

Chapter 1 Introduction

1.1 Background

The process of formulating a National Population Policy has been greatly advanced in Cambodia through the availability of population census data and other demographic information. The conduct of the Cambodia Inter-Censal Population Survey 2013 (CIPS) in March 2013 is an important step in the creation of a continuous flow of population data that will enable Cambodia prepare plans and programs of development supported by a strong database. The reference time for CIPS 2013 was the midnight (00 hours) of March 3. It was planned to take place exactly in the middle of the two censuses held in 2008 and 2018. Unlike CIPS 2004, CIPS 2013 was designed to provide 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 barracks and prison as well as homeless populations were not covered in the survey.

1.2 Objectives of the Cambodia Inter-Censal Population Survey 2013 (CIPS)

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; other population and household information.

These fresh data will enable calculation and reliable projections of population size and growth, fertility level, mortality level, volume of migration and related details.

The survey was also intended to train the national staff in sampling, data collection, data processing, analysis and dissemination. The draft questionnaires for 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 CIPS 2013: Form A House List and Form B Household Questionnaire (see Appendix I and II).

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.

1.3 Sampling

The sample design for the survey was a stratified two-stage sampling. The first stage units consisted of Enumeration Areas (EAs) as the Primary Sampling Units (PSUs) and the second stage units were the households. The total sample sizes adopted to make reliable estimates at provincial level were 955 EAs as Primary Sampling Units (PSUs) and 28,650 households as the Secondary Sampling Units (SSUs). An EA is compact unit within a village with about 90 to 100 households. The second stage of sampling was

carried out by the supervisor prior to the start of the interviews in the EA. Thirty households were selected by systematic equal probability sampling from a list of households in the EA (or a segment of the EA in the cases where a large EA has been segmented and one segment has been selected randomly). The selected EAs were located in 924 villages.

The survey provides reliable estimates separately for urban and rural areas at the national level, but at provincial level it provides reliable estimates only for total population by sex. The sample fraction varied by stratum and data had to be weighted to correctly estimate population. The weights also served other purposes, such as helping to correct for non-response. Estimation is made for total population including institutional, homeless etc. population.

1.4 Organization of the Survey

The first preliminary 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 village and detailed EA map.

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, and Secretaries, Under-Secretaries and other Directors of Departments also supervised the field activities.

A technical consultant appointed by UNFPA undertook a few short-term missions at appropriate stages to provide assistance in questionnaire design, training and overall guidance to the NIS, and 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 of Field Staff

The 100 NIS Survey Coordinators (NIS SC) were first intensively trained at the NIS (November-December 2012) by senior officers on updating village/EA maps, sampling, house-listing, interviewing households and filling-in household questionnaires, concepts and definitions adopted. 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 closely involved in organizing the survey and making field visits to ensure that the survey was proceeding on track. 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 (Form A). 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 an interval in each EA and choosing a random start. 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 (Form B) 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 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 II (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 Publications and Dissemination of the Results

At the first instance a quick tabulation of population totals based on Enumerators Summary was made. This was checked again with reference to the results from the processing of Form B Household Questionnaire. The Provisional Report was released on 15 August 2013 presenting the population totals, with a brief analysis, in respect of Cambodia and its Provinces so as to provide advanced information

about the latest estimate of the size of population at the national and sub-national levels.

It was followed by the General Report touching the different aspects of the country's population released on 25 November 2013. Then, a great number of Priority Tables were tabulated and disseminated, basically based on which 13 in-depth analytical reports by topic were compiled. In parallel with such work, various statistical maps were drawn for presentation and analysis of the results.

1.9 The Present Report

This report titled “Literacy and Educational Attainment” is No.7 of the series of in-depth analytical reports, presenting the current situations of and improvements in literacy and educational attainment in Cambodia. Needless to say, the various estimates presented in this report were derived from a sample of the surveyed population. As in any sample 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 contained so as to serve as a measure of change over time, useful for planning and monitoring.

Sources of Data and Limitations

In the Cambodia Inter-Censal Population Survey 2013, questions on language (mother tongue), literacy status, educational attainment of the highest grade and school attendance were asked for each person in the household. About the definition of terms, please refer to “Terms and Classifications related to this Report.”

Questions on literacy status were asked for each person at ages of 7 and above, and used same categories as in the 2008 Population Census. By definition all children of the age of 6 years or less were treated as illiterate, even if the child may read and write. A person who knows how to read and write but at the time of the survey he/she can no longer read and write due to some physical defects or illness is still considered literate. An example of this is an aged person who knows how to read and write but can no longer perform these activities due to poor eyesight. Disabled persons who can read and write through any means such as Braille system for the blind, are considered literate.

Questions on educational characteristics were asked for each person aged 7 and above, and used same categories as in the 2008 Population Census. Categories of educational levels have been provided for recording the highest grade completed of persons who had ever attended school, or an educational institution. The educational system in Cambodia is provided details on Figure 4.1 in Chapter 4. The classification of educational levels adopted for the Cambodia Inter-Censal Population Survey 2013 is shown in “Terms and Classifications related to this Report.” For the international comparison of educational attainment in this Report, category “None or no class completed” includes the following two categories; (a) a person who has never attended school/educational institution persons and (b) illiterate

persons.

Data from Inter-Censal population surveys and censuses provide the statuses on literacy and educational achievement of Cambodia at national and sub-national levels. Furthermore, the Cambodia Inter-Censal Population Survey 2013 provides us with detailed data on language (mother tongue), literacy by language type, school attendance status and educational attainment. The data will enable us consider the current ordinary language, literacy and educational attainment and differentials in the country and also trends by comparing them with data from previous censuses and surveys.

School attendance rate, as described in the definition, is the percentage of persons who are currently attending school at a given age to the population at the corresponding school-age shown in “Education System in Cambodia.” So, school attendance rate is always less than 100 or equal to 100 and differs from gross enrolment ratio. Gross enrolment ratio (GER) is defined as the ratio of the number of children in school to the population of school-age children. Since the large number of over-aged children enrolled, GER can be more than 100 percent. Therefore, there is a clear distinction between school attendance rate and GER. In the survey, we only have data regarding school attendance.

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

1.10 Terms and Classifications related to This Report

Language: Mother Tongue

Mother tongue of a person is defined as the language spoken in childhood by the person’s mother to the person or the language mainly spoken in the household. The mother tongue is classified into the following 32 languages: Khmer, Vietnamese, Chinese, Lao, Thai, French, English, Korean, Japanese and 23 languages for minority group (Chaaray, Chaam, Kaaveat, Klueng, Kuoy, Krueng, Lon, Phnong, Proay, Tumpoon, Stieng, Ro Ong, Kraol, Raadear, Thmoon, Mel, Khogn, Por, Suoy, S’ouch, Kchruk, Mon, Kchak), and any other mother tongue which has to be specified.

Literacy

The definition of literacy is the ability to read and write with understanding in any language. The person aged 7 and above is asked whether he/she can read and write with understanding in Khmer language or dialect, or in any other language (other than Khmer). If the person is literate, further questions on the literacy in one more language (other than Khmer) were also asked. Information on language in which literate was also collected in CIPS as well as 2008 Population Census. 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. For the 2013 CIPS, which was carried out in a similar concept in the 2008 Census, all children of the age of 6 years or less (i.e. completed age 0, 1, 2, 3, 4, 5 and 6) were treated as illiterate

even if the child is going to a school and may read and write a few odd words in a language, same as in 2008 Census.

General Literacy Rate

The percentage of literate population aged 7 and over to total population aged 7 and over.

Adult Literacy Rate

The percentage of literate population aged 15 and over to total population aged 15 and over.

Educational Attainment: Highest Grade Completed

The person aged 7 and above is asked about his/her highest grade completed in the school, college or any other educational institution attended by the respondents where a certificate, diploma or degree is awarded. This is classified into the following main categories;

- (a) None or no class completed: a person who has never attended school/educational institution,
- (b) Primary Not Completed: Grade 1 to 5 completed.
- (c) Primary: Grade 6 to 8 completed.
- (d) Lower Secondary: Grade 9 to 12 completed.
Lower secondary school certificate.
- (e) Secondary/Diploma: Upper secondary school certificate.
Technical/vocational pre-secondary diploma/certificate
- (f) Beyond Secondary: Technical/vocational post-secondary diploma/certificate
Graduate Degree (College/university undergraduate or Bachelor degree)
Master degree (M.A., MSc)
Doctorate degree (PhD),

Please refer to Chapter 4 about education system in Cambodia in detail.

Full Time Education

Full-time education refers to education in an educational institution like Primary School, Secondary School, College, etc.

Full Time Student

Student whose main activity is a student and he/she is attending full-time education.

Employed Student

Student whose main activity is employed and also he/she is now attending School/Educational Institution.

School Attendance

All persons including children aged 6 and below, irrespective of literacy are asked whether he/she has attended school /educational institution. This is classified into the following three main categories:

- (a) Never attended: if the person has never at any time received full-time education.
- (b) Attending Now: if the person is still receiving full-time education at the time of the Census.
- (c) Attended in the Past: if the person received full-time education in the past and is no longer receiving it.

School Attendance Rate

This is the percentage of persons who are currently attending school at a given age to the population at the corresponding school-age.

Employment Categories

Main Activity

Main Activity means the activity during 6 month (183 days) or more during the last one year (i.e. for the major part of the last year).

(1) 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.

Employed: All persons who were in the following categories for 6 months (183 days) or more during the last one year:

- (a) Persons who were in paid employment
- (b) Persons who during the reference period performed some work for wages, salary, profit or family gains in cash or kind.
- (c) 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 fisherman), those on sick leave or leave without pay, those who could not work due to strike or lockout in the organization they were working .
- (d) Persons who were self-employed (e.g. running a shop by himself or herself, selling eatables, practicing as doctors, lawyers etc.).

Unemployed: Persons who were without work but were seeking work or available for work.

Economic Activity Rate

The percentage of economically active population to total population

Economic Activity Rate of the working age group

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

(2) Economically Inactive Population (Not in Labor Force)

Those who are not employed or unemployed spend most of their time as homemakers, students etc. during the reference period of one year preceding the census date.

Occupational Categories

Major groups of the occupations by the International Standard Classification of Occupations (ISCO) are used in the Cambodia Inter-Censal Population Survey 2013 as follows:

0. Armed Forces
1. Managers,
2. Professional,
3. Technicians & Associate Professionals,
4. Clerical Support Workers,
5. Services & Sales Workers,
6. Skilled Agricultural, Forestry & Fishery Workers,
7. Craft & Related Workers,
8. Plant & Machine Operators & Assemblers,
9. Elementary Occupations,

For the analysis in this report, occupation has been grouped into the following broad categories:

- I . Managers, Professional, Technicians & Associate Professionals: Major Groups 1+2+3
- II . Clerical Support workers, Services & Sales Workers: Major Groups 4+5
- III. Skilled Agricultural, Forestry & Fishery Workers: Major Group 6
- IV. Craft & Related Workers, Plant & Machine Operators & Assemblers, Elementary Occupations, Armed Forces: Major Groups 7+8+9+0

Sex Ratio: Number of males per 100 females.

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.

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.

General Fertility Rate (GFR)

The general fertility rate is the number of births per 1000 women at child bearing ages (15-49 years old).

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.

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

Urban

Urban areas are based on the criteria adopted in the "Reclassification of Urban Areas in Cambodia, 2011" (February 2012). The criteria adopted for the 2013 survey to every commune to treat it as urban:

- (a) Population density exceeding 200 per km²
- (b) Percentage of persons (both sexes) employed in agriculture below 50 percent
- (c) Total population of the commune should exceed 2,000.

Rural: Areas other than urban are treated as Rural areas.