

# Some Thought about Designing a Population Census in Lao PDR

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## 1. Purpose of paper and summary of findings

This paper describes population statistics in Lao PDR and discusses some strategies in formulating a policy for population censuses. The paper states that a population census is a huge undertaking for a small country like Lao PDR, and even if donor support, both technical and financial will be provided, it is a resource-demanding task for the country. The paper states that population censuses should be used as much as possible and in order to achieve that they should be part of an integrated long-term survey plan. One important use of the census operation is to set an effective Master Sample for forthcoming household surveys based on the enumeration areas defined in the census. The contents of a census should also be discussed carefully.

A Population Census should address rare events. Maternal mortality could be one example of this. This also means that frequent events could be considered to be included as a sample. Fertility may be an example. The paper also states it may also be possible, with careful planning, to use the census teams to capture data that is not normally part of the census. For Lao PDR living conditions and/or agricultural production in remote rural enumeration areas could be an example. Such a step, of course, adds to the complexity of the whole operation, but it may be cost efficient.

The data processing of census data is not discussed below. It is also resource demanding and it is time consuming. The possibility to use adequate technology such as scanning should be explored to speed up this process. Again, however, there are large investment costs involved, so it is not a clear-cut option.

## 2. Population policies in Lao PDR

The general purpose of a census is to provide information on the population and its living conditions, which can be used for planning purposes in most sectors of the society, e.g. education, labour market, housing, water and electricity supply, etc.

In June 1999, the Government adopted the National Population and Development Policy of the Lao PDR. The general objectives of this policy are to:

Enable the people of the Lao PDR, especially couples, to reasonably and responsibly determine the number and spacing of their children taking into account their social and economic conditions, with a view to improve their quality of life and ensuring that the country's population growth is compatible with socio-economic development

Promote a balanced distribution of population between urban and rural areas and between different regions of the country, while at the same time, guaranteeing the movement of the people within the country

Promote the development of the country's human resources and their full utilization in socio-economic development with the aim to reduce poverty, especially among minority population

### **3. A short description of population statistics in Lao PDR**

The population statistics in LAO PDR is based on decennial population censuses combined with demographic household surveys. The country does not have a centrally or locally maintained system of permanent population register, although there are certain administrative routines at the village level. A population register is too resource demanding for Lao PDR.

Lao PDR carried out its first historic population census in 1985. It was a successful census by any international standard but had a fairly limited set of variables. This census was followed by a population count based on reports of village chiefs in 1990 that yielded an update of population numbers by sex and administrative divisions from the village level up to the national level. A multi-round demographic sample survey that was conducted 1988-1991 gave improved data on fertility, mortality and migration. The second and latest national census was conducted in March 1995 with a wider set of variables, including housing characteristics. The next census is thus scheduled for March 2005. In addition to the censuses some demographic surveys have been undertaken such as the 1994 Fertility and Birth Spacing Survey and the Lao Reproductive Health Survey in 2000. Multi-purpose household sample surveys have also been conducted in 1992/93 and 1997/98 and the next round is scheduled for 2002.

The country thus has a well-established population database and it has been used in a number of cases and situations.

A system for vital statistics has to cover the following variables:

- Total population by age and sex
- Fertility, i e. total fertility rate, TFR
- Mortality, i. e. life-table and causes of death
- Nuptiality
- Internal and external migration.

All these variables, with sufficient quality and actuality, -except causes of death, - can be collected through population registers or through decennial population censuses combined with inter-census demographic surveys or multi-purpose household surveys. One must bear in mind that demographic factors are very stable, even if cultural and other factors might influence fertility and nuptiality.

The demand for population projections is on the increase, and age-sex detail in the projections made in Lao PDR are used to derive projections of the labour force and school enrollments. For gender studies population censuses are a basic source of information and social statistics generally are fully dependent on population statistics and should be seen as integrated elements in the system of population statistics.

### **4. Some considerations for future censuses**

A Population Census is a huge task for a small country like Lao PDR to administer and conduct. It is therefore of great importance to include only the most important topics in the census and this may

become a delicate process, as there is normally pressures to include topics from many subject matter areas. It is also a well-known fact that questions included in population censuses greatly enrich the analysis.

Already for the 1995 census a number of alternatives were discussed:

- A full population census enumerating the entire population with a questionnaire covering the internationally normal census topics
- A population census enumerating the entire population on a limited set of variables and a 20 per cent sample of the population on a full set of census variables,
- A head count using the existing administrative structure at the village level to get an update on population numbers by administrative divisions

The reduction in cost of alternative 2 in relation to alternative 1 seems to be fairly limited but still respectable. The arguments for a limited population census complemented with a large sample survey are not primarily based on savings. Arguments for sampling have more to do with achieving better control of the operation by reducing its size, using the marginal cost savings to improve data quality in the sample, cutting lead time so that the census is a statistical operation, etc. Having a full set of variables only for a sample of the population is, of course, a drawback. Since the recent focus of Government policies is on decentralization to district as the focal point for planning, the sample size should be sufficiently large to measure core variables at the district level.

The process in determining the details of the next census is to identify a core list of variables, which should correspond to basic international requirements and in addition focus on rare events, hard to capture in sample surveys. It is further likely that there will be a discussion on whether to capture same variables through a sample. It is equally possible and in line with efforts to integrate the census in a long-term survey plan to complement a limited population census with a separate form to record data that are normally not part of a census work. A separate form for recording data on essential means of production in all rural enumeration areas could be used for remote rural enumeration areas. This may be a cost-effective strategy. The logistics may cause problems and, if implemented, it should be carefully planned. However, from past experiences such an activity could be seen as feasible.

A much larger saving of census cost would be accomplished if the census operation could depend on the local administrative structure instead on basic cartographic work required. This alternative is of various reasons not an option for the next census.

The alternatives for the 2005 census have not been decided yet, nor the set of variables to be included. Users in the various sectors and at the various levels in the administrative structure must be involved in an extended process of consultations. Census statistics have no value unless they are used for the benefit of correctly diagnosing problems, guiding policies and decisions and evaluating progress made.

The 1995 database was used to create a Master Sample as frame for household surveys. This is an important use of the coming census, as there is a plan to implement a regular household survey program for the coming years. However, even if a Master Sample system provides a cost effective way to conduct household surveys in countries which lack population register, have less developed infrastructure, a Master Sample system is certainly not for free. It should therefore be regarded as a

national asset with potential to keep down the nation's statistics costs, and the more so the more the Master Sample is shared by different survey conductors in the country.

The NSC will consider the establishment of a Geographical Information System (GIS), from which computerized maps down to enumeration areas (EA) can be available. This will provide easier access to maps for the purpose of selecting future samples, but maps also have their intrinsic value, as they contribute to presentation of data in an easy and effective way.

The set of variables normally considered for a Population and Housing Census includes a number of topics, from which countries select the set that is relevant for their particular needs. In the list below, variables are grouped by subject matter but not arranged in their order of priority in the overall Lao statistical system.

1. Population size and structure (sex, age, household size and structure)
2. Population change and health planning (marital status, births, deaths, family size and structure)
3. Migration (place of birth, place of residence, migration)
4. Educational planning (attainment, school attendance, literacy)
5. Economic planning (economic activity, sector of industry, occupation)
6. Housing conditions (type of house, number of rooms, size in square meters, toilet facilities, water facilities, cooking facilities)
7. Ethnicity (ethnic group)

One of the fundamental principles for building a statistical system is that each new census or survey should build on the experiences of the previous efforts and that each census or survey should be seen as a pilot or a preparatory for any future rounds.