# Planning for the 2010 Population and Housing Census in Thailand

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### 1. Introduction

National Statistical Office Thailand is the main governmental agency entrusted with responsibility for Thailand's statistical activities including the collection and compilation, dissemination of fundamental statistics, providing recommendations on statistical related matters, organizing training courses in statistical methods, computer data processing as well as the statistical data bank of the country, co-coordinating with international organizations in terms of statistical techniques and operating any other activities which are commanded by the Prime Minister of the Cabinet.

## 2. History of Census

National Statistical Office has had long experience in undertaking national population and housing censuses, apart from its responsibility of collecting, interpreting, and disseminating statistics in other fields.

Thailand's first population census was conducted in 1909 by the Ministry of Interior. Four subsequent censuses followed in 1919, 1929, 1937 and 1947. Since 1960, the National Statistical Office (NSO) has been responsible for undertaking population censuses for every ten years under the 1952 Statistical Act (revised in 1965). In accordance with the United Nations' recommendation that countries should undertake national censuses in every the year ending with 0 (zero) for the purpose of international comparison, Thailand has conducted its census in 1970, 1980, 1990 and 2000. In 1970, the first housing census was conducted simultaneously with the population census. The tenth population and fourth housing census was carried out in April, 2000. The NSO is currently planning to conduct its eleventh census in the year 2010.

For the 1960, 1970, 1980 and 1990 censuses, the main method of data collection was field interview. After the data collection in all provinces was completed,

questionnaires were sent to the central office in Bangkok. Manual editing, keyboard data entry, and other steps of data processing, including tabulation were then carried out.

The quality and timeliness of the data provided by the census can always be improved in order to meet the needs of various users. The timeliness of the census information is also important for a public relations campaign. The general public will acknowledge and use data if it is current and will then become more aware of the importance of statistics. Consequently, the statistical efforts of the country will improve, and in turn, the quality of statistics produced will be strengthening.

#### 3. Future Plan

National Statistical Office will undertake the Population and Housing
Census in 2010. National Statistical Office has started the planning process in the
ending of 2006. Preparatory work undertaken for the 2010 Census includes the following

### 3.1 To Conduct Pilot Census in 2008

National Statistical Office will be plans to conduct Pilot Census in 2008.

A pilot census is normally conducted about 1-2 year before the census. Any necessary changes that are made need to be incorporated quickly between the pilot census and the actual enumeration. This limited testing time makes it difficult to predict potential problems that may occur during the actual census.

The objectives of Pilot Census are to test for all steps of conducting population census, namely, preparation and planning step, data collection, data analysis, and data dissemination step. Lessons learnt from Pilot Census will be applied for the becoming 2010 Population and Housing Census.

## 3.2 To meet the users' demands

National Statistical Office is exploring and adopting new ways to meet users' demands. The goal of any census is to produce timely, accurate data to meet users' needs. Census planning begins approximately 2-3 years before the census. Statistical Office staff assigned to work on the census reviews the materials and plans from the previous census. User group and advisory board meeting are held to gather information on current data needs which potentially lead to changes.

In preparing for the next census, much effort has to be made in reviewing the users' needs. The content of the census should cover variables that are expected to be of great demand for the following 10 years and not only for the census year.

## 3.3 Census Preparation and Planning

## 3.3.1 Mapping

Mapping work for the 2010 Census will begin as early as 2008 and be completed in early 2010. The main objective of mapping is to provide the latest information on the census frame to enable enumerators to carry out their task in a timely and precisely manner. The operational work involved in relation to updating the maps was fully carried out by the Provincial Statistical Offices (PSO)

The de jure approach was adopted for previous Population Census whereby all persons on Census Day were enumerated according to their place of usual residence except student adopted the de facto approach.

### 3.3.2 Public Relation

Publicity campaigns for the 2010 Census will be started in 2008 with the extensive use of publicity materials such as electronic media, printing media, and distribution materials such as posters, calendar, car stickers, billboard, stamps and first day covers as well as web side coverage. In general, the publicity programmes was aimed at creating public awareness.

# 3.3.3 Census Methodology

The methodology used in the 2010 Census is quite the same as the last census for both listing stage and enumeration stage. These two stages are conducted at the same time. Sampling method is adopted because of limited budget. Complete enumeration is applied into both persons and households by using short form questionnaire, however for the detailed information, only 20% sample households is collected and long form questionnaire will be used.

## 3.3.4 Data collection method and field personnel

The period of data collection is 1-31 May 2010 with census reference date of 1 May 2010. There are approximately 45,000 enumerators and 7,500 supervisors,

with the ratio of one supervisor to 6 enumerators. An enumerator is assigned to be responsible for one enumeration district, which consists of 200-300 households.

The 2010 Population and Housing Census still adopt face to face interview as the major method of data collection. Other methods should be considered to apply for specific areas, such as apartment, condominium, high security areas etc., where the enumerators are not normally allowed to enter into those places to make such interview. Then the self-enumeration method by asking cooperation from manager of the resident to collect the data is done.

It is still in the process of considering whether to change the field personnel from school teachers to village volunteers for the becoming census, following the best practice from the last agriculture census in 2003.

For non-municipal areas, volunteers in village are employed as field personnel, while temporary employees with at least Bachelor's degree for supervisors and with at least upper secondary level (Grade 11) for enumerators, are planned to employed to work in Bangkok and municipal areas.

## 3.3.5 Data Processing

The data processing for the 2010 Census involves manual and computer processing and will be decentralized. Regional processing centers will be set up and link via provincial network and wide area network.

For data processing stage of the next Population and Housing Census, the NSO will be able to build a strong ICT infrastructure to enhance its system of data processing and dissemination. Image scanning system is a technology for efficiently managing the data capture for large-scale surveys and censuses. It provides accurate, timely and reliable data capture from the census forms with less human intervention than needed for manual data entry. Because the census requires large-scale data collection, the image scanning system which needs to be installed must be sufficiently efficient to process the data within the required period. For such a large investment, the possibilities for using the technology after the census is completed will have to be considered.

### 3.3.6 Data Dissemination

The census results are disseminated in the form of published data and non-published tables. Published data can be obtained in report form (publication) or CD-Rom or diskettes. The census results are also disseminated through the NSO's website. In addition, census data can also be retrieved through the census database (CensusInfo), Geographical Information System (GIS) and data warehouse.

The NSO plans to improve the data dissemination system. The result of this improvement will help data users to meet the need and to access data and information more conveniently through the on line "One Stop Service" system. Those who want raw data could also get access to data files via Internet with charge and specific approval.

### 3.3.7 Data Utilization

The features of census data that render usefulness in the formulation of development and strategic plans are comprehensiveness, comparability and availability at community levels and at other levels of aggregated areas.

## 3.3.7.1 The use of census in planning and evaluation development

As the population has been growing steadily, the need for housing, food, education, and so on has increased accordingly. Thus, in planning the national socio-economic development, the national policy makers would need reliable information from credible sources for their decision support in order to formulate appropriate policies

Various government agencies have used the census data in variety of ways according to their responsibilities. These include:

- Assessment of the current levels and differentials among important population and housing characteristics and evaluation of the availability of basic household needs in key sectors.
- Evaluation of the benefits of development programs at the small area level over a period.

- Assessment of manpower resources and their distribution and movement
- Assessment of the current demographic and social situation.
- Identification of special population group such as children, youth and elderly.
- Formulation of housing policy and programmes.
- The provincial governments also use the census data to validate community level statistics obtained from other sources.

## 3.3.7.2 Population Projection

A common use of the results of the census is to provide a basis for the estimates of the population of the country. The Population Projection is an important use of the population and housing census data. In Thailand, a committee comprised representatives from the National Economic and Social Development Board (NESDB), the National Statistical Office, Ministry of Interior and academic institutes was setup to establish the Population Projection project. The latest publication is the Thai Population Projection: 2000-2050. Therefore it is planned to use the results of these census round to adjust the new population base. Apart from providing information for policy and operational uses, these population estimates are also used to provide benchmarks for household survey program.

## 3.3.7.3 Poverty Mapping

A new assignment which utilized the 2000 Population Census was the Poverty Mapping. The NESDB; the NSO and the Thailand Development Research Institute (TDRI) under the technical and financial support of the World Bank and ASEM Trust Fund have completed the first Thai Poverty Mapping in 2003. It used a technique to combine the 2000 Household Socio-Economic Survey data with the 2000 Population and Housing Census data to derive household poverty and inequality estimates based on both income and consumption at the village level across the whole country.

The results of the poverty mapping showed that the map matched well with SES at national level and regional level but less so at province level. A cross-validation of these data such as field visits and existing welfare indicator comparison obtained from other sources such as the Village Survey of the NSO and the Nrd2C project of the Ministry of Interior would be needed.

## 4. Conclusion

Census management strategies emphasize early planning, testing, and continuous evaluation of census operations to reduce the periodic census burden and improve quality.

Since Thailand has had experience in using the ICR technology for the previous census, it will be used again in the 2010 Population and Housing Census and more ICR system will be set up in regional centers. The NSO will be able to build a strong training of trainers, implementing a public awareness and educating campaign on the 2010 Census. The lessons learnt from previous census, together with good planning and preparing will make the 2010 Population and Housing Census to be more successfully.