

Utilization of the 2000 Census data

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1. Introduction

The Population and Housing Census is one the most important sources of socioeconomic data in the country. It provides the most a comprehensive update of the information on the population in terms of their demographic and social conditions as well as the housing conditions at the national and sub-national: region, province, district, sub-district (Tumbon) and villages levels. The census is therefore a statistical project of national importance which serves a variety of information needs.

As in other country, the Thai Population Census data are being utilized in many ways by a variety of clients that include Government, the private sector, those engage in social and economic research, the politicians and the general public. The Government forms by far the largest user group.

Population and Housing Census in Thailand is undertaken every 10 years. The latest census was carried out in 2000. It was the tenth population census, and the fourth housing census. The National Statistical Office (NSO), a governmental organization under the Ministry of Information and Communication Technology, bears the full responsibility for the planning, implementation, analysis, publication and dissemination of the census results. The previous census data have been extensively utilized by the local and international organizations.

The 2000 Census aimed at collecting information on demographic and socioeconomic characteristics, fertility, migration, and housing conditions. These data items were suggested by the census users and approved by the Census Executive Committee. The 2000 census provided data for the formulation of a

wide-range of the national policies and the monitoring and evaluating the development programs at the macro and micro levels. Furthermore, the census facilitated historical comparisons over a number of censuses and provided a basis for the projections of various demographic characteristics.

In order to maximize the utilization of the 2000 census data, the data were made available to users both in publications and unpublished data upon request in the forms of CD-ROM and diskettes. The publications included a preliminary report, an advanced report, a series of final reports, and some analytical reports,. The 1% sample micro-data and its meta-data file were made for users who would like to conduct in-depth analysis of the census data. The NSO also presented the census data using GIS. The interesting statistics are also available at t h e N S O ' s w e b s i t e .

2. Utilization of census data

The features of census data that render them useful in the formulation of development and strategic plans are comprehensiveness, comparability and availability at community levels and at other levels of area aggregation.

2.1 The use of census in development planning and evaluation

As the population has been growing steadily, the need for housing, food, education, and so on has been increasing 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 f o r m u l a t e a p p r o p r i a t e p o l i c i e s .

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

- Assessment of the current levels of 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 programmes at the small a r e a l e v e l o v e r a p e r i o d .

- Assessment of manpower resources and their distribution and mobility.
- Assessment of the current demographic and social situation.
- Identification of special population groups 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.

2.2 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 exercise 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. The latest one is the Thai Population Projection: 2000-2025. Apart from providing information for policy and operational uses, these population estimates are also used to provide benchmarks for household survey programmes.

In Thailand there are many sample surveys conducted between censuses especially those under the responsibility of the NSO. The important ones are the Monthly Household Labour Force Survey and the Biennial Household Socio-Economic Survey. The population estimates obtained from the latest Population Projection are used as benchmark data to adjust the weighted survey data as well as to measure change through the survey programme.

The Population Projection 2000-2025 contained 3 series with variations in fertility assumptions i.e. medium, high and low level. The assumption on mortality was set as a constant. The base population used was the number of

population by age and sex from the 2000 Population and Housing Census, a d j u s t e d f o r u n d e r e n u m e r a t i o n .

The Population Projection contained four geographical levels:

- The whole country population: 2000-2025
- The regional population: 2000-2025
- The provincial population: 2000-2025
- The municipal and non-municipal area.

In projecting the regional and area population, the proportion of population in each area obtained from the population registration was also taken i n t o c o n s i d e r a t i o n .

2.3 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 the 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.

A poverty map can contribute to a wealth of information to help policy makers in addressing concerns about regional inequality and lagging regions in a decentralizing fiscal framework, leading to better geographical targeting. It helps to make visible those poor who are otherwise hidden behind the averages of

large regional aggregations. In addition, poverty maps can be combined with other available geographically desegregated data, e.g. geographic databases of transport infrastructure, information on natural resources quality and natural disasters, to yield a rich array of information relevant for poverty analysis and policy making.

In terms of producing statistical data, if the combined estimates from the census data and these administrative or survey data can be used at an extensive level, it would help to close the gap in the planning for the micro area level. It is well known that survey data are generally inadequate for use in micro-area analysis. However, to maximize the use of data from these additional sources, it is essential that there is standardization of concepts and definitions for these common topics such as age, sex, relation to head of household, occupation and so on. Moreover, the common definitions regarding geographic and local administrative locations are also relevant.

2.4 Sampling Frame

The NSO conducts many sample surveys between censuses as part of our household survey programme. Detailed small areas counts, i.e. the Enumeration Districts (ED's), from the census are used directly in the design of the sampling frame and the selection of the sample units.

Each year a survey for updating the census frame is carried out. A sample of ED's are drawn from the Census Frame and divided into 12 groups. Each group will be re-enumerated on basic household information such as number of household members, sex, type of household, type of economic household, etc. The updated frame will be used for all household surveys in that year.

2.5 Research Projects and Academic use

The 2000 Population and Housing Census is a rich source of data for various kinds of research i.e. demography, social and economic. It provides comprehensive information at national, regional and local area levels on the size,

distribution, composition, and demographic characteristics of the population. The population differentials and urbanization can be studied at various area levels.

Academic institutes conduct several research projects on the basis of the 1 percent sample of the 2000 census. The followings are some example of the interesting research projects :

1. Fertility Continues to Fall in Thailand: Estimates from the 2000 Census
2. Changes in Household Living Arrangements of Thailand: 1970-2000
3. Living Arrangement of Youth
4. Fertility of Ethnic Minority
5. Analysis of Nuptiality
6. Migration in Samui Island

Apart from these, many students also make use the 2000 Census for their theses and dissertations .

3. Future Improvement an Census data Dissemination

The NSO is now in the process of improving the data dissemination system. The result of this improvement will help data users to access data and information more conveniently through the on line “One Stop Service” system. Those who want to work with the raw data could also get access to data files via our Data Warehouse System with charge and specific approval.

The NSO plans to review the regulation to disseminate data especially on the price of publications and raw data files. This will be done towards a balance between the promotion of the use of statistical data and the need for the NSO to recover the cost of statistical production. For instance, the students should get to use our data with a lower charge, while other government agencies might have to pay if they want to use the raw data .

The meta database development will also be emphasized to serve the strategy of improving data dissemination. It is expected that the users will be facilitated by this database in their utilization of our data. This would minimize the time wasted in explaining the meaning and background of those data. This would further allow the NSO to improve the services providing to data users on higher level data clarification and advice. To do this, the NSO would improve training of its staff dealing with the data users and the facilities such as information centers and telephone services.

The system of data storage will also be improved based on the concept of Data Warehouse (DW). Right now the LFS DW is already available for outside users. However, the users can access the DW only via the NSO intranet at a specific service location. Next year there will be an improvement in the level of details of information provided in the DW and on the ICT infrastructure to link with the main users like BOT, NESDB and the Ministry of Labour and Social Welfare.

For the 2003 Agricultural Census which is now at the stage of data processing, the NSO is preparing to store the data in DW system. The would be progressively applied to other census data dissemination.

4. Conclusion

The importance of the population census to the government, academic and business users have been increasing over time. The NSO will have to improve this source of data in terms of its content and quality as well as the system of disseminating the data. Moreover, it is also the responsibility of the NSO to promote the use of the census and other kind of data and information. Once the statistical data and information are widely utilized, the cooperation of data users with the data providers will be raised. This would lead to an improvement in the level of quality of the information provided by the data providers.

In preparing for the next census, more efforts have to be made in reviewing the user 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. The 2000 Population and Housing Census had missed some

important variables, which are much needed such as information on disability and the environment. It is far more costly and complicated to develop surveys so as to provide such information especially at the micro level.

It is believed that before the next Population and Housing Census, the NSO will be able to build a strong ICT infrastructure to enhance its system of data dissemination. Therefore, the data users could expect to be served with better accessibility, improved facilities and higher quality census data in the future.
