

**Meeting on 2010 Round of Population and Housing Censuses,  
31 July -2 August 2006, Siem Reap, Cambodia**

**Country paper of Lao PDR**

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**1. History of Census taking in the Lao People's Democratic Republic**

The government of the Lao PDR conducted the first population census in March 1985. This Census was carried out with financial and technical support from UNFPA and expertise from ESCAP. The second Census was taken in 1995 at the same point of time as the first Census. The most recent Census, the third which was conducted in March 2005. The two last Censuses have been supported financially and technically by Sida, the technical support given through Statistics Sweden. The Census in Lao is thus carried out every ten years. This follows the UN recommendation, as Censuses were carried out with an interval of maximum 10 years.

The results from the Lao population Census 2005 are very important. They will provide the next step in the time series, which started with the Lao Census in 1985, continued through the Lao population Census 1995. A time series like that is a major tool in analyzing the structure of the population and measuring the development in a country.

**2. Experience s from the Population and Housing Census 2005 - Strong point**

***Organization***

The formal decision regarding the Population and Housing Census 2005 was taken by the Prime Minister on 21/10/2003 through decree No. 66/PM. National Statistics Center was assigned to be a secretariat for the Population and Housing Census 2005. It has a decree on Organization and Activities of the National Statistics System No 140/PM, dated 20/8/2002. The implementation of the Population and Housing Census 2005 based to Plan Activitie s of the Census, 2005 No 03/SCS, dated 26/1/2004.

***Census preparation***

In the preparation period NSC has carried out many activities that can be summarized as follows:

- ◆ Prepared the listing of household and conducted GIS training.
- ◆ Organized the Pilot Survey in two provinces.
- ◆ Conducted Training for trainer, supervisors and enumerators in three levels: Central, Provinces, Districts.
- ◆ Organized many Workshop, Meeting to consult and discuss about the contents of Census and the necessities work.
- ◆ Forming the publicity in Vientiane Capital, and in local areas: meeting, TV, newspaper, radio spot, poster, slogan, interview, film.
- ◆ Provided supported materials for Census implementation:
  - 22 new cars, one for each province and four for concerned ministries.
  - 110 GPS.
  - 2 scanners and some new computers for data processing.

## ***Methodology***

The 2005 Census in Lao PDR used the same methodology as in 1995 and was conducted on a de jure basis. This means that only Lao citizens or people with a permanent residence permit were counted. In addition the people were enumerated in the village they are registered. A person temporary away from the home village was enumerated there, unless he had been away longer than 6 months. Laotians temporarily abroad such as Government officials, both civilian and military, including Lao diplomatic personnel, and their family stationed abroad were counted through the Ministry of Foreign Affairs.

Civilian nationals of foreign countries who stay in Lao P.D.R without being Lao citizens or without being granted permanent residence permit. (For instance: foreign military and diplomatic personnel and their families stationed in Lao).

## ***Questionnaire***

The questionnaire was identical to the 1995 questionnaire with the exception that two new modules on migration and disability were added. There was also a new question on household ownership of agricultural land. The cover page of the questionnaire would try to collect information on village infrastructures: the access to road, primary school, Health center, electricity, water supply, and also the total number of people in the village by sex.

The main questionnaire consists of 10 sections and 35 questions:

- A Identification: province, district, village, enumeration area and household identity.
- B Individual information on all household members (B1-B10).
- C Education attainment of household members aged 6 years and above (C11-C14).
- D Labor force characteristics of household members aged 10 years and above (D15-D17).
- E Fertility characteristics of women aged 15-49 years (E18-E20).
- F Deaths in household in the last 12 months (D21).
- G Household members who moved in to or moved out from the household during the last 12 months (G22-G23).
- H Characteristics of disabilities in household (H24).
- I Housing characteristics (I25-I34).
- J Total number of people in the household by sex (J35).

## ***Field operation and personnel***

Field interview was an interview face to face (the respondents were most likely head of household). The census started on the 1st of March and end on the 7th of March, 2005. There were 15828 enumeration areas. These were visited by 16 942 enumerators and 1 945 supervisors (1 supervisor: 10 enumerators). Totally, there were about 21 262 persons participating in the 2005 Census activities.

## ***Data processing***

The new "IT center" is a very positive experience. A lot of work has been carried out to create a good working environment, not only regarding the IT equipment, but also regarding other equipment such as shelves, desks, chairs etc.

It was decided to use scanning for data entry. The scanners system was installed in co-operation with consultants from the supplier, Readsoft Company, and the IT group at NSC. The Eyes and Hands software was used for data entry and SQL for programming. The data capture was very fast compared to manual data entry. Also data entry errors were avoided.

The data entry equipment was structured to meet the needs for Population and Housing Census 2005:

- 34 PCs
- 2 scanners (for data capture)
- 2 printers
- 2 servers

*The working steps on data processing*

- Each of 18 provinces is responsible for its own preliminary processing (manual compiling the information from a cover page of the questionnaire, as preliminary results from the enumerators' field report).
- After that the questionnaires were sent to the National Statistics Center in Vientiane for data capture.
- Intelligent character recognition (ICR) was used for data capture. It was the first time to use scanner in Lao.

There were 35 persons working on data processing in terms of using scanner. The process has many steps: taking care store room, tick off, cutting, preparing of booklets, scanning, interpretation, verification, and transfer. The work was organized by one IT persons and two subject matter statisticians .

***Analysis***

As part of the Census analysis, there was a calculation of specific measures (rates): mortality and fertility. For this job the external consultants were hired. There was a comparison between the two Censuses, 1995 and 2005. Estimate and projection population were carried out as well.

***Data dissemination***

Census results have been produced and disseminated in the form of tables, graphs, and maps. Up to now some publications have been released such as a preliminary report, and a final report. The continued work is with the provincial reports, which are being done presently. This is expected to be completed in September 2006.

**3. Weak points were experienced with the Population and Housing Census 2005**

Although the new techniques assisted NSC in completing the work in less time consumer than previous Censuses, it also caused some problems that were learnt as the negative experience. Some problems were learnt from the field, but many problems also were found in the data processing and analyzing steps. Those matters can be summarized as follows:

### ***Training***

Too many enumerators were trained in one group. It was a clear identification of the need to have good on the quality of supervisors and enumerators (education level, age). During the training both supervisors and enumerators did not study the manuals properly.

### ***Data collection process***

- ◆ In spite of a lot of efforts put into publicity and training, some supervisors and enumerators appeared to lack of skills in interviewing people.
- ◆ Some supervisors were not able follow up their enumeration areas properly since some EAs were quite large and long distance.
- ◆ Too many enumerators per one supervisor.
- ◆ Some areas appeared to carry out the Census enumeration prior the defined date of the Census, so they had to redo the interview.
- ◆ Some enumerators made mistakes in recording the answers and did not revise their work.
- ◆ Questionnaire and enumeration manual should be clear, and easy for enumeration to understand.
- ◆ Not all questions were filled, especially questions on gender and age.

### ***Processing constrains***

- ◆ Poor hand writing of the enumerator.
- ◆ Poor quality of pencils (some).
- ◆ The quality of questionnaire paper was poor (oily), since there was only one printing shop able to print for the Census purpose.
- ◆ The preparation for scanning did not respect to the rule properly.
- ◆ Scanner PC often “hung”, no solution presented by Readsoft Company.
- ◆ Hardware problems. Most problems that occurred were solved by consultant from Malaysia, the consultant from the nearest agency in Bangkok couldn't solve the problem
- ◆ The service of the E&H system during interpretation and transfer of data should run automatically but the service hanged everyday and needed to be restarted daily.
- ◆ After data were transferred to the database it was found that E&H produced duplicate rows during transfer.
- ◆ Many duplicate of data and image name, because of the problems stated above: scanner PC hangs, bad interpretation or bad verification, bad instruction

### ***Census results c onstrains***

- ◆ Under reporting number of births.
- ◆ Lack of skills staff and subject matter specialists in data processing and analysis

## **4. Future plan**

The Government of the Lao PDR is following the UN recommendation to take the Population Census in every 10 years. It still long time to reach to the next Census, but it is a challenge work. Since it is not easy to find and mobilize the financial and technical assistance. However, Lao government needs external support for such big census due to weak capacity in providing large amount.