

# **The General Population Census of Cambodia, 1998: Achievements, lessons learned, constraints and recommendations.**

Name of the Author: Sy Than San  
Director, National Institute of Statistics  
Ministry of Planning  
No. 386 Blvd. Monivong  
Phnom Penh, Cambodia  
E-mail: sythan@forum.org.kh

## **1. Achievements**

- In the absence of a census for 36 years due to war and political disturbances, no comprehensive and satisfactory population database existed for use in development plans and programmes of Cambodia . The Royal Government of Cambodia requested the United Nations Population Fund (UNFPA) to provide technical and financial support for conducting a population census.

- The Census project was implemented in two phases:

a) The first phase of the project (1995-96): A team of UN technical staff commenced the census preliminary work in 1995. The conduct of national-level Demographic Survey of Cambodia, in 1996, covering 20,000 households.

b) Phase II of the UNFPA funded census project (1997-2000) focused on capacity building in the preparation for the census, the conduct of the census in March 1998, data processing, analysis and dissemination of the census results.

- The 1998 Census was organized under the authority of the Royal Decree ( Kret) issued in 1996. The National Committee for the General Population Census of Cambodia under the chairmanship of HE Deputy Prime Minister has established. About 25,000 enumerators and 8,350 supervisors were appointed.

- The census enumeration was conducted successfully in March 1998. The fieldwork, data processing and analysis of the 1998 Census were conducted smoothly. Data processing was the major post- census activity. It included manual coding and editing of census documents and data entry from more than two million census questionnaires using sixty computers.

- Few areas were inaccessible during the census due to military operations. The population in these excluded areas is estimated to be about 45,000.

- The most important finding of the PES was that the net under-enumeration in the census was 1.78 percent. This is considered to be good.

- A Master Sample has been drawn based on the census data. The Master Sample will provide a reliable sampling frame to be used for the planning and implementation of inter-censal household surveys and other household surveys.

- For the data processing of the 1998 Population Census of Cambodia four individual phases were identified, i.e. Phase 1- Check - in of census questionnaires and related documents, Phase 2- Manual

Coding and Editing ( about 10 months, commenced in July 1998 to middle of May 1999) , Phase 3- Data Entry and Verification ( about 9 months, completed by early June 1999), Phase 4 Return to archive of census questionnaires ( end of data processing).

- A preliminary report was released by Deputy Prime Minister on August 25, 1998 at a function in MOP ( within 5 months after the census). On September 14, 1999 a 300 page report entitled "Final Census Results" was released by Deputy Prime Minister at an impressive function at Chaktomuk Theatre ( within 18 months after the census).

- Several reports have been produced, each dealing with a specific topics on fertility, mortality, migration, population projection, educational characteristics, housing amenities and household characteristics, district gazetteer , women and at the same time 4 CD-ROMs have been released and widely disseminated to all users ( Government, international organisations, NGOs , general public and private sector ) and at central and local level through workshops.

- The most typical CD-ROMs compiling from the Population Census of Cambodia- 1998, are:

**CD # 1- Census Priority Tables .** This CD was released in September 1999.

This CD-ROM contains more than 11 thousands statistical tables covering the general population aspects like sex, age, marital status, relationship to head of household, education, economic activity, migration, fertility and household amenities for all provinces and all districts of Cambodia.

A user-friendly "Table Retrieval System" is also included to facilitate easy retrieval of selected tables among the large number available.

**CD # 2- Village Databases.** In an effort to meet frequent demands from data users who need small area statistics, the NIS has released the CD-ROM with aggregated data of census variables, i.e. age, sex, relationship, marital status, literacy, school attendance, educational attainment and housing amenities for every village enumerated in the country.

This dissemination is intended for data users with good knowledge of microcomputers, database, database management system, and/or spreadsheet that can generate statistical information from the database in DBF format.

**CD # 3- POPMAP application .** This CD was released in April 2000. This is a GIS package containing POPMAP application, which is a UN- developed, integrated, easy to use software package for developing a computerized geographical database of population data and related information.

The Cambodia application consists of a country map and maps for each of the 24 provinces and cities of Cambodia. The layers are available down to the communes. Furthermore, information on villages, schools, routes and rivers is also included for all maps. A large database with 123 different demographic and socio- economic indicators, most of which are available down to the commune level, forms the main thrust of the application.

**CD # 4- Win R+ Population Database.** This CD was released in May 2000. Win R+, another United Nations software package, is an abbreviation of REDATAM- Plus for Windows, where REDATAM stands for REtrieval of DATA for small Areas by Microcomputer. This is a micro level database containing all the data records of the individual persons and household captured in the 1998 population census. This permit the data users the production of any cross- tabulation for any user-defined geographical area.

The WinR+ software package is included to enable data user to easily derive information from the database, including new variables, tabulations, and other outputs. All this can be achieved via graphical windows and without the assistance of a programmer.

- **On- line dissemination.** The web site of NIS was launched in 2000 at [www.nis.gov.kh](http://www.nis.gov.kh) with census background information and key census results. It is a static web site displaying the information most required by the users. An order form is also included so that visitors can make contact for clarification or request for data.

## **2 . Lessons learned**

- The choice of a large number of local primary and secondary school teachers as enumerators and supervisors was good as they carried out their duties well with a sense of responsibility . District and commune officials assisted PCO in census administrative tasks and supervision within their respective jurisdictions and served as a link between PCO and the field workers .

- Data Processing Adviser from the very beginning of the project as it helped in building up the complete village database and establishing a computer center at the appropriate time .

- The Census Advocacy and Public Information Campaign succeeded in reaching most of the population .While the main channels of communication used were television and radio it was found that in Cambodia another essential means of reaching people was through direct contact and particularly through the village chief. There was no case of refusal to answer questions or non- cooperation in the census.

- Training was arranged at three levels . The first level was training of trainers' trainers at NIS the second level was training of trainers at province headquarters and the 3rd level was training of enumerators and supervisors at selected training centers in districts . Training session of enumerators and supervisors had less than 40 participants .

- The field supervision indicated that the census coverage and quality was generally very good.

- This was confirmed by the Post-Enumeration Survey conducted soon after the census , under enumeration of 1.78 %.

## **3 . Some Constraints**

- Successfully in various areas, but in the more technical areas like census analysis and computer programming , capacity building was still limited .

- The low salary paid to Government staff . Difficult to keep staff working fully for the office when a project ends, they have to supplement their salaries per force either with incentive payments from other projects or by working outside .

- The lack of qualified counterparts and / or the sharing of counterparts amongst different projects hamper the decision making process as well as the transfer of knowledge.

## **4. Recommendations**

- It is important that more efforts are taken to make line Ministries like Health, Rural Development and Social Affairs, Labour aware of the detailed census data relevant to them (especially population projection) so that they could increasingly use them in their work.

- Further analysis of census and survey data ( e.g. district level) could be carried out to support the decentralized process of the Government relating to the upcoming commune council election in February 2002.

- Dissemination of census results , combining CDHS 2000 and other survey results should be continued both at national and provincial levels. The utilisation of user- oriented dissemination through provincial workshops conducted so far is recognized ( where provincial and district planner and welfare workers participated ), taking into account the lack of human resources and equipment at local level. These efforts should be continued in the future for better utilization of data as well as to enhance the brand name of NIS.

- Further improvement of POPMAP relating to health information by cooperating with MOH and local offices (NIS) to collect required information from provincial health centers.

- For the future activities focusing on IT :

- a) Empowering and connecting local offices and other government bodies.
- b) Centralized data store with metadata in moving to data warehouse.
- c) Promote dynamic web site.

## **REFERENCES**

Sy Than San ( 2000). Report of Director of NIS on the workshop on Census Data Dissemination and Population Projections. Phnom Penh.

Sy Than San and Nott Rama Rao ( 2001). Final Project Report of the Project : Support to National Population Census of Cambodia ( Phase II). Phnom Penh

Harry Lode (2000). End of Assignment report. Phnom Penh.

## **RESUME**

Cet article presente le succès du Recensement Général de la population du Cambodge en 1998, depuis le premier recensement général de la population en 1962.

On a en outre expliqué les méthodes adoptés spécialement dans la large dissémination des données utilisant les CD-ROMs pour le Gouvernement au niveau central et local (provinces) aussi bien parmi les organisations internationales, organisations non gouvernementales, chercheurs, public et secteur privé.

L'auteur a exposé dans cet article ses vues sur le futur development statistique au Cambodge concernant le role de la technique informatique dans la dissémination de la statistique officielle de l'Institut National de la Statistique.