rate (employed plus unemployed rates) of the disabled persons is 53.7. It is lower than the economic activity rate of 62.3 of the general population (See Chapter 6). In the case of disabled population, the male economic active rates are generally higher than those of females in all the broad age groups. The economic activity rate of 69.3 of the disabled population in the working age group 15-64 in 2013 (Table 9.8) is also less than the national average of 82.2. These rates for males and females in the general population are 84.5 and 80.0 respectively.

The above analysis reveals that the disabled population deserves special attention in education, employment and health care. The results of the survey when analyzed further will go a long way in providing useful data for the successful implementation of the schemes for the welfare of the physically challenged population.

# Chapter 10 <br> Housing and Household Characteristics 

### 10.1 Housing Status

Information on building and housing characteristics was collected in the house listing operation that was undertaken three days prior to the main survey of CIPS 2013. During house listing all the buildings/structures in the sample EA which were used for residential purposes, partly or wholly, were listed along with the households found in them by the enumerator concerned, in Form A (specimen given at Appendix 2). In addition to this listing the following information was collected and recorded by the enumerator in respect of housing characteristics: (i) whether the building was wholly or partly residential and if the latter, the other use to which the building was put and (ii) the material used for wall, roof and floor of the building.

The analysis in this section on housing status is based on information contained in the Priority Tables H1 and H2. It has to be noted that the 2008 data include institutional buildings whereas the 2013 survey excludes them. The number of residential buildings in Cambodia has increased from about 2.6 million in 2008 to about 2.8 million in 2013, registering an increase by about 5 per cent (Table 10.1) during the five years. The increase in number of residential buildings in the urban areas is more spectacular (19.4 per cent) than that in the rural areas ( 1.5 per cent). This is borne out largely by rising number of multi-story buildings in and around Phnom Penh in the recent past.

In Cambodia as a whole, more than 90 per cent of the residential buildings are wholly residential (Table 10.1). The proportion of wholly residential buildings in the rural areas is more than in urban areas as in the latter the practice of utilizing residential buildings partly for shops and workshops is becoming more common. Table 10.2 presents information on the quality of the residential and partly residential buildings.

Table 10.1 Percentage Distribution of Residential Buildings as Wholly Residential, Partly Residential and Category of Partly Residential, Cambodia 2008 and 2013

| Residence | Total No. of Buildings | Percentage Distribution |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Wholly Residential | Category of Partly Residential |  |  |
|  |  |  |  | Residence and Shop | Residence and Workshop | Residence and Other Use |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2008 |  |  |  |  |  |  |
| Total | 2,637,654 | 100 | 95.7 | 3.1 | 0.7 | 0.4 |
| Urban | 450,345 | 100 | 90.1 | 7.4 | 1.3 | 1.2 |
| Rural | 2,187,309 | 100 | 96.9 | 2.3 | 0.6 | 0.3 |
| 2013 |  |  |  |  |  |  |
| Total | 2,758,261 | 100 | 91.5 | 7.2 | 1.1 | 0.2 |
| Urban | 537,745 | 100 | 81.9 | 16.1 | 1.5 | 0.5 |
| Rural | 2,220,516 | 100 | 93.9 | 5.1 | 1.0 | 0.1 |

Figure 10.1 Percentages of Permanent, Semi-Permanent and Temporary Buildings by Residence, Cambodia 2008 and 2013


Table 10.2 Percentage Distribution of Residential and Partly Residential Buildings by Nature of Construction and by Residence, Cambodia 2008 and 2013

| Total/Urban /Rural | Total Number of Buildings | Percentage of Buildings by Nature of Construction |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total | Permanent | SemiPermanent | Temporary |
| (1) | (2) | (3) | (4) | (5) | (6) |
| 2008 |  |  |  |  |  |
| Total | 2,637,654 | 100 | 57.0 | 24.6 | 18.5 |
| Urban | 450,345 | 100 | 86.5 | 9.3 | 4.2 |
| Rural | 2,187,309 | 100 | 50.9 | 27.7 | 21.4 |
| 2013 |  |  |  |  |  |
| Total | 2,758,261 | 100 | 73.6 | 19.7 | 6.7 |
| Urban | 537,745 | 100 | 93.0 | 5.3 | 1.7 |
| Rural | 2,220,516 | 100 | 68.9 | 23.2 | 7.9 |

Information on the quality of the residential and partly residential buildings is presented in Table 10.2. The following combination of housing materials is used to determine the quality of a building. Based on the wall and roof material, buildings used for residential purposes (wholly and partly) could be classified as permanent, semi-permanent, or temporary. Roof made of bamboo/ thatch/ grass or plastic/ synthetic sheet is considered as temporary. Roof made of any of the following materials is considered as permanent: wood/ plywood, concrete/ brick/ stone, galvanized iron/ aluminum/ other metal sheets and asbestos cement sheets and tiles. Wall made of bamboo/ thatch/ grass/ reeds or earth or salvaged/ improvised materials is considered as temporary. Wall made of any of the following materials is considered as permanent: wood/ plywood/ concrete/ brick/ stone, galvanized iron/ aluminum/ other metal sheets and asbestos cement sheets.

A building or structure with a combination of permanent wall and permanent roof materials is considered as permanent. A building with combination of permanent wall and temporary roof materials or temporary wall and permanent roof materials is considered as semi-permanent. A building with a combination of temporary wall and temporary roof material is considered as a temporary building.

It is observed that there is a steep increase in the proportions of permanent residential buildings and partly residential buildings in Cambodia during the last five years. In particular there has been a rapid conversion of temporary structures into permanent buildings during this period. This trend is more pronounced in the rural areas.

### 10.2 Household Characteristics

Analysis of household characteristics and household amenities that follow are based on the remaining H Series priority tables generated in respect of questions concerned in Part 5 of the Form B-Household Questionnaire canvassed in CIPS 2013.

Table 10.3 Distribution of Population in Normal Households and Average Household Size by Residence 2008-2013

| Residence | Total Population <br> (in Thousands) |  | No. of Normal <br> Households <br> (in Thousands) |  | Average Household <br> Size |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 1 3}$ |
| (1) | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Cambodia | $\mathbf{1 3 , 3 9 6}$ | $\mathbf{1 4 , 6 7 7}$ | $\mathbf{2 , 8 1 8}$ | $\mathbf{3 , 1 6 3}$ | $\mathbf{4 . 7}$ | $\mathbf{4 . 6}$ |
| Urban | 2,614 | 3,146 | 507 | 658 | 4.9 | 4.8 |
| Rural | 10,782 | 11,530 | 2,311 | 2,505 | 4.6 | 4.6 |

The number of normal households has increased by about 345 thousands or 12.3 per cent at the national level during 2008-2013 (Table 10.3).This is higher than the population growth rate of 9.6 per cent during the same period. The average size of household has decreased marginally.

Table 10.4 Percent Distribution of Households by Sex of Head of Household and by Size of Household, Cambodia 2008 and 2013

| Characteristic | Percent Distribution in the year |  |
| :---: | :---: | :---: |
|  | 2008 | 2013 |
| (1) | (2) | (3) |
| Household Headship |  |  |
| Male | 74.4 | 72.9 |
| Female | 25.6 | 27.1 |
| Total | 100 | 100 |
| No. of Usual Members |  |  |
| 1 | 3.5 | 3.6 |
| 2 | 9.8 | 10.8 |
| 3 | 17.0 | 17.9 |
| 4 | 20.7 | 23.2 |
| 5 | 18.2 | 19.2 |
| 6 | 13.3 | 12.3 |
| 7 | 8.3 | 6.6 |
| 8 | 4.6 | 3.2 |
| 9 | 2.5 | 1.7 |
| 10+ | 2.2 | 1.4 |
| Total | 100 | 100 |
| Number of Households* | 2,817,637 | 3,163,226 |

Note: *Excludes Institutional, Homeless, Boat and Transient Households
As may be seen from Table 10.4, four-member households form the highest proportion both in 2008 and 2013, with the proportion increasing by 2.5 percentage points during the five years. Smaller-sized households (less than four members) have each shown an increase in proportion. The bigger-sized households (six members and above) have each shown a decrease. The five-member households have however shown a one percentage point increase. All these indicate a shift towards a smaller family size.

## Female and Male Headed Households

The percentage of female-headed households in Cambodia has increased by one percentage point from 26 to 27 per cent during 2008-2013 (Table 10.4). A majority of them are of age ranging from 35 to 59 in 2008 and 40 to 64 in 2013 (Table 10.5). Female heads of households in this age range from about 57 and 58 percent in 2008 and 2013 respectively. Majority of male heads of households are of age ranging from 25 to 49 ( 66.1 per cent) in 2008 and in the corresponding ages 30 to 54 in 2013 ( 63.7 per cent).

Table 10.5 Percent Distribution of Heads of Households (Aged 10 and over) by Sex and Five-year Age Group, Cambodia 2008 and 2013

| Age Group | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both Sexes | Males | Females | Both Sexes | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 10-14 | 0.2 | 0.1 | 0.4 | 0.1 | 0.0 | 0.1 |
| 15-19 | 0.8 | 0.6 | 1.5 | 0.5 | 0.3 | 1.0 |
| 20-24 | 4.9 | 5.0 | 4.6 | 3.2 | 3.3 | 2.8 |
| 25-29 | 11.9 | 13.3 | 7.8 | 8.6 | 9.6 | 5.8 |
| 30-34 | 9.9 | 11.0 | 6.7 | 12.8 | 14.3 | 8.7 |
| 35-39 | 14.1 | 15.5 | 10.2 | 10.0 | 11.3 | 6.6 |
| 40-44 | 13.2 | 13.8 | 11.3 | 12.8 | 13.7 | 10.6 |
| 45-49 | 12.5 | 12.5 | 12.3 | 12.9 | 13.2 | 12.1 |
| 50-54 | 9.3 | 8.3 | 12.2 | 11.6 | 11.2 | 12.6 |
| 55-59 | 7.9 | 6.9 | 10.8 | 8.8 | 7.7 | 11.9 |
| 60-64 | 5.7 | 4.9 | 8.1 | 7.3 | 6.1 | 10.5 |
| 65-69 | 4.3 | 3.6 | 6.2 | 5.1 | 4.1 | 7.6 |
| 70-74 | 2.8 | 2.3 | 4.2 | 3.4 | 2.7 | 5.2 |
| 75+ | 2.5 | 2.1 | 3.8 | 3.1 | 2.5 | 4.4 |

Figure 10.2 Female Heads of Households by Age, Cambodia 2008 and 2013


Table 10.6 presents the distribution of 1,000 households each in respect of all households, households headed by males and households headed by females by size of household and number of economically active members. In 2013, about 2.3 percent of all households, 1.3 percent of male headed households and about 5 percent of female headed households have no earning members. This situation is nearly the same as it was in 2008. In the case of female-headed households in 2013 three-person households predominate and among them those with one economically active member form the highest proportion followed by two economically active member households.. In the case of male headed households fourperson households form the highest proportion and among them those with two economically active members predominate.

Table 10.6 Distribution of $\mathbf{1 , 0 0 0}$ Households by Sex of Head of household and number of Economically-active members in the households, Cambodia 2008 and 2013

| Household head/Size | Households with number of Economically Active Members |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7+ |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 2008 |  |  |  |  |  |  |  |  |  |
| Total | 1000.0 | 21.6 | 165.5 | 470.9 | 164.4 | 100.0 | 45.6 | 19.5 | 12.6 |
| 1 Person | 35.4 | 7.6 | 27.8 | - | - | - | - | - | - |
| 2 Persons | 98.4 | 7.0 | 32.6 | 58.9 | - | - | - | - | - |
| 3 Persons | 169.8 | 3.5 | 36.5 | 101.8 | 28.0 | - | - | - | - |
| 4 Persons | 206.6 | 1.8 | 31.0 | 123.5 | 32.8 | 17.4 | - | - | - |
| 5 Persons | 182.4 | 0.9 | 19.9 | 93.4 | 37.8 | 22.0 | 8.4 | - | - |
| 6 Persons | 132.9 | 0.4 | 10.4 | 53.7 | 30.9 | 23.5 | 10.3 | 3.7 | - |
| 7 Persons | 82.6 | 0.2 | 4.5 | 24.7 | 19.1 | 17.7 | 10.5 | 4.3 | 1.5 |
| 8 Persons | 46.0 | 0.1 | 1.8 | 9.8 | 9.4 | 10.5 | 7.8 | 4.4 | 2.2 |
| 9 Persons | 24.0 | 0.1 | 0.7 | 3.4 | 4.0 | 5.3 | 4.7 | 3.3 | 2.6 |
| 10 Persons + | 22.0 | 0.1 | 0.4 | 1.7 | 2.3 | 3.6 | 4.0 | 3.7 | 6.3 |
| Male Head | 1000.0 | 12.0 | 108.3 | 523.6 | 163.7 | 107.0 | 49.8 | 21.6 | 14.1 |
| 1 Person | 14.7 | 3.1 | 11.6 | - | - | - | - | - | - |
| 2 Persons | 70.1 | 4.7 | 12.3 | 53.1 | - | - | - | - | - |
| 3 Persons | 158.9 | 2.0 | 22.4 | 111.0 | 23.6 | - | - | - | - |
| 4 Persons | 214.2 | 1.0 | 25.1 | 141.1 | 30.2 | 16.7 | - | - | - |
| 5 Persons | 196.8 | 0.6 | 18.4 | 108.4 | 38.0 | 22.9 | 8.6 | - | - |
| 6 Persons | 147.5 | 0.3 | 10.5 | 63.1 | 33.0 | 25.4 | 11.2 | 4.0 | - |
| 7 Persons | 93.4 | 0.1 | 4.9 | 29.3 | 21.2 | 19.8 | 11.6 | 4.8 | 1.7 |
| 8 Persons | 52.4 | 0.1 | 2.0 | 11.7 | 10.6 | 12.0 | 8.7 | 4.9 | 2.5 |
| 9 Persons | 27.4 | 0.0 | 0.8 | 4.1 | 4.5 | 6.1 | 5.3 | 3.8 | 2.9 |
| 10 Persons + | 24.8 | 0.1 | 0.5 | 2.0 | 2.6 | 4.1 | 4.5 | 4.1 | 7.1 |
| Female Head | 1000.0 | 49.6 | 331.9 | 317.5 | 166.4 | 79.7 | 33.4 | 13.2 | 8.3 |
| 1 Person | 95.8 | 20.9 | 74.9 | - | - | - | - | - | - |
| 2 Persons | 180.7 | 13.6 | 91.4 | 75.7 | - | - | - | - | - |
| 3 Persons | 201.6 | 7.9 | 77.7 | 75.0 | 41.0 | - | - | - | - |
| 4 Persons | 184.5 | 4.1 | 48.4 | 72.2 | 40.5 | 19.3 | - | - | - |
| 5 Persons | 140.4 | 2.0 | 24.1 | 49.8 | 37.1 | 19.5 | 8.0 | - | - |
| 6 Persons | 90.3 | 0.7 | 9.9 | 26.5 | 24.7 | 17.8 | 7.7 | 3.0 | - |
| 7 Persons | 51.2 | 0.3 | 3.6 | 11.4 | 13.2 | 11.6 | 7.2 | 2.9 | 1.1 |
| 8 Persons | 27.6 | 0.1 | 1.3 | 4.5 | 6.0 | 6.3 | 5.1 | 2.8 | 1.5 |
| 9 Persons | 14.1 | 0.1 | 0.4 | 1.6 | 2.4 | 3.0 | 2.9 | 2.1 | 1.6 |
| 10 Persons + | 13.9 | 0.1 | 0.3 | 0.9 | 1.5 | 2.2 | 2.6 | 2.4 | 4.1 |
| 2013 |  |  |  |  |  |  |  |  |  |
| Total | 1000 | 22.7 | 165.9 | 451.4 | 169.0 | 105.8 | 52.1 | 20.7 | 12.4 |
| 1 Person | 36.4 | 8.8 | 27.6 | - - | - | - | - | - | - |
| 2 Persons | 108.4 | 7.3 | 38.5 | 62.6 | - | - | - | - | - |
| 3 Persons | 179.3 | 3.4 | 38.4 | 105.6 | 31.9 | - | - | - | - |
| 4 Persons | 232.4 | 1.9 | 32.3 | 136.8 | 39.6 | 21.8 | - | - | - |
| 5 Persons | 192.3 | 0.6 | 17.9 | 87.7 | 45.2 | 28.3 | 12.5 | - | - |
| 6 Persons | 122.9 | 0.5 | 8.0 | 39.1 | 30.3 | 25.6 | 14.3 | 5.1 | - |
| 7 Persons | 66.2 | 0.1 | 2.1 | 13.9 | 13.2 | 17.4 | 11.8 | 6.0 | 1.8 |
| 8 Persons | 31.5 | - | 0.7 | 4.1 | 5.7 | 7.2 | 6.0 | 4.4 | 3.3 |
| 9 Persons | 16.9 | - | 0.3 | 1.3 | 1.8 | 3.0 | 5.0 | 2.8 | 2.8 |


| Household head/Size | Households with number of Economically Active Members |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7+ |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
| 10 Persons + | 13.6 | - | 0.1 | 0.3 | 1.2 | 2.6 | 2.5 | 2.4 | 4.5 |
| Male Head | 1000.0 | 12.5 | 101.5 | 510.8 | 167.5 | 114.3 | 56.2 | 23.2 | 13.8 |
| 1 Person | 12.3 | 2.3 | 10.1 | - | - | - | - | - | - |
| 2 Persons | 79.3 | 5.8 | 14.5 | 59.0 | - | - | - | - | - |
| 3 Persons | 165.5 | 2.2 | 20.5 | 114.8 | 28.1 | - | - | - | - |
| 4 Persons | 249.8 | 1.1 | 26.2 | 163.1 | 36.9 | 22.4 | - | - | - |
| 5 Persons | 213.0 | 0.6 | 17.8 | 104.9 | 46.5 | 29.9 | 13.3 | - | - |
| 6 Persons | 136.6 | 0.5 | 8.8 | 46.3 | 31.8 | 27.9 | 15.8 | 5.6 | - |
| 7 Persons | 73.9 | 0.1 | 2.3 | 16.0 | 14.3 | 19.9 | 12.3 | 7.0 | 2.1 |
| 8 Persons | 35.8 | - | 1.0 | 4.7 | 6.7 | 8.2 | 6.7 | 4.7 | 3.7 |
| 9 Persons | 18.7 | - | 0.3 | 1.7 | 2.1 | 3.0 | 5.6 | 3.1 | 3.0 |
| 10 Persons + | 15.0 | - | 0.1 | 0.4 | 1.1 | 2.9 | 2.6 | 2.8 | 5.0 |
| Female Head | 1000.0 | 49.9 | 339.3 | 291.4 | 173.1 | 82.8 | 41.1 | 13.7 | 8.6 |
| 1 Person | 101.2 | 26.4 | 74.8 | - | - | - | - | - | - |
| 2 Persons | 186.8 | 11.3 | 103.2 | 72.3 | - | - | - | - | - |
| 3 Persons | 216.7 | 6.8 | 86.7 | 81.0 | 42.3 | - | - | - | - |
| 4 Persons | 185.4 | 3.9 | 48.8 | 66.0 | 46.7 | 20.0 | - | - | - |
| 5 Persons | 136.6 | 0.7 | 18.3 | 41.4 | 41.7 | 23.9 | 10.4 | - | - |
| 6 Persons | 86.1 | 0.8 | 5.8 | 19.7 | 26.3 | 19.3 | 10.4 | 3.8 | - |
| 7 Persons | 45.4 | - | 1.5 | 8.2 | 10.4 | 10.7 | 10.2 | 3.2 | 1.0 |
| 8 Persons | 19.9 | - | 0.0 | 2.5 | 3.1 | 4.3 | 4.3 | 3.5 | 2.3 |
| 9 Persons | 12.0 | - | 0.2 | 0.2 | 0.9 | 3.0 | 3.3 | 2.1 | 2.3 |
| 10 Persons + | 9.9 | - | 0.0 | 0.0 | 1.6 | 1.6 | 2.4 | 1.2 | 3.1 |

About 65 percent of the economically active heads are in the ages ranging from 25 to 49 in 2008 and five years later in 2013, ages 30 to 54 account for about 64 per cent of economically active heads of households (Table10.7). Most of the economically active heads are concentrated in the middle age and the economically inactive persons belong mostly to the older age groups.

Table 10.7 Percent Distribution of Head of Households Aged 10 and over of each Sex who are Economically Active/ Inactive by Age Group, Cambodia 2008 and 2013

| Age of Head of Households | Economically Active Heads |  |  | Economically Inactive Heads |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Persons | Males | Females | Persons | Males | Females |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| 2008 |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 10-14 | 0.0 | 0.0 | 0.1 | 2.8 | 3.1 | 2.5 |
| 15-19 | 0.5 | 0.3 | 1.0 | 5.6 | 7.1 | 4.5 |
| 20-24 | 5.0 | 5.1 | 4.8 | 3.5 | 3.9 | 3.2 |
| 25-29 | 12.5 | 13.7 | 8.4 | 3.8 | 3.0 | 4.3 |
| 30-34 | 10.4 | 11.4 | 7.3 | 2.3 | 1.6 | 2.9 |
| 35-39 | 14.9 | 16.0 | 11.2 | 3.3 | 2.3 | 4.0 |
| 40-44 | 13.8 | 14.2 | 12.4 | 4.0 | 3.0 | 4.7 |
| 45-49 | 12.9 | 12.8 | 13.4 | 5.3 | 4.1 | 6.1 |
| 50-54 | 9.4 | 8.4 | 12.8 | 7.1 | 5.3 | 8.4 |
| 55-59 | 7.9 | 6.9 | 10.9 | 9.0 | 7.4 | 10.1 |
| 60-64 | 5.3 | 4.7 | 7.5 | 11.7 | 11.5 | 11.8 |
| 65-69 | 3.8 | 3.3 | 5.3 | 12.1 | 12.6 | 11.8 |
| $70-74$ | 2.1 | 1.9 | 2.9 | 12.8 | 14.5 | 11.7 |
| $75+$ | 1.6 | 1.4 | 2.1 | 16.9 | 20.8 | 14.0 |
| 2013 |  |  |  |  |  |  |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| 10-14 | 0.0 | 0.0 | 0.0 | 0.8 | 0.8 | 0.8 |
| 15-19 | 0.2 | 0.1 | 0.5 | 4.3 | 4.9 | 3.8 |
| 20-24 | 3.3 | 3.4 | 3.0 | 1.5 | 0.9 | 1.9 |
| 25-29 | 9.1 | 10.0 | 6.4 | 2.6 | 2.0 | 3.1 |
| 30-34 | 13.6 | 14.9 | 9.6 | 2.6 | 0.6 | 3.9 |
| 35-39 | 10.8 | 11.8 | 7.6 | 1.0 | 0.2 | 1.7 |
| 40-44 | 13.7 | 14.2 | 12.1 | 2.0 | 1.3 | 2.6 |
| 45-49 | 13.7 | 13.7 | 13.7 | 3.0 | 2.4 | 3.4 |
| 50-54 | 12.1 | 11.6 | 13.5 | 5.9 | 3.6 | 7.6 |
| 55-59 | 8.8 | 7.7 | 12.2 | 9.5 | 8.4 | 10.4 |
| 60-64 | 6.8 | 5.8 | 9.9 | 13.0 | 12.3 | 13.5 |
| 65-69 | 4.3 | 3.7 | 6.3 | 14.0 | 13.5 | 14.4 |
| $70-74$ | 2.2 | 1.9 | 3.1 | 18.1 | 21.0 | 16.0 |
| $75+$ | 1.5 | 1.4 | 2.0 | 21.7 | 28.2 | 17.0 |

Note* Excludes Institutional, Homeless, Boat and Transient Households

## Number of Rooms Occupied

More than 90 per cent of normal households live in their own dwellings (Table 10.8). This proportion is higher in the rural areas than in the urban areas. A majority of households occupy one room only. One-roomed and two roomed households constitute more than 90 per cent both in 2008 and 2013. In 2013, the proportion of four roomed households is hardly two per cent and the combined proportion of households with higher number of rooms is about one per cent. Almost the same situation existed in 2008.

Table 10.8 Percent Distribution of Households by Tenure Status, Number of Rooms Occupied and, Residence, Cambodia 2008 and 2013

| Tenure Status | Number of Rooms Occupied |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | 1 | 2 | 3 | 4 | 5 | 6 | 7 + |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 2008 |  |  |  |  |  |  |  |  |
| Total | 1,000 | 726 | 209 | 44 | 12 | 5 | 2 | 2 |
| Owner Occupied | 922 | 664 | 198 | 41 | 11 | 4 | 2 | 2 |
| Rented | 40 | 32 | 6 | 2 | 1 | 0 | 0 | 0 |
| Rent Free | 34 | 27 | 5 | 1 | 0 | 0 | 0 | 0 |
| Other | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Urban | 1,000 | 579 | 238 | 102 | 41 | 21 | 10 | 8 |
| Owner Occupied | 770 | 399 | 208 | 91 | 38 | 19 | 9 | 7 |
| Rented | 186 | 147 | 25 | 8 | 3 | 2 | 1 | 1 |
| Rent Free | 39 | 29 | 6 | 3 | 1 | 0 | 0 | 0 |
| Other | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 |
| Rural | 1,000 | 757 | 203 | 6 | 1 | 1 | 1 | 0 |
| Owner Occupied | 955 | 722 | 196 | 30 | 6 | 1 | 1 | 0 |
| Rented | 9 | 7 | 2 | 0 | 0 | 0 | 0 | 0 |
| Rent Free | 33 | 26 | 5 | 1 | 0 | 0 | 0 | 0 |
| Other | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2013 |  |  |  |  |  |  |  |  |
| Total | 1,000 | 668 | 240 | 63 | 18 | 5 | 3 | 3 |
| Owner Occupied | 929 | 618 | 225 | 59 | 17 | 5 | 3 | 2 |
| Rented | 32 | 21 | 7 | 2 | 1 | 0 | 0 | 0 |
| Rent Free | 32 | 23 | 6 | 2 | 0 | 0 | 0 | 0 |
| Other | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 |
| Urban | 1,000 | 453 | 301 | 146 | 56 | 21 | 11 | 12 |
| Owner Occupied | 838 | 350 | 265 | 135 | 51 | 19 | 9 | 10 |
| Rented | 126 | 79 | 30 | 9 | 4 | 2 | 1 | 1 |
| Rent Free | 29 | 19 | 5 | 2 | 1 | 1 | 1 | 0 |
| Other | 6 | 6 | 1 | 0 | 0 | 0 | 0 | 0 |
| Rural | 1,000 | 725 | 224 | 41 | 8 | 1 | 1 | 0 |
| Owner Occupied | 953 | 689 | 215 | 39 | 8 | 1 | 1 | 0 |
| Rented | 8 | 6 | 1 | 0 | 0 | 0 | 0 | 0 |
| Rent Free | 33 | 24 | 7 | 1 | 0 | 0 | 0 | 0 |
| Other | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 |

### 10.3 Household Amenities and Facilities

## Drinking Water

As in the previous censuses information on amenities and facilities available to households was collected in the CIPS 2013. Improved water sources include pipes, tube- pipe well, protected dug well and rain water. Nearly 57 percent of households in Cambodia have access to improved water sources in 2013 as against 47 per cent in 2008(Table 10.9). This is due to a significant increase in the availability of water from pipes and tube wells. In the urban areas a higher percentage of households ( 81.8 per cent in 2013 and 75.8 per cent in 2008) have access to improved water sources, especially water supplied through pipes. Only fifty per cent of the rural households have water supplied through improved sources. About one third of them get it from tube or pipe wells.

Table 10.9 Percent Distribution of Households by Main Source of Drinking Water by Residence, Cambodia 2008 and 2013

| Source | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Piped Water | 13.8 | 56.8 | 4.4 | 19.8 | 63.7 | 8.3 |
| Tube / Pipe Well | 26.8 | 14.7 | 29.5 | 29.5 | 14.7 | 33.4 |
| Protected Dug Well | 5.2 | 3.8 | 5.5 | 6.2 | 1.8 | 7.3 |
| Unprotected Dug Well | 20.7 | 4.5 | 24.2 | 14.3 | 2.8 | 17.3 |
| Rain | 1.0 | 0.5 | 1.1 | 1.4 | 1.6 | 1.4 |
| Spring, River, etc | 23.1 | 6.2 | 26.8 | 18.7 | 6.1 | 22.0 |
| Bought | 8.2 | 13.0 | 7.1 | 8.6 | 9.2 | 8.4 |
| Other | 1.3 | 0.5 | 1.4 | 1.4 | 0.1 | 1.8 |

During the five-year period, a considerable proportion of urbanites seem to have shifted the source of drinking water from near their premises to within their premises since there is a decline in the proportion of households having near- premises- water sources with a matching increase in the proportion of households having water sources within their premises (Table 10.10). In the rural areas only a little over one third of the households have the source of drinking water within their premises in 2013 as against about 29 per cent in 2008. Providing safe drinking water to the entire population within or very close to their premises appears to be a priority issue.

Figure 10.3 Percent Distribution of Households by Main Source of Drinking Water, Cambodia 2013


| $\square$ Tube Pipe Well | $\square$ Piped Water | $\square$ Spring, River, etc |
| :--- | :--- | :--- |
| $\square$ Unprotected Dug Well | $\square$ Bought | $\square$ Protected Dug Well |
| $\square$ Rain | $\square$ Other |  |

Table 10.10 Percent Distribution of Households by Location of Source of Drinking Water by Residence Cambodia 2008-2013

| Location of Source of Drinking <br> Water | $\mathbf{2 0 0 8}$ |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| Within the Premises | 36.2 | 67.4 | 29.4 | 43.3 | 72.0 | 35.8 |
| Near the Premises | 31.5 | 18.2 | 34.4 | 29.8 | 13.7 | 34.0 |
| Away from the Premises | 32,3 | 14.4 | 36.2 | 26.9 | 14.2 | 30.2 |

## Source of Light

The use of electricity (including city power, generator and both) as a source of light has increased at the national level with 48 percent of the households having this amenity in 2013 as against 28.4 percent in 2008 (Table 10.11). In the year 2013, while 94 percent of the households in the urban areas are served by electricity ( 87 per cent in 2008), only 36 percent (13.1 per cent in 2008) have this amenity in the rural areas. Nevertheless it is evident that there have been efforts towards rapid electrification of rural areas.

Table 10.11 Percent Distribution of Households by Main of Source of Light and Residence, Cambodia 2008 and 2013

| Source of Light | $\mathbf{2 0 0 8}$ |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| City Power | 22.5 | 82.5 | 9.3 | 44.3 | 90.5 | 32.2 |
| Generator | 1.7 | 1.9 | 1.7 | 2.2 | 1.2 | 2.5 |
| City Power + Generator | 2.2 | 2.7 | 2.1 | 1.5 | 2.3 | 1.3 |
| Kerosene | 38.6 | 7.4 | 45.5 | 14.6 | 2.1 | 17.8 |
| Candle | 0.4 | 0.4 | 0.4 | 0.7 | 0.2 | 0.8 |
| Battery | 34.1 | 5.0 | 40.4 | 36.4 | 3.7 | 45.0 |
| Other | 0.5 | 0.2 | 0.6 | 0.3 | 0.0 | 0.4 |

Figure 10.4 Percent Distribution of Households by Main Source of Light and by Residence, Cambodia 2008 and 2013


## Toilet Facility

Table 10.12 Percent Distribution of Households by Toilet Facility and Category of Toilet Facility by Residence, Cambodia 2008 and2013

| Toilet Facility | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) |
| Total | 100 | 100 | 100 | 100 | 100 | 100 |
| Without Toilet | 66.3 | 18.5 | 76.8 | 51.3 | 12.5 | 61.5 |
| With Toilet | 33.7 | 81.5 | 23.2 | 48.7 | 87.5 | 38.5 |
| Connected To Sewerage | 13.5 | 45.7 | 6.4 | 21.5 | 53.4 | 13.2 |
| Septic Tank | 14.4 | 32.6 | 10.5 | 23.8 | 32.2 | 21.6 |
| Pit Latrine | 4.9 | 2.5 | 5.4 | 2.6 | 1.2 | 3.0 |
| Other | 0.9 | 0.7 | 0.9 | 0.8 | 0.7 | 0.8 |

The proportion of households having toilet facility within premises has increased by 15 percentage points at the national level during 2008-2013(Table 10.12). The increase is relatively higher in rural areas ( 15.3 percentage points) than in the urban areas ( 6 percentage points). A majority of households with toilet facility in the urban areas have sewerage connection. In the rural areas most of the households with toilet facility have their toilet connected to septic tank. Only about 13 percent of rural households have sewerage connection. The percentage of households having all the three amenities of access to improved water sources, electric power and toilet facility within the premises constitutes 29.5 percent in 2013 as against 17.4 percent in 2008. About 80 percent of urban households have these three amenities as against about 16 percent rural households with these amenities (Table 10.13). There is an overall improvement in this regard during the last five years.

Table 10.13 Percent Distribution of households having Access to Improved Water Source, Electric Power, and Toilet Facility within Premises by Residence, Cambodia 2008 and 2013

| Particulars | 2008 |  |  | 2013 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Percentage of Households with Combined <br> Amenities | 17.4 | 72.5 | 5.3 | 29.5 | 79.8 | 16.3 |

## Cooking Fuel

The use of firewood as the main cooking fuel in rural areas has declined during 2008-2013 and the households seem to switch over to better type of fuel like charcoal and LPG (Table 10.14). In the urban areas there is a conspicuous increase in the use of LPG.

Table 10.14 Percent Distribution of Households by Type of Fuel Used for Cooking by Residence, Cambodia 2008 and 2013

| Cooking Fuel | $\mathbf{2 0 0 8}$ |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| $\mathbf{( 1 )}$ | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| Firewood | 83.6 | 34.7 | 94.3 | 77.9 | 33.3 | 89.7 |
| Charcoal | 7.5 | 25.6 | 3.5 | 8.4 | 19.0 | 5.6 |
| Kerosene | 0.4 | 0.4 | 0.3 | 0.1 | 0.1 | 0.1 |
| LPG | 7.9 | 37.3 | 1.5 | 12.1 | 44.4 | 3.7 |
| Electricity | 0.4 | 1.5 | 0.1 | 1.2 | 3.1 | 0.7 |
| None | 0.2 | 0.4 | 0.2 | 0.1 | 0.1 | 0.1 |
| Other | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |

Table 10.15 Percent Distribution of Households by Location of Kitchen within Premises and by Residence, Cambodia 2013

| Location of Kitchen <br> within premises | $\mathbf{2 0 1 3}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural |
| (1) | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| Separate | 41.2 | 51.1 | 38.7 |
| Not Separate | 58.8 | 48.9 | 61.4 |

## Location of Kitchen within Premises

Majority of households at the national level do not have a separate kitchen within their premises (Table 10.15). In the urban areas a little more than half the number of households have separate kitchen facility. In rural areas, however, more than 60 per cent of households have no separate kitchen. It is pointed out in this connection that majority of rural households live in single room dwellings (Table 10.8) and use firewood as cooking fuel (Table 10.14).

## Access to Internet

It is seen from Table 10.16 that there is an improvement in internet accessibility in the country as a whole during the last five years. However the improvement is perceptible more in the urban areas with about 22 percent of households accessing this facility in 2013 as against 4 percent in 2008. Nearly half the number of those having access to internet facility in urban areas does so only at home. The use of internet in rural areas continues to be not significant.

Table 10.16 Percent Distribution of Households by Accessibility to Internet facility and Residence, Cambodia 2008 and 2013

| Accessibility to Internet | 2008 |  |  | $\mathbf{2 0 1 3}$ |  |  |
| :---: | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Urban | Rural | Total | Urban | Rural |
| (1) | $\mathbf{( 2 )}$ | $\mathbf{( 3 )}$ | $\mathbf{( 4 )}$ | $\mathbf{( 5 )}$ | $\mathbf{( 6 )}$ | $\mathbf{( 7 )}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| No Access | $\mathbf{9 8} .9$ | 96.0 | 99.7 | 94.5 | 78.3 | 98.7 |
| Accessed at home | 0.1 | 0.4 | 0.0 | 2.6 | 10.9 | 0.5 |
| Accessed outside home | 0.9 | 3.6 | 0.2 | 1.3 | 4.5 | 0.5 |
| Accessed at home and outside home | 0.1 | $0 . .5$ | 0.0 | 1.6 | 6.4 | 0.3 |

## Assets Owned

Information on type and number of assets owned by households provides approximate indicators of the economic condition of the people. There is an increase in the proportion of households owning television by about 7 percentage points during the five years. Most of these households have only one TV each. On the other hand there is a decline in the ownership of radio receivers (Table 10.17). Cell phones have become more popular in 2013 with 81 percent owning it ( 95 percent in urban areas and 78 percent in rural areas). The improvement in this regard is remarkable in rural areas The proportion of motor cycle owning households has also increased considerably from about 44 percent to about 61 percent at national level (from about 62 to 80 percent in urban areas and from 39 to 56 percent in rural areas). Among these households 10 percent have two motorcycles each households owning cars/vans has increased only by 2 percentage points from 5 to 7 percent. Bicycle is more popular among rural households while motorcycle is the favorite mode of transport for urban households. Nearly one-third of the urban households have refrigerators while it is hardly 2 percent of the households in the rural areas who have this home appliance. Washing machine and air-conditioner are owned each by about 18 percent and 17 percent households respectively in urban areas and their ownership in rural areas is very minimal. Fans are also more popular in urban areas with about 83 per cent households owning this gadget as against about 21 percent in rural areas. Koyoan, mostly utilized in agriculture, is owned by about 10 percent rural households
Table 10.17 Distributions of Households by Assets Owned and Residence, Cambodia 2008-2013

| Type of Asset | Households having number of asset as mentioned below |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | No Assets | Having Assets | 1 | 2 | 3 | 4 | 5+ | Total | No Assets | Having Assets | 1 | 2 | 3 | 4 | 5+ |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | (15) | (16) | (17) |
| 2008 |  |  |  |  |  |  |  |  | 2013 |  |  |  |  |  |  |  |
| Cambodia |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Radio | 100 | 59.2 | 40.8 | 39.3 | 1.1 | 0.1 | 0.0 | 0.2 | 100 | 67.2 | 32.8 | 31.8 | 0.9 | 0.1 | 0.0 | 0.0 |
| TV | 100 | 41.6 | 58.4 | 55.2 | 2.4 | 0.5 | 0.1 | 0.1 | 100 | 34.4 | 65.6 | 60.1 | 4.1 | 0.9 | 0.3 | 0.2 |
| Phone | 100 | 98.9 | 1.1 | 1.0 | 0.1 | 0.0 | 0.0 | 0.0 | 100 | 87.4 | 12.6 | 12.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| Cellphone | 100 | 62.7 | 37.4 | 26.1 | 6.6 | 2.5 | 1.2 | 1.1 | 100 | 18.6 | 81.4 | 44.8 | 19.4 | 8.4 | 4.4 | 4.3 |
| Computer | 100 | 96.4 | 3.7 | 3.0 | 0.4 | 0.1 | 0.0 | 0.0 | 100 | 90.7 | 9.3 | 7.1 | 1.5 | 0.5 | 0.1 | 0.1 |
| Bicycle | 100 | 36.2 | 64.8 | 46.5 | 12.8 | 3.5 | 0.7 | 0.2 | 100 | 40.3 | 59.7 | 45.2 | 11.1 | 2.7 | 0.5 | 0.2 |
| Motorcycle | 100 | 55.9 | 44.2 | 37.1 | 5.4 | 1.2 | 0.3 | 0.2 | 100 | 39.4 | 60.6 | 47.2 | 10.0 | 2.5 | 0.5 | 0.3 |
| Refrigerator |  |  |  |  |  |  |  | 0.0 | 100 | 91.9 | 8.1 | 7.5 | 0.5 | 0.1 | 0.0 | 0.0 |
| Washing Machine |  |  |  |  |  |  |  | 0.0 | 100 | 95.9 | 4.1 | 4.1 | 0.1 | 0.0 | 0.0 | 0.0 |
| Air Conditioner |  |  |  |  |  |  |  | 0.0 | 100 | 96.0 | 4.0 | 2.3 | 1.0 | 0.3 | 0.2 | 0.2 |
| Fan |  |  |  |  |  |  |  | 0.0 | 100 | 65.9 | 34.1 | 18.0 | 8.4 | 4.5 | 1.9 | 1.3 |
| Car | 100 | 95.2 | 4.8 | 4.1 | 0.5 | 0.1 | 0.0 | 0.1 | 100 | 92.9 | 7.1 | 6.0 | 0.8 | 0.2 | 0.0 | 0.1 |
| Boat | 100 | 94.7 | 5.3 | 4.5 | 0.6 | 0.1 | 0.1 | 0.0 | 100 | 95.1 | 4.9 | 4.2 | 0.4 | 0.1 | 0.1 | 0.1 |
| Tractor | 100 | 99.6 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 100 | 99.4 | 0.6 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 |
| Koyoan | 100 | 96.8 | 3.2 | 3.1 | 0.1 | 0.0 | 0.0 | 0.0 | 100 | 91.7 | 8.3 | 8.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| Urban |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Radio | 100 | 49.7 | 50.4 | 46.6 | 2.9 | 0.5 | 0.1 | 0.3 | 100 | 61.5 | 38.5 | 35.7 | 2.4 | 0.3 | 0.1 | 0.0 |
| TV | 100 | 19.2 | 80.8 | 68.9 | 8.7 | 2.2 | 0.6 | 0.5 | 100 | 9.8 | 90.2 | 69.5 | 14.7 | 4.0 | 1.2 | 0.8 |
| Phone | 100 | 96.6 | 3.4 | 2.9 | 0.3 | 0.1 | 0.1 | 0.1 | 100 | 81.8 | 18.2 | 17.5 | 0.5 | 0.1 | 0.1 | 0.0 |
| Cellphone | 100 | 23.8 | 76.2 | 35.3 | 20.6 | 9.8 | 5.2 | 5.3 | 100 | 5.5 | 94.5 | 23.0 | 27.6 | 17.9 | 11.8 | 14.3 |
| Computer | 100 | 84.2 | 15.8 | 13.2 | 1.8 | 0.5 | 0.2 | 0.2 | 100 | 69.8 | 30.2 | 21.6 | 5.9 | 1.9 | 0.2 | 0.6 |
| Bicycle | 100 | 49.5 | 50.5 | 34.4 | 11.5 | 3.5 | 0.8 | 0.3 | 100 | 47.8 | 52.2 | 36.7 | 11.2 | 3.3 | 0.7 | 0.3 |
| Motorcycle | 100 | 32.8 | 62.2 | 46.0 | 14.7 | 4.7 | 1.3 | 0.5 | 100 | 20.0 | 80.0 | 48.0 | 21.4 | 7.7 | 1.8 | 1.0 |
| Refrigerator |  |  |  |  |  |  |  | 0.0 | 100 | 67.5 | 32.5 | 30.1 | 1.8 | 0.3 | 0.2 | 0.0 |
| Washing Machine |  |  |  |  |  |  |  | 0.0 | 100 | 82.4 | 17.6 | 17.3 | 0.3 | 0.0 | 0.0 | 0.0 |
| Air Conditioner |  |  |  |  |  |  |  | 0.0 | 100 | 82.8 | 17.2 | 9.8 | 4.6 | 1.2 | 0.7 | 0.8 |
| Fan |  |  |  |  |  |  |  | 0.0 | 100 | 17.1 | 82.9 | 27.7 | 25.6 | 16.8 | 7.7 | 5.2 |



# Chapter 11 <br> Summary and Conclusions 

### 11.1 Population Size, Growth and Distribution

The Cambodia Inter-censal Population Survey 2013 (CIPS) conducted in March 2013 is the second survey of its kind, the first having been conducted in March 2004. It is a nationally representative sample survey conducted in between two population censuses for updating information on population size and growth, fertility, mortality, migration and other population characteristics as well as housing and household facilities and amenities. For the first time, the 2013 Inter-censal Population Survey provides estimates up to the provincial level. The target population set for CIPS, 2013 was the normal household population (regular households) of Cambodia. The various estimates presented in this report are derived from a sample of the surveyed population. As in any such survey, these estimates are subject to both sampling and non-sampling errors. The details of the sampling procedure and estimation are given in Chapter 2 of this report.

In absolute terms, Cambodia's population has increased by 1.28 million during the half-decade 20082013. The population growth rate at national level was projected as 1.54 per cent in 2013 which is slightly higher than 1.46 per cent arrived at as population growth rate during 2008-2013 by the CIPS 2013 estimate. The relatively small difference between the projections and CIPS 2013 estimate may be accounted for by the fact that two different methodologies were adopted in projections and sample survey estimations. The annual exponential growth rate of the population of Cambodia is higher than that of Southeast Asia as a whole ( 1.1 per cent) as per ESCAP Population Data Sheet of 2012.

There are large regional variations in population distribution. The Plains region has always accounted for the largest population concentration ( 49.19 per cent). During the last five years there was no major change in the share of the population of each region in the country's population. It is observed from Table 3.2 that over the years, the comparatively less developed provinces of Preah Vihear, Otdar Meancheay, Ratanak Kiri and Mondul Kiri, have been registering high annual population growth rates. This may be due to absorption of migrant population from other provinces as a result of availability of land for cultivation, better economic opportunities and fresh developments in these areas. Eleven provinces have recorded an annual population growth rate higher than the national growth rate. At the extremes, the growth rate of Preah Vihear is 4.5 percentage points higher and that of Pailin 3.2 percentage points lower than the overall growth rate.

Among the provinces, Kampong Cham and Phnom Penh provinces have maintained the first and second ranks in terms of population in 2008 and 2013 respectively. Kep continues to be the last province in terms of population size. Cambodia's population density is 82 , having increased by 7 points from the level of 75 as per the 2008 Census. As is to be expected that population density in urban areas is very much higher than that in rural areas.

The percentages of urban population to total population of Cambodia in 2008 and 2013 are 19.5 and 21.4 respectively. As per the 1998 Census the urban proportion was 18.3 percent. There is, therefore, an increasing trend in urbanization in Cambodia over the years. During the period 2008-2013, the average annual population growth in urban areas was 3.7 percent, while in rural areas it was only 1.3 percent. Migration plays an important role in the relatively higher rate of growth of population in urban areas. Life-time migrants therefore constitute only 25 per cent of the population at the national level.

### 11.2 Age Structure and Sex Ratio

There is a fairly consistent pattern in age distribution in 2008 and 2013.The proportion of children (less than 15 years of age) has also decreased from 33.7 in 2008 to 29.4 in 2013 indicating fertility decline as the main cause for this decrease. There is an increase in the working age and aged populations. In developed countries the phenomenal rise in the working age population due to demographic transition had proved to be a "demographic dividend" for some time. But in the case of Cambodia, it poses a great challenge to absorb the growing labour force in productive work.

At the national level, dependency ratio has declined from 61 in 2008 to 52 in 2013. It is higher in rural areas (56). Cambodia's population has an old age structure with 29.4 per cent of Cambodia's population under 15 years of age and about 8.0 per cent aged 60 years and more. This is also illustrated by the median age, which is 24.5 years in 2013 as against 22.1 years as per the 2008 Census.

The estimated sex ratio of 94.3 according to CIPS 2013 is only marginally less than what it was in 2008. In most of the countries of the world sex ratio ranges from 95 to 105 . The low sex ratio of Cambodia may be mainly attributed to its history of war and political instability in the past.

### 11.3 Marital Status

The proportion of currently married persons among those aged 15 years and more is about 62 percent. Never married population accounts for 31.14 percent of population. The proportion of the widowed and divorced/separated population is close to 7 percent. However, there are relatively more widowed and divorced/separated females than males.

The average age at marriage in 2013 is 26.2 and 23.7 years for males and females respectively, calculated based on the proportion never married/single by age (SMAM). The higher proportion of young married women compared to men of the same age is a further indication that women generally marry at younger ages than men. As compared to 2008 the average age at marriage has increased by 0.6 years and 0.4 years for males and females respectively. The proportions of teen age marriage among men and women are nearly the same at around 8 percent in 2008 and 2013 at the national level.

### 11.4 Literacy and Education

In the past five years, percentage of females who are literate in any language has increased almost by two percentage points while the corresponding proportion among men has increased by little more than one percentage point. However, there is a big male-female gap in literacy rates (currently 85.1 percent for males and 74.8 percent for females). This gap is relatively higher in rural areas. In general, gender inequality in basic education is a major issue in Cambodia requiring immediate attention. Literacy rates in urban areas are higher than in rural areas due to disparities in level of development between the two areas. Nevertheless, in recent years, because of policies for universal primary education and elimination of illiteracy, the gap in literacy rates between urban and rural areas is narrowing down.

Enrolment rate in schools of girls starts at a higher level than boys at ages 5-11, tends to be almost equal to that of boys at ages 12-14 and begins to be lower than that of boys with the progress of age. This may be due to the traditional attitude of encouraging boys rather than girls to study after a certain age. It is also observed that more children in urban areas than those in rural areas are currently attending school. Compared to 2008 Census, there is an improvement in respect of educational attainment. Proportions of educational attainment are higher for males than for females. There is a long way to go in improving the general educational levels of the people of Cambodia as only as low as 1.8 per cent of those aged 25 years and more have qualified beyond secondary level in 2013.

It has been estimated from the survey results that the main subjects grouped below together accounted for 72 per cent of 0.44 million persons with completed higher level of education: 1. Banking, Finance and Accounting 2.Engineering and Technology3.Education4.Language Studies5.Development studies 6.Computer Science/Information Technology7.Medical related subjects, and 8.Law. The number of women is less that of men in all subjects except Banking, Finance and Accounting where the percentage of women is about 62 per cent.

### 11.5 Labour Force

The overall labour force participation rate ( 62.7 percent) in Cambodia has increased by about four percentage points during 2008-2013. Women continue to enter and exit the labour force at an earlier age than men. The male economic activity rate remains higher than that of females in all ages from age 25. The economic activity rates have always been higher in the rural areas than in the urban areas both in respect of males and females presumably due to higher participation of persons in agriculture in rural areas and higher school enrolment of boys and girls in urban areas. Both in the urban and rural areas of the country, the economic activity rates for males are higher than that for females though the gap between the male-female participation rates is much less in rural areas than in the urban areas.

The employment rate which is defined as the percentage of employed to the total number of persons in the labour force works out as 98.3 per cent and 97.6 per cent for Cambodia in 2008 and 2013 respectively. Correspondingly the unemployment rates are 1.7 per cent and 2,4 per cent respectively. There is therefore an increase the unemployment rate in the country during the half decade. In 2013 the unemployment rates among men and women are 2.2 per cent and 2.8 per cent respectively.

An analysis of the status in employment reveals that unpaid family workers and own account workers together constitute about 78 percent of the employed population in Cambodia in 2013. The corresponding proportion in 2008 was about 83 per cent. The fall in the proportion during the five years is more due to fall in the proportion of unpaid family workers especially among rural women. With paid employment constituting only about 22 per cent, most of the workers in Cambodia are in the informal sector. The proportion of women in the informal sector is higher than that of males. In 2013 most of the population at the national level is employed in local private enterprises ( 87.2 percent).

The proportion of population in the primary sector has continued to decline during the five years 20082013. The decline is sharper in the case of women than men. The proportions in the Secondary and Tertiary sectors have increased. This confirms that concentration of workers in the agricultural sector is gradually declining and the employment is becoming diversified. However as of 2013, it is the tertiary sector which absorbs more than two-thirds of the work force in the urban areas whereas in rural areas more than three-fourths of the population is in the primary sector.

About 42 percent of the total employed population in Cambodia is having a secondary activity besides main activity. The most favored secondary occupation is unpaid livestock farming ( 16.7 percent) followed by unpaid crop farming ( 7.6 percent).

### 11.6 Fertility and Mortality

There is as yet no satisfactory civil registration system in Cambodia. Therefore, censuses and surveys have become the main sources of demographic estimates in Cambodia as in other countries with deficient vital registration systems. Because the questions about fertility and mortality, especially infant and child mortality are very sensitive questions information related to fertility and child mortality collected in a census or a survey is liable to be incomplete. This is true also of the CIPS 2013. Therefore, different demographic techniques have to be applied for estimating fertility and early age mortality from data collected at CIPS 2013. As such, estimates of fertility and mortality based on the CIPS 2013 data should be interpreted as providing indications of trends in these demographic parameters and of the range in which the values of parameters could lie.

Considering all the factors mentioned above and taking into account the trends in demographic parameters from other sources and various estimates derived, it may be concluded that the total fertility rate in Cambodia derived from the CIPS 2013 data is around 2.80, 2.15 and 3.05 for Total, Urban and Rural areas respectively (with a reference period of March 2012-March 2013), the infant mortality rate is around 33. 9 and 38 per 1,000 live births for the Total, Urban and Rural areas respectively (reference period March 2012-March 2013), the under-five mortality rate (U5MR) is around 53, 15 and 60 per 1,000 live births for Total, Urban and Rural areas respectively. The declining trend in fertility and infant mortality is continuing, although the speed of decline appears to have slowed down a little, which is to be expected at comparatively moderate levels of these parameters.

### 11.7 Migration

Life-time migrants constitute only about 25 per cent of the population at the national level. The number of migrants based on place of last residence (referred to as migrants), has increased by about 19 percent during the five years. The rate of increase of male migrants ( 19.2 percent) is only marginally less than that of female migrants ( 19.6 percent). The percentage of migrants at national level ( 28.9 per cent) is slightly higher than the corresponding proportion in 2008 ( 26.5 per cent). As is to be expected, the proportion of migrants in urban areas is much higher than that in rural areas.

The proportion of migrants within the province of enumeration has increased by four percentage points and the proportion of migrants from another province has declined by the same percentage in 2013 when compared to 2008. The proportion of international migrants continues to remain low at about 2.5 per cent.

In the urban areas, most of the persons enumerated had migrated from the rural areas. On the other hand a large majority of migrants in the rural areas are from other rural areas. Nearly two-thirds of migrants in the urban areas have been from rural areas both in 2008 and 2013.Migrants who have changed their residence for the reason "family moved" continue to be the highest during the decade. In 2013 the age group 30-34 accounts for the highest proportion of migrants. The percentage of economically active persons among migrants is 79.In 2008, skilled agricultural, forestry and fishery workers formed 49 percent of such migrants. In 2013 it has slightly increased to 50.4 per cent. The educational level of the migrants is fairly higher than that of the total population. In 2013 about 36 percent of the internal migrants to the place of enumeration have stayed there for less than ten years. The remaining 64 percent are long term residents for 10 years and more.

### 11.8 Disability

In accordance with the slightly revised definition adopted in 2013, the percentage of the disabled population in 2013 at the national level was 2.1.The proportion is slightly higher in the case of males. The percentage of disabled females has increased from 44 to 48 per cent during 2008-13. The incidence of disability continues to be higher in the rural areas than in the urban areas. The gap between the proportions of disabled males and females is less in the urban areas than in the rural areas. The literacy level of the disabled population in 2013 (57.9) is much lower than that of the general population (79.8). The literacy rate among the disabled males (69.1) is very much less than the male literacy rate among the general population (85.1). In the case of females the literacy rate of the disabled (45.5) is far below that among the females in the general population (74.8).

Among the literate disabled population 49 per cent have not completed even the primary level. The proportion of those who have completed Primary level of education and Lower secondary level among the disabled are lower than the corresponding levels of education of the general population. Those who have the educational qualification of beyond Secondary level among the disabled constitute hardly one percent as against nearly 2 per cent among the general population. The literacy and educational levels of female disabled persons are generally lower than those of male disabled population. In 2013
the economic activity rate of the disabled persons (53.7) is lower than that of the general population (62.3). The disabled population deserves special attention in education, employment and health care. The survey results when analyzed further will go a long way in providing useful data for the successful implementation of the schemes for the welfare of the physically challenged population.

### 11.9 Housing and Household Characteristics

There is a steep increase in the proportions of permanent residential buildings (from 57.0 to 73.6 percent) and partly residential buildings (from 19.7 to 24.6 percent) in Cambodia during the last five years. The increase in the number of residential buildings in the urban areas is more spectacular (19.4 per cent than in rural areas ( 1.5 per cent). This may be partly due to rising number of multi-story buildings in and around Phnom Penh in the recent past. There has been a rapid conversion of temporary structures into permanent buildings during this period. This trend is more pronounced in the rural areas. The number of normal households has increased by about 345 thousands or 12.3 per cent at the national level during 2008-2013. This is higher than the population growth rate of 9.6 per cent during the same period. The average size of household has decreased marginally. Four-member households form the highest proportion both in 2008 and 2013, with the proportion increasing by 2.5 percentage points during the five years. Smaller-sized households (less than four members) have each shown an increase in proportion. All these indicate a shift towards a smaller family size.

The percentage of female-headed households in Cambodia has increased by one percentage point from 26 to 27 per cent during 2008-2013. A majority of them are of age ranging from 40 to 64 in 2013.In the case of female-headed households in 2013, three-person households predominate and among them those with one economically active member form the highest proportion. More than 90 per cent of normal households live in their own dwellings. This proportion is higher in the rural areas than in the urban areas. A majority of households occupy one room only.

Nearly 57 percent of households in Cambodia have access to improved water sources in 2013 as against 47 per cent in 2008. This is due to a significant increase in the availability of water from pipes and tube wells. In the urban areas a higher percentage of households ( 81.8 per cent in 2013 and 75.8 per cent in 2008) have access to improved water sources, especially water supplied through pipes. Only about 50 per cent of the rural population has water supplied through improved sources. About one-third of them get it from tube and pipe wells. During the five-year period, a considerable proportion of urbanites seem to have shifted the source of drinking water from near their premises to within their premises since there is a decline in the proportion of households having near-premises-water sources with a matching increase in the proportion of households having water sources within their premises In the rural areas only a little over one third of the households have the source of drinking water within their premises in 2013 as against about 29 per cent in 2008. Providing safe drinking water to the entire population within or very close to their promises appears to be a priority issue.

The use of electricity (including city power, generator and both) as a source of light has increased at the national level with 48 percent of the households having this amenity in 2013 as against 28.4 percent in 2008. In 2013, while 94 percent of the households in the urban areas are served by electricity ( 87
per cent in 2008) only 36 percent ( 13.1 per cent in 2008) have this amenity in the rural areas. Nevertheless it is evident that there have been efforts towards rapid electrification of rural areas.

The percentages of households having toilet facility within premises are 48.7 in total areas, 87.5 in urban areas and 38.5 in rural areas in 2013. The proportion has increased by 15 percentage points at the national level during 2008-2013 The increase is relatively higher in rural areas ( 15.3 percentage points) than in the urban areas ( 6 percentage points). A majority of households with toilet facility in the urban areas have sewerage connection. In the rural areas most of the households with toilet facility have their toilet connected to septic tank. Only about 13 percent of rural households have sewerage connection.

The use of firewood as the main cooking fuel in rural areas has declined during 2008-2013 and the households seem to switch over to better type of fuel like charcoal and LPG. In the urban areas there is a conspicuous increase in the use of LPG. Only 41 percent of households in Cambodia have a separate kitchen in their residence, with little more than half the number of urban households having a separate kitchen in their dwelling. There is an improvement in internet accessibility in the country as a whole during the last five years. However the improvement is perceptible more in the urban areas with about 22 percent of households accessing this facility in 2013 as against 4 percent in 2008. Nearly half the number of those having access to internet facility in urban areas do so only at home. The use of internet in rural areas continues to be not significant.

Information on type and number of assets owned by households provides approximate indicators of the economic condition of the people. There is an increase in the proportion of households owning television by about 7 percentage points during the five years. Most of these households have only one TV each. Cell phones have become more popular in 2013 with 81 percent owning it ( 95 percent in urban areas and 78 percent in rural areas). The improvement in this regard is remarkable in rural areas The proportion of motor cycle owning households has also increased considerably from about 44 percent to about 61 percent at national level (from about 62 to 80 percent in urban areas and from 39 to 56 percent in rural areas). Among these households 10 percent have two motorcycles each. Households owning cars/vans has increased only by 2 percentage points from 5 to 7 percent. Bicycle is more popular among rural households while motorcycle is the favorite mode of transport for urban households.

APPENDIX
APPENDIX I

| FORM A HOUSELIST |
| :--- |
| $\begin{array}{l}\text { Page Number............. } \\ \text { Total Number of pages used for the EA..... }\end{array}$ |







Royal Government of Cambodia
Cambodia Inter-Censal Population Survey, 2013
 STRICTLY CONFIDENTIAL
Identification Particulars

 \begin{tabular}{l}
(**Count the number of entries and give total) <br>
*KEY TO CODES <br>
\hline W

 

\hline Wall Material ( Column 3) <br>

1. Bamboo / Thatch / Grass / Reeds <br>
2. Earth <br>
3. Wood / Plywood <br>
4. Concrete / Brick / Stone <br>
5. Galvanised Iron / Aluminium / Other metal sheets <br>
6. Asbestos cement sheets <br>
7. Salvaged / Improvised materials <br>
8. Other (specify) <br>
\hline
\end{tabular}

APPENDIX II


| For All Persons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Literacy |  | Full Time Education |  |  |  |  | Physical/Mental Disability, if any | $\begin{aligned} & \text { Main } \\ & \text { Activity } \end{aligned}$ | Employment Period | Occupation | $\begin{array}{\|l\|} \hline \text { Employment } \\ \text { Status } \end{array}$ | Industry, Trade or Service | Sector of Employment | Secondary economic <br> activity (For all Codes <br> 1 to 8 in Col 19) |
| 16 |  | 17 |  |  |  |  | 18 | 19 | 20 | 21 | 22 | 23 | 24 |  |
| (a) Can the person read and write \|with understanding in Khmer language ? <br> 1: Yes <br> 2: No <br> (Enter Code) | (b) <br> Can this person read and write with understanding in any other language? If so which language? (Enter code from list below) | (a) <br> Has the person attended School /Educational Institution? <br> 1: Never <br> 2: Now <br> 3: Past <br> (Enter Code) | (b) <br> Currently atten- <br> ding Grade for <br> code 2 of col. <br> $17(a)$ <br> (Enter <br> Code <br> from <br> list <br> below) | (c) <br> Highest Grade <br> completed | (d) <br> Main subject for codes 15 17(b) or 17( (For other co 17(b),(c) skip | f study <br> 20 in Col <br> es in col. <br> to col. 18) <br> Code | If the person is physically/ mentally disabled give appropriate code number from the list below. Otherwise enter (0) | Main activity of the person during last year <br> (Enter Code from list below ) | Number of months employed in the last 12 months | Name of Occupation | Employment Status/Class <br> (Enter Code from list below ) | Nature of Industry, Trade orService | Sector in which Employed <br> (Enter Code from list below ) | In terms of contribution to income or subsistence, what was the second most important economic activity of this individual over the last year? <br> (Enter code from list below) |
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| Codes for column 16(b) | Codes for column 17(b) |  | Codes for column 18 | Codes for Column 19 | Codes for Column 22 | Codes for column 24 | es for Column |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Literacy in any | Currently attending Grade |  | Type of disability | Main Activity During last Year | Employment Status/ | Sector of employment | Secondary economic activity |
| other language | For code 183 in in co. 17 (a) put dash (-) in $17($ (b) |  | 1: In seeing |  | Cla | 1. Govermment | 01. None |
| 1: No other lagguage | For codes 2 in col. $177(\mathrm{a})$, Code from list below. |  | 2: In spech | 1: Employed (Fill in cols. 20 to 24) | 1: Emploger | 2. Sate owned enterpise | Farming (growing crops) |
| 2: Vietramese | Codes for column 17(c) |  | 3: In hearing | 2: Unemployed (Employed any time beforre) | 2: Paid employce | 3. Cambodian enterprise (Private) | 02. Unpaid Employment (Self-employed or |
| 3: Chinse | Highest GradeDegree/Diploma completed |  | 4: In movement | (Fill in in cols. 20 to 24 for last employment, | 3: Own-account worker | 4. Foreign enterpise | employed in family enterpise) |
| 4: Lao | For code 1 in Col. 17 (a) put dash (-) in col. 17(c) |  | 5: Mental Retardation |  | 4: Unpaid family worker | 5. Non profiti institution | 03. Paid Employment (Wage labourer) |
| 5: Thai | For codes $2 \& 3$ in col.17(a), Code from the list below | Sparate Codes for Col. $17(\mathrm{c}$ ) | 6. Mental llness | 3: Unemployed (Never employd any time beforc) | 5: Ohler (Specify) | 6. Houschold sector | Livestock farming |
| 6: French | COMMON CODES FOR COL.L17(b) and 17 (c) | 13: Lower Secondary Diploma/Cerifificate | 7:Any Other(specify) |  |  | 7. Embassies, Intemational institutions, | 04. Unpaid Employment (Self-employed or |
| 7: English |  | 14: Upper Secondary Diploma/Certificate/Baccalaureate | 8: Multiple Disability | 4: Home maker 5 S Sudent |  | and foreign aid and development agencies 8. Other, specify | employed in family enterprise) |
| 8: Cham | 00: Pre-schoolKindergaten | 15: Technical/vocational pre-secondary diploma/certificate | (specify by code) | 5: Student |  | 8. Other, specify. | 05.Paid Employment (Wage labourer) |
| 9: Other (Specify) | 01: Grade 1 | $16:$ Technicalvocational postsecondary diplomacertificate |  | 6: Dependent |  |  | Other Activities |
|  | 02: Grade 2 | 17: Graduate Degree |  | 7: Rent-receiver, Retired or other income recipient |  |  | 06. Fishing |
|  | - | 18: Master's Degree |  | 8: Other (Specify) |  |  | 07. Other household-based production |
|  | 11: Grade 11 | 19: Ph.D. Dergree |  | (For codes 3, 4,5, 6,7 \& \& put dash (-) in Cols. 20 to 24) |  |  | or senices |
|  | 12: Grade 12 | 20: Any other Diploma/Degrce completed (specify) |  |  |  |  | Construction |
|  | Separate Codes for Col. 17(b) | 188: No grade completed |  |  |  |  | 09. Wholesale or retail trade |
|  | 15: Tcechnical/vocational presceosndary diplomà cerififcate Course |  |  |  |  |  | 10. Transport |
|  | 16:Technical/vocational post-secondary diploma/certificate Course 17: Undergraduate Course |  |  |  |  |  | 11. Ohter paid employment (services like teaching, cooking, child care, medical, etc.) |
|  | 18: Post Graduate Course |  |  |  |  |  |  |
|  | 19: Post- Master Degree Course <br> 20: Any other course (specify) |  |  |  |  |  |  |

FORM B HOUSEHOLD QUESTIONNAIRE PART 3: FERTLITTY INFORMATION OF FEMALES AGED 15 AND OVER LISTED IN COLUMN 2 OF PART 2


| Codes for Column 9 |
| :--- |
| 1. Dotor |
| 2. Nurse |
| 3. Midwife |
| 4. Tradional Birth Attendant (TBA) |
| 5. Other |
| 6. None |

FORM B HOUSEHOLD QUESTIONNAIRE PART 4 : DEATH IN HOUSEHOLD
Deaths in Household in the last 12 months: Total Number of Deaths

| PARTICULARS OF THE DECEASED |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|l\|l} \hline \text { Sl. } \\ \text { No. } \end{array}$ | Name of Deceased | Sex <br> 1: Male <br> 2: Female <br>  <br> (Enter Code) | Relationship to Head of Household (Use Code given below) | Age at Death <br> Write the age in total years completed at the time of death <br> 00: Less then 1 year <br> 01:1 year to less than 2 years <br> 02: 2 years to less than 3 years <br> 97: 97 years to less than 98 years 98:98 years and over |  |  | What was the cause of death? <br> (Enter Code from the list below) | Has this death beenregistered with the civilauthority?1: Yes2: No | For women aged 15-49 years who died |  |  |
|  |  |  |  |  |  |  | Did the woman die |  | If"Yes" in | olumn 7(a) |
|  |  |  |  |  |  |  | hile pregnant, during |  | State where the death | State who attended |
|  |  |  |  |  |  |  | delivery or within 42 days after giving birth ? |  |  | her before death |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { 1: Yes } \\ & \text { 2: No } \end{aligned}$ |  | (Enter Code from the list below) | (Enter Code from the list below) |
| 1 | 2 | 3 | 4 |  |  | 5 |  | 6 | 7 | 8(a) | 8(b) | 8 (c) |
| 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 |  |  |  |  |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |  |  |  |  |
| 6 |  |  |  |  |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |  |  |  |  |
| 0 |  |  |  |  |  |  |  |  |  |  |  |


|  |  |
| :---: | :---: |


|  |  |
| :--- | :--- |


官 2

## 

FORM B HOUSEHOLD QUESTIONNAIRE PART 5: HOUSING CONDITIONS AND FACILITIES

| On what basis does this household occupy this dwelling? | Main Source of light | Main Cooking Fuel | Toilet facility within premises | Main Source of drinking water supply | Location of Drinking water source | No. of rooms occupied by household (exclude kitchen, bathroom, toilet and storeroom) | Availability of separate kitchen within premises |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 1: Owner occupied <br> 2 : Rent <br> 3 : Not owner, but rent free <br> 4 : Other (specify ) $\square$ <br> (Enter Code) | 1 : City power <br> 2 : Generator <br> 3 : Both city power and generator <br> 4 : Kerosene <br> 5 : Candle <br> 6 : Battery <br> 7 : Other (specify) <br> (Enter Code) $\square$ | 1 : Firewood <br> 2 : Charcoal <br> 3 : Kerosene <br> 4 : Liquefied Petroleum Gas (LPG) <br> 5 : Electricity <br> 6 : None <br> 7 : Other (specify ) <br> (Enter Code) $\square$ | 1 : Not available <br> If available give one of the codes 2 to 5 : <br> 2 : Connected to sewerage <br> 3 : Septic tank <br> 4 : Pit latrine <br> 5: Other type $\square$ of toilet (specify)...... (Enter Code) | 1 : Piped water <br> 2: Tube / pipe well <br> 3: Protected dug well <br> 4 : Unprotected dug well <br> 5 : Rain <br> 6: Spring, river, stream, lake/pond <br> 7 : Bought <br> 8: Other (specify) (Enter Code ) | 1: Within the premises <br> 2: Near the premises <br> 3: Away $\square$ (Enter Code ) | 1 : One Room <br> 2 : Two Rooms <br> 3 : Three Rooms <br> 4 : Four Rooms <br> 5 : Five Rooms <br> 6 : Six Rooms <br> 7 : Seven Rooms $\square$ <br> 8 : Eight Rooms and above | (1:Yes |



Cambodia Inter-censal Population Survey 2013 (CIPS 2013) List of Priority Tables
The List of Priority Tables for CIPS is drawn from the corresponding List of 2008 Census with some revisions, additions and deletions in view of the various changes in the questionnaire. The following List contains the old Tables, the new Tables and the revised Tables as indicated.
Table No. Title

## (i) A Series. General Population Tables

## (iii) C Series. Economic Tables

12. C1 Population by Usual Activity Status, 5 -year Age Group and Sex.
13. C2 Employed Persons aged 5 and over by Status in Employment, 5 -year Age Group and Sex. 14. C3 Employed Persons aged 5 and over by Sector of Employment, 5-year Age Group and Sex.
14. C4 Unemployed Persons aged 5 and over by Status in last Employment, 5 -year Age Group and Sex. 16. C5 Economically Active Population aged 5 and over by Secondary Economic Activity, 5-year Age Group and Sex. 17. C6 Economically Inactive Population aged 5 and over by Secondary Economic Activity, 5 -year Age Group and Sex. 18. C7 Employed Persons aged 5 and over by Employment Status, 5 -year Age Group and Sex.
15. C8 Economically Active Population aged 5 and over by Industrial Section, Major Group of Occupation and Sex.
16. C9 Economically Inactive Population aged 5 and over by Functional Categories, 5 -year Age Group and Sex.
17. C10 Employed Population aged 5 and over by Industrial Section, 5 -year Age Group and Sex.
18. C11 Employed Population aged 5 and over by Major Group of Occupation, Age Groups and Sex.
19. C12 Employed Population aged 5 and over by Main Status in Employment, Industry and Sex.
20. C13 Employed Population aged 5 and over by Main Status in Employment, Occupation and Sex.
21. 16 Employed Females aged 5 and over by Occupational Group and Marital Status.
22. C17 Employed Population aged 5 to 20 by School Attendance, Single Year of Age and Sex.
(iv) D Series. Migration Tables
23. E1 (Revised) Physically/Mentally Disabled Persons by 5 -year Age Group and Sex.
24. E2 (Revised) Physically/Mentally Disabled Persons by Category of Disability, Marital Status and Sex.
25. E3 (Revised) Physically/Mentally Disabled Persons by Literacy in any language, Level of Education, 5 -year Age Group and Sex.
26. E3A (Revised) Physically/Mentally Disabled Persons by Category of Disability, Literacy in any Language, Level of Education and Sex.
27. E4 (Revised) Physically/Mentally Disabled Persons by Main Activity, 5 -year Age Group and Sex.
28. E4A (Revised) Physically/Mentally Disabled Persons by Category of Disability, Main Activity and Sex.
(vi) F Series. Fertility Tables
29. F1 Females aged 15 to 49 bearing children during last year by 5 -year Age Group, Educational level and Births during last year by Birth order. 43. F2 Females aged 15 to 49 bearing children during last year by 5-year Age Group, Usual Activity Status and Births during last year by Birth order. 44. F3 Females aged 15 and over by Parity, Total Children Ever Born, 5 -year Age Group and Educational Level. 45. F4 Females aged 15 and over by Parity, Total Children Ever Born, 5 -year Age Group and Usual Activity Status.
30. F5 Females aged 15 and over by Number of Surviving Children, 5 -year Age Group and Educational level.
31. F6 Females aged 15 and over by Number of Surviving Children, 5 -year Age Group and Usual Activity Status.
32. F7 Females aged 15 to 49 bearing children during last year by 5 -year Age Group and Type of Assistance during Delivery. 49. F8 (New) Registration of Birth in the last year by Educational Level of Mother
33. F9. (New) Ever Married Females Aged 15 and above by Age at First Marriage and Current Age
34. F10. (New) Ever Married Females Aged 15 and above by Age at First Marriage and by Number of Children Ever Born
35. F13. (New) Children Living with Own Mother by Age and Age of Mother
36. F14. (New) Females Aged 15 and above Living with Own Children by Parity, Total children Ever Born and Age
37. F15. (New) Ever Married Females Aged 15 and above by Age at First Child Birth and Current Age
38. F16. (New) Ever Married Females Aged 15 and above by Age at First Child Birth and Number of Children Ever Born
39. F17. (New) Ever Married Females Aged 15 and above by Age at First Child Birth and Number of Children
40. F18. (New) Ever Married Females Aged 15 and above by Parity, Total Children Ever Born, Age at First Child 60. F19. (New) Ever Married Population by Age at First Married and Sex of Respondent
(vii) G Series. Mortality Tables
41. G1 Population, Number of Deaths in Households in the last year by broad Age Group and Sex. 62. G2 Deaths in Households in the last year by Cause of Death, broad Age Group and Sex.
42. G3 Maternal Deaths by Type of Assistance, Place of Death and 5-year Age Group.
43. G4. (New) Number of Deaths in Households in the Year by Death Registration, Broad Age Groups and Sex
(viii) H Series. Household and Housing Amenity Tables 65. H1 Buildings/Structures with Households by Type of Use.
44. H2 Buildings/Structures (Residential + Partly Residential) by Predominant material of Roof, Wall and Floor.
45. H3 Households by Tenure Status of Dwelling, Household Size and Number of Rooms Occupied.
46. H4 Households by Size of Households, Number of Economically Active Members and Sex of Head of Household
47. H5 Head of Households (aged 10 and over) by Usual Activity Status, 5-year Age Group and Sex.
48. H6 Households by Main source of Light used and Household Size.
49. H7 Households by Type of Fuel used for Cooking and Household Size.
50. H8 Households classified by Main source of Drinking Water, Location of Source and Household Size.
51. H9 Households by Tenure Status of Dwelling and Toilet Facility Category.
52. H10 Households and Population (in 10,000's) by Tenure Status of Dwelling, Availability of Electric Power and Toilet Facility.
53. H11 Households classified by source of Drinking Water, Availability of Electric Power and Toilet Facility.
54. H12 (Revised) Households by Type and Number of Assets owned.
55. H13 (Revised) Households by Household Size and Access to Internet.
56. H14 (New) Households with Separate Kitchen by Household Size and Number of Rooms Occupied
Note: The lowest level of presentation of all tables is Province except Tables D2 and D3 which are presented at National Level

## APPENDIX IV

## Definition of Disability

The following instructions were given to the Enumerator:

## I. The types of disabilities identified for survey purpose are given below:

## 1. In Seeing:

(i) A person who cannot see at all (has no perception of light) or has blurred vision even with the help of glasses or contact lens will be considered as having disability in "Seeing" or visually disabled.
(ii) A person with proper vision only in one eye will also be treated as visually disabled.
(iii) A person may have blurred vision and difficulty in seeing, but would not have tested whether her/his eye-sight would improve by using spectacles. Such persons also would be treated as visually disabled.

## 2. In Speech:

(i) A person would be recorded as having speech disability, if she/he is dumb or he cannot speak at all.
(ii) A person whose speech is not understood by a listener of normal comprehension and hearing would be treated as having speech disability.
(iii) A person who speaks single words only and is not able to speak in sentences has speech disability
(iv) A person who stammers to that extent that the speech cannot be understood is having speech disability.

## 3. In Hearing:

(i) A person who cannot hear at all (deaf) or can hear only loud sounds will be considered as having hearing disability
(ii) A person who is able to hear, only by using hearing-aid will be treated as disabled under this category.
(iii) If a person cannot hear through one ear though her/ his other ear is functioning normally, should also be considered as having hearing disability.

## 4. In Movement:

(i) If a person does not have leg/s or arm/s or hand/s or there is absence of all the fingers or toes or a thumb she/he is disabled in movement
(ii) If any part of the body is deformed (Example: hunch back), the person will be treated as disabled under this category
(iii) A person who cannot move herself/himself or without the aid of another person or without the aid of stick, wheel chair etc., will be treated as disabled under this category.
(iv) A person will be treated as disabled in movement if she / he are unable to move or lift or pick up any small article placed near her/ him.
(v) A person who may not be able to move normally because of problems of joints like arthritis and has to invariably limp while moving will also be considered to have movement disability.
(vi) Very short statured persons (dwarfs) are considered as having movement difficulty.
5. Mental Retardation: This refers to
(i) A person with lower intelligence or has delayed development (walking, talking, learning etc).
(ii) One who lacks comprehension appropriate to her/ his age
(iii) A person who has difficulty in communicating her/his needs and generally depends on her/his family members for performing daily routine.

Note: Mental Retardation is generally from birth. If the person has got mental impairment at a later age, it may be mental illness
6. Mental IIlness: This refers to
(i) A person who exhibits unusual behaviour like talking /laughing to self, staring in space, excessive fear and suspicion without reason.
(ii) A person who has problems like loss of memory, depression etc which are usually related to old age
(iii) Exhibits other symptoms indicative of mental disturbance

Note: A mentally ill person may or may not take medicines for her/his illness. It should be left to the respondent to report whether a member of the household is mentally disabled and no argument may be made on this issue.
7. Any other (specify): Examples are specific learning difficulties, Epilepsy which is not controlled and which limits daily function etc. Even if you find it difficult to categories based on the explanation given by the person, then also write Code 7 .

Multiple Disabilities: This refers to a person having more than one disability described above
II. If a person is disabled as mentioned above enter code according to the following list:

| Disability | Code |  |
| :--- | :--- | :--- |
| In Seeing | 1 |  |
| In Speech | 2 |  |
| In Hearing | 3 |  |
| In Movement | 4 |  |
| Mental Retardation | 5 |  |
| Mental Illness | 6 |  |
| Any Other (Specify) | 7 |  |
| Multiple Disabilities 8 | 8 (In this case write 8 and specify the disabilities within brackets |  |

Example: $8(1,4)$ or $8(2,3,4), 8$ (2,7-Epileptic fit), $8(4,5)$
III. The disability of a person will be decided with reference to the date of enumeration. Persons with temporary disability on the date of enumeration will not be considered as disabled. For example, a person's movement may have been restricted because of some temporary injury and she/he is likely to return to his normal state after sometime, such a person will NOT be treated as disabled.

## APPENDIX V

## Glossary

## Adult Literacy Rate

Percentage of literate population aged 15 and more to total population aged 15 and more in a given area.

## Age

Total years completed by a person on his/her last birthday.

## Age Dependency Ratio

The percentage of population in the younger $(0-14)$ and older $(65+$ ) age groups to population in the age group 15-64.

## Age-Specific Economic Activity Rate

Percentage of economically active population in an age group to total population in that age group

## Age-Specific Fertility Rate

The number of births to women of a given age group per 1,000 women in that age group

## Annual Exponential Growth Rate

$$
\begin{gathered}
r=\frac{\log _{e} P_{t}-\log _{e} P_{o}}{t} \\
P_{t}=P_{o} e^{r t}
\end{gathered}
$$

Where, Po is the population at the base year, Pt is the population at year ' t ' and ' t ' is the number of years between Po and Pt. Here the compounding with the rate of growth ' r ' is done on a continuous basis.

## Average Household Size

This is the average number of persons in normal or regular households (i.e. excluding institutional and homeless households and households of boat and transient population).

## Building

Building refers generally to a single structure on the ground. Sometimes it is made up of more than one component unit which are used or likely to be used as dwelling (residence) or establishments such as shops, business houses, offices, factories, workshops, work sheds, schools, place of entertainments, place of worship, stores, etc. It is also possible that buildings, which have components units, may be used for a combination of purpose such as shop-cum-residence, workshop-cum-residence, office-cum-residence, etc.

## Child-Woman Ratio

This is the ratio of children under 5 years old in a population to women in the age group $15-49$. It is computed by dividing the number of children aged $0-4$ in the population by the number of women aged 15-49.

## Crude Birth Rate (CBR)

The number of live births in a year per 1,000 population.

## Crude Death Rate

The number of deaths per 1,000 population in a given year

## Economic Activity Rate

The percentage of economic active population to total population

## Dwelling

The room or the set of rooms in a building in which household resides

## Educational Level

Educational level refers to completed level in this report

## Economically Active Population (or labour force)

Persons with main activity as employed or unemployed during the reference period of one year preceding the census date.

## Economic Activity Rate of the working age group

Percentage of economically active population to total population within the age group 15-64

## Economically Inactive (or not active) Population

Persons other than the economically active during the reference period of one year preceding the census date.

## Employed

Comprises persons who were in the following categories for 6 months ( 183 days) or more during the one year preceding the census date:
(i) Persons who were in paid employment (e.g. working in public or private organization etc). (ii) Persons who, during the reference period, performed some work for wage, salary, profit or family gain in cash or kind. (iii) Persons who did not do any work for pay or profit during the reference period although they had a job to which they could return. (e.g. off season workers like farmers or fishermen), those on sick leave or leave without pay, those who could not work due to strike or lockout in the organization they were working. (iv) Persons who were self-employed (e.g. Running a shop by himself or herself, selling eatables, practicing as doctors, lawyer etc)

## Fertility

Fertility is defined as the childbearing performance of a woman or group of women measured in terms of the actual number of children born.

## Gender

Refers to roles, attitudes and values assigned by culture and society to women and men

## Gender Equity

Means fair treatment of women and men

## Literacy Rate

This is calculated as percentage of literate persons to total population excluding children aged 0 to 6 .

## Head of Household

For survey purposes he or she is a person who is recognized as such in household. He or she is generally the person who bears the chief responsibility for management of the household and takes decisions on behalf of the household. The head of household need not necessarily be the oldest member, but may be a female member or a younger member of either sex. The name of the person who is recognized by the household as its head was recorded in the census. In the case of an absentee de jure "Head", the person who was responsible for managing the affairs of the household was regarded as the Head for the census purpose.

## Household

A group of persons who commonly live together and would take meals from a common kitchen unless the exigencies of work prevented any of them from doing so.

## Infant Mortality Rate

Infant Mortality Rate is the number of deaths of infants under age one year per 1,000 live births in a given year.

## Industrial Sector

Industry (or branch of economic activity) refers to the activity of the establishment or enterprise in which the individual works. Industries are grouped according to following sectors:

Primary Sector: Section A (Agriculture, Forestry and Fishing) of the International Standard Industrial Classification (ISIC)
Secondary Sector: Section B (Mining and Quarrying), C (Manufacturing), D (Electricity, Gas, Steam and AirCon Supply), E (Water supply, Sewerage, Waste Management and Remediation Activities), F (Construction) of the International Standard Industrial Classification (ISIC)
Tertiary Sector: Sector G (Wholesale and Retail Trade, Repair of Motor Vehicles and Motorcycles), H (Transportation and Storage), I (Accommodation and Food Service Activities), J (Information and Communication), K (Financial and Insurance Activities), L (Real Estate), M (Professional, Scientific and Technical Activities), N (Administrative and Support Service Activities), O (Public Administration and Defense, Social Security), P (Education), Q (Human Health and Social Work Activities), R (Art, Entertainment and Recreation), S (Other Service Activities), T (Use Activities of Household as Employers), U (Activities of Extraterritorial Organizations and Bodies) of the International Standard Industrial Classification (ISIC)

## Lifetime Migration

Migration status of persons as determined by comparing the place of birth with place of residence

## Literacy

Refers to the ability to read and write with understanding in any language. In CIPS 2013, information on literacy in Khmer language and literacy in any other language was ascertained from respondent. By definition all children of the age of 6 years or less are treated as illiterate.

## Live Birth

This refers to the complete expulsion (delivery) or extraction from its mother of a product of conception (baby), irrespective of the duration of pregnancy. The baby after such separation breathes or shows other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. Each product of such birth is considered as live birth.

## Main Activity during Last Year

The activity of a person during 6 months (183 days) or more in the one year preceding the reference date of the census.

## Maternal Mortality

This refers to the number of women who die while pregnant, during delivery or within 42 days after delivery.

## Median Age

It is defined as the age, which divides the population into two equal size groups, one of which is younger and the other of which older than the median.

## Migration

This is the process of changing residence from one geographical location to another. In the 2008 Census it meant shifting residence by the person enumerated from another village or country (which was his/her previous residence) to the village in which he/she was enumerated.

## Myer's Index

This is a measure of heaping on individual ages or terminal digits. The tendency of enumerators or respondents to report certain ages at the expense of others is called age heaping, age preference or digit preference (e.g. ages ending in 0 or 5). The theoretical range of Myer's index extends from the minimum of 0 , when there is neither preference nor avoidance of any particular digit at all, to the maximum of 90 when all ages are reported in a single terminal digit.

## Nature of Industry, Trade or Service

Refers to the sector of economy in which a person worked. Examples are: Cultivation, fishing, livestock rearing, selling of vegetables, automobile repairs, manufacture of toys, transport service, school or educational service, sale of clothes (retail), manufacture of eatables etc. If a person works as sales assistant in a Gas Station his occupation is sales person and the nature of his trade is retail sale of petrol.

## Occupation

The name of the job a person does (e.g. cashier, primary school teacher, nurse, blacksmith, watchman, manager etc.)

## Physical/Mental Disability

See Appendix IV for definition adopted in CIPS 2013

## Population Density

Number of persons per sq.km

## Primary Sampling Units (PSUs)

The Enumeration Areas (EAs) of 2008 General Population census of Cambodia which were updated for use in CIPS 2013

## Rural

Areas other than urban are treated as Rural.

## Secondary Economic Activity

(i) For persons employed for the major part of the year preceding the survey (i.e. main activity employed) this refers to a second job or activity which gave him/her additional income in cash or kind.
(ii) In respect of others (i.e. unemployed or economically inactive for the major part of the year preceding the census date) it refers to some job or activity undertaken to earn income in cash or kind. In other words it is their marginal work.

## Secondary Sampling Units (SSUs)

The households in the EAs
Sex Ratio
The number of males per 100 females in a population

## Singulate Mean Age at Marriage (SMAM)

It compares the age-specific proportions of those who are never married with those who are ever-married calculating the mean age at which the transition between the two states was made. For details of the methodology developed by John Hajnal, please see "The Methods and Materials of Demography" by Shryock and Siegel.

## Total Fertility Rate (TFR)

The total fertility rate is the number of children which a woman of hypothetical cohort would bear during her life time if she were to bear children throughout her life at the rates specified by the schedule of age specific fertility rates for the particular year and if none of them dies before crossing the age of reproduction. Therefore Total fertility rate is the number of births a woman would have if she experienced a given set of age specific birth rates throughout her reproductive span. It is the sum of age-specific fertility rates.

## UN Age accuracy Index

It is the sum of (i) the mean deviation of the age ratio for males from 100 (ii) the mean deviation of the age ratios for females from 100 and (iii) three times the mean of the age-to-age differences in reported sex ratios. In this procedure the age ratio is defined as the ratio of the population in a given age group to one-half the sum of population in the preceding and following groups.

## Unemployed

Persons who were without employment, but were seeking employment or available for employment, for 6 months (183 days) or more during the one year preceding the census date.

## Urban

Urban areas are based on the criteria adopted in the "Reclassification of Urban Areas in Cambodia, 2011" (February 2012) published by the National Institute of Statistics, Ministry of Planning, Phnom Penh

## Usual Activity Status of population

This refers to the main activity status of a person during the one year preceding the census date as employed, unemployed or economically not active.

## Whipple's Index

Whipple's Index is a measure of preference for ages ending in 0 and 5. Its range is from 100, indicating no preference for 0 and 5 , up to 500 indicating that only 0 and 5 were reported.


[^0]:    ${ }^{1}$ The male CEB for the age-group would be equal to 1.05 times 18,326 (equal to 18,747 ) and the male CEB in the agegroup 20-24 would be equal to 1.05 times 198,121 (i.e., 204,328).

[^1]:    ${ }^{2}$ This can be worked out by taking the difference between the "adjusted" CEB in the age-groups 15-19 and 20-24 (i.e., $18,747+204,328)$ and the enumerated CEB in these two age-groups $(15,242+195,535)$.

[^2]:    Note: Excluding educational levels Other and Not reported

