

The Lao Population Census 2005– some remarks from a management level perspective

This is a brief paper about the population census taking in Lao PDR. The focus will be on management processes and some of the problems/challenges the management faced when the 2005 census was planned and executed.

0. Background: some basic facts about the 2005 census

The census enumeration was done in the week 1-7 March, 2005. There were 15,828 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. The census was conducted on a *de jure* basis. The main questionnaire consisted of 10 sections and 35 questions, including questions on education, labor force characteristics, characteristics of disabilities and housing characteristics. Scanning was used for the data entry; the system consisted of two scanners and 20 verifier work stations. Census results are disseminated through printed publications and CD-ROMs (DevInfo).

The next census is planned for 2015. A population count and an inter-censal demographic survey will be conducted around 2010.

What do we want from the population census?

The question can be separated into two questions; both of the questions require serious consideration from the NSC management. 1) *What does NSC want from the census?* The management must decide how the census should fit into the statistics production system. 2) *What do the users want from the census?* NSC must have a procedure for user consultation that is effective in the sense that all important user needs are put on the table and discussed

1. How should the census fit into the statistics production system of NSC?

The decision on the “role” of the census has implications for both the design of the census and the design of the statistical production system within NSC.

The strength of the census is the ability to provide data for small geographic areas/population groups. However, the census cannot provide data on complex issues; sample surveys are the only reliable means to collect information about complex topics. A strategic decision for NSC concerns which data should be collected in the census and which data should be collected in household sample surveys or from administrative sources.

The census database is an important source of information by its own but the full potential of the census is realized only when the census information is used as an

“information infrastructure” in support of other statistical production. Two important uses are:

- *Census data for construction of a Master Sampling Frame.* NSC has developed a register of villages that serves as a master sample frame of primary sampling units (villages) for the household sample surveys. The register will be updated with the census data.
- *Census data as auxiliary information in estimation.* The census data are often used for calibration of estimates from household surveys. Census data can also be used for small area estimation. An example is poverty mapping where census data are used for building models that enables estimation of poverty rates in small areas. This kind of use requires studies to find the best variables to use as auxiliary variables for poverty estimation and, consequently, consideration to include such variables in the census. So far NSC has not done any serious work in this area.

2. The user (“customer”) consultation process.

A good dialogue between users and producers requires some statistical knowledge on the part of the users. Likewise, it requires an ability on the part of NSC to understand the data needs of the user. Often it is a situation where a subject matter problem must be translated into a statistical problem. The dialogue may be hampered by users that put forward unrealistic demands on data from the census or by NSC staff that not fully understand the problem.

In the final stages of the consultation process the producer must ask the questions: Are there uses that have not been articulated? Could some of the user needs articulated in the consultation process be better accommodated by household surveys or data collection from administrative sources?

On the whole the user consultations prior to the 2005 census went well. However, there is probably room for improvements of the process. Maybe there should be a continuous, on-going, process rather than the one-shot exercise it is now?

What resources are available for use and how do we achieve the population census goals with what we have?
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The management faces two resource problems: *financial* - how to secure sufficient financial resources - and *organizational* - how to use the real resources (manpower, equipment) efficiently. Crucial for the efficiency of the organization is the capability of the organization to adapt to changes - to “modernize”.

3. Financial resources: How to obtain long term funding for census taking?

A census requires a large addition to the current budget. Part of it can be funded by the Lao Government but the major part must come from external sources. The censuses 1995 and 2005 were both funded by Swedish International

Development Cooperation Agency (Sida) as part of the Sida-funded technical assistance project at NSC. In a long term perspective NSC must find reliable funding from other sources but also secure a better funding from government. How to go about this task is an important question for the NSC management.

4. The capability of the organization to adopt new methods and technologies.

During the 10 years since the last census the information and communication technology has developed tremendously. There have also been developments in the area of statistical methods. The efficiency of the census work, and indeed all the work at NSC, could be improved if new methods and technologies are adopted by the organization. This is not an easy task for NSC which is a small (too small) organization. To keep up with the developments in the methods and technologies require well trained staff that have the time to do proper development work.

In the 2005 census two new technologies were introduced: data entry by *scanning* and data presentation using *geographical information systems* (GIS).

The decision to use scanning took some serious consideration. To pay off the investment in scanners NSC must be able to use the scanners in other statistics production with large data entry volumes. The scanners have been used for a reproductive health survey and will be used in the economic census in the end of 2006.

The geographical information systems have undergone a rapid development in recent years. NSC has invested substantially in capacity building in this area. The presentation of the 2005 Census will use much more GIS features than previous censuses. (The coordinates for each village have been measured by GPS-devices).

Impact on various parties?

5. Impact on users

The impact on NSC and, to some extent, the national statistical system is obvious. But what is the impact on users - apart from the quality improvement (in decisions, plans, follow-up etc) due to the use of up-to-date population data? One would hope, although no studies exist, that the use of census data is part of a learning process where users are becoming more and more sophisticated in the use of the data. On the way there will be problems of different kinds. NSC has have encountered problems with some users that do not fully understand some demographic measures, e.g. the method of indirect estimation. It has been proposed that seminars on demography should be arranged for users.