

# **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