

POPULATION AND HOUSING CENSUSES IN VIETNAM: EXPERIENCES AND FUTURE PLAN

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by

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I. Brief History

Census is the best way to provide a comprehensive collection of information on characteristics and living conditions of the population. The first population and housing census of Viet Nam was conducted in 1979 and the next censuses were conducted after every ten years. The second census was conducted in 1989 and the most recent census was conducted in 1999. According to the Statistical Law which was passed by the National Assembly in 2003 and got effective on 1 January 2004, the next census will be conducted in 2009.

II. The experiences with the most recent census – strong points

1. Preparation and Planning

Preparation of the last population and housing census in 1999 took two and a quarter years - from late 1996 through March 1999. In accordance with the Decision of the Prime Minister, the main tasks during this stage were setting up census steering committees and census offices at different administrative levels, drawing up the census design (census plan, census forms and documents), Carrying out a pre-test and pilot census, delimiting administration boundaries and enumeration areas, drawing maps and making household lists, procuring and installing data processing equipment and training technical personnel, holding meetings on the census at national and other levels, recruiting and training census enumerators and supervisors, and printing census questionnaires and documents. Another important task performed prior to and during the census was carrying out the pre-census communication campaign, which included advocacy efforts, development and distribution of communication materials, communication through meetings and publicity activities through mass media networks.

1.1 Coverage and sample design

As in the previous census in 1989, the 1999 census covered all persons usually residing in Viet Nam as of the census date, 1 April.

The population and housing censuses were conducted simultaneously using the household as the basic unit of enumeration. Households consisted of persons

living together in a house/flat and having common meals. All households and persons usually residing in each household were recorded.

As part of the 1999 census, a 3 percent sample of enumeration areas was drawn to collect information on fertility and mortality. Lists of enumeration areas were used as the frame for sample selection. A stratified systematic sampling method with a random start was applied.

1.2 Schedule content

Two forms of questionnaire were adopted: one form canvassed the population and housing characteristics of all households, and the other recorded information about the essential means of production in all enumeration areas in rural areas. The individual questionnaire had two types: a short form and a long form. The short form was used to enumerate 97 percent of households. It contained 18 population questions: (1) Name; (2) Relationship to head of household; (3) Sex; (4) Date of birth; (5) Ethnic group; (6) Religion; (7) Place present on midnight 31/3/1999; (8) Place of usual residence 5 years ago; (9) Whether the place of usual residence 5 years ago was urban or rural; (10) School attendance; (11) Highest level of education currently attending or completed; (12) Literacy; (13) Qualification; (14) Field of qualification; (15) Marital status; (16) Main economic activity in previous 12 months; (17) Main occupation in previous 12 months; and (18) Economic sector and industry, and 11 housing questions: (1) Whether having house to live; (2) Separate or common house; (3) Type of house/flat; (4) Total area; (5) Owner of house/flat; (6) Years of use; (7) Lighting/ electricity; (8) Drinking water; (9) Type of toilet facilities; (10) Household television; and (11) Household radio.

The long form was used to enumerate the households in the 3 percent sample of enumeration areas. It was the same as the short form except that it contained an additional three questions on fertility and mortality: (1) Number of children ever born and number of children who have died; (2) Last live birth: date, sex and survival status; and (3) Information on deaths in the household in the previous 12 months.

1.3 Pre-test and pilot census

The census materials and procedures had undergone two tests before being applied in the actual census. The first test was a pre-test conducted in December 1997 in three provinces which were purposely chosen to represent three typical regions in Viet Nam. The main objective of the pre-test was to test the applicability of the questionnaires and accompanying professional stipulations, and to find out the response to each question. Interview time and efficiency of field workers and trainer were also studied. The results of the pre-test were evaluated on a workshop. After the workshop, improvements of the census questionnaire and procedures, and other preparatory activities for the pilot census were made.

The second test was the pilot census conducted in August and September 1998 in one representative province. Fifty-two enumeration areas with a population of

approximately 25,000 inhabitants were chosen for the pilot census. This was the final test of all phases of census operation before starting the actual census in early April 1999. Two workshops were organized to study the results of the pilot census. The first workshop reviewed experiences concerning field organization and management and the second workshop reviewed data processing.

1.4 Mapping and household listing

The mapping and household listing was begun in October 1998 and ended by the end of the same year.

Two types of maps, base maps and enumeration area maps were created. Base maps were prepared of every commune and of every ward, and each base map showed the location of all enumeration areas in that commune or ward. Each enumeration area map showed the EA boundaries, streets, roads, lanes, canals, ponds, landmarks, location of every house to be visited by enumerators, and other physical features.

The household listing operation was done in close relation with mapping plan and was carried out by commune statistical clerks. A separate household list was filled out for every household, containing entries for EA address and such household specifics as household number, total number of residents, males and females.

These materials were distributed to enumerators ten days before the field operation for final updating. Updated maps and lists proved extremely helpful at the time of enumeration.

2. Pre-census communication

The pre-census communication campaign in support of 1999 census was both extensive and intensive. The communication efforts were designed to:

- (a) Obtain the support and collaboration of all government institutions, mass media and mass organizations by creating understanding with regard to the importance and objectives of the census; and
- (b) Make the population of Viet Nam aware of the population census, its purpose and operations, further to encourage hospitality to, and close cooperation with census takers.

At the central level, the mass media campaign was carried out in three phases with progressively intensified tempo as census date approached: phase 1: from September to November 1998; phase 2: from December 1998 to February 1999; and phase 3: from 1 March to 15 April 1999. The communication activities at local levels were carried out in two phases: phase 1: from October 1998 to February 1999; and phase 2: from 1 March to 15 April 1999.

The intensive use of all available media channels during the pre-census communication campaign helped to make people throughout the country aware of the census date and enumeration period, the need for providing correct answers,

the importance of public cooperation and participation, and the responsibility of the people to cooperate with, and assist enumerators and other census officials.

3. Enumeration and Supervision

The enumeration started on 1 April 1999 and was scheduled to last until 7 April in enumeration areas with full enumeration, and until 9 April in areas with sample enumeration. In fact, the enumeration was completed some days behind schedule in difficult areas.

3.1 Enumeration areas/districts

The whole country was divided into enumeration areas (EAs) or enumeration districts (166,330 EAs). Each EA had clear boundaries and contained only as many households as an enumerator could finish during the stated enumeration period. The number of households in an EA varied from 80 to 100 households.

3.2 Recruitment and training of field workers

The training aimed to provide the census with qualified cadres to properly supervise the fieldwork and to train staff at all levels down to enumerators and supervisors.

Enumerators could be selected from among farmers, cadres, students or teachers. Almost all enumerators were selected from the local population. Only in some remote areas where the majority of inhabitants were from ethnic minorities were enumerators recruited from other locations because of their literacy. In these areas local persons (often village headman) served as guides and interpreters for the enumerators.

Training was conducted in three-stage program. In the first stage, two census staff members from each province were trained at the central level in either Ha Noi or Ho Chi Minh City. In those six-day courses, trainees received an introduction on the purpose of the census, an explanation of the census questionnaires, and instruction on enumeration procedures. UNFPA supported this stage of training. The second stage of training funded by the Government of Denmark, was conducted in the provincial capitals. Provincial census staff who had received training at the central level trained key census staff members from each district in six-day courses. The number of trainees per province depended on the number of districts in the province. In the third stage, the key census staff from each district trained enumerators and supervisors. At this stage, about 4,000 courses were conducted, and approximately 250,000 persons, of whom 86 percent were male, were trained. The United Nation Development Programme (UNDP) contributed to the cost of training at this stage.

Well-designed training materials helped to ensure the quality of the training, Apart from the well-printed manuals, two attractive training aides for this census were (i) video tapes and (ii) questionnaires and professional guides printed in wall chart format (A0 size). These material were well-designed and produced in sufficient

quantity for training at central, provincial and local levels. Based on their actual use, they were evaluated as effective tools that contributed to the quality of the training.

3.3 Enumeration procedures and supervision

In the 1999 population and housing census, the canvassing method was adopted. Each enumerator visited every household within the EA assigned to him/her to ask for the detailed information for each person. The interviewing and data recording followed the instructions that the enumerators had received. When the enumeration in a household was completed, the enumerators read the responses back to the respondent to make certain the answers were correct. Enumerators were equipped with the materials necessary for their daily work. As a result of a proper training programme, enumerators effectively performed the functions of interviewing and recording information. In addition, the publicity campaign had made people aware of the census so the enumeration was carried out smoothly according to plan.

During a 30-45-day period from mid-March to late April, many census workers did not rest on Sundays and worked overtime. In many mountainous areas where enumerators were recruited from outside the EA, they remained in the EA until the completion of the enumeration. The enumeration in those areas was often difficult. Enumerators climbed hills on winding trails and waded across streams to visit households and they were warmly welcomed by the local people. The enumeration in remote areas of the Mekong River Delta was not less difficult than in remote mountain areas. However, in all areas, enumerators displayed a great commitment to perform their tasks. They did not want to allow mistakes or delays in their work to affect the overall results. Their devotion to their work and their care for every detail were recognized by the people, and they received the active support and assistance of the people.

4. Data Processing and Tabulation

Data processing was begun in mid-May 1999, immediately after the field-work, and continued until the end of 2000. The main tasks of the initial stage of data processing were to complete the checking and coding of the 3 percent sample questionnaires by mid-June 1999, to complete the manual tabulation of the preliminary count, and to announce it by late June 1999. Further plans are to complete the data entry and data tabulation of the 3 percent sample questionnaires and to release those results by late 1999; to start the checking and coding of the remaining 97 percent of questionnaires and to complete that by December 1999; to start the data processing and tabulation of remaining questionnaires (97 per cent); and to complete data processing and release the results by the end of 2000.

Data entry for the census was decentralized to nine regional computer centers, compared with three for the 1989 census. During the course of data entry, the Computer Center in GSO plays the leading role. In addition to carrying out data

entry, the Center was assigned the following important tasks: (i) to develop software packages used for census data entry, data processing and data tabulation; (ii) to prepare manuals used for data entry and correction, and the monitoring, supervision and management of data entry; and (iii) to undertake field monitoring and supervision of census data entry at the other eight regional centers.

By late 1998, the nine regional computer centers were connected by a local area network (LAN). For setting up this network, 10 Net Servers LH3, 252 Fujitsu PC-Deskpower 5000, and other equipment such as laser printers and scanners were purchased with the financial support of the Governments of Denmark and the Netherlands. In addition, with the assistance of the United Nation Population Fund, technical cadres working with the network were trained by computer experts of the GSO Computer Centre.

5. Evaluation

The whole process of the 1999 census has been geared to ensuring the quality of the census data. This has been done firstly through the concern of the efforts made in designing the census questionnaires and professionally - developed materials, in drawing EA maps and establishing household lists, and in recruiting and training enumerators and supervisors as described above.

The conduct of the 1999 population and housing census reflects the results of a process of capacity-building at GSO. Many of the tasks of the 1999 census have been modeled on the 1989 census procedures, from the census communication campaign to the training programme and field procedures. Sixty to seventy percent of the census personnel at the central and provincial levels during the 1999 count had also worked on the 1989 census. As a result, GSO was able to conduct the 1999 census with greater self-reliance and with less financial and technical assistance from international and bilateral donors.

Post-enumeration survey

A post-enumeration survey (PES) was conducted to determine the completeness and accuracy of the census. A stratified sample of 60 EAs in urban areas and 50 EAs in rural areas was selected. All households in each selected EA were re-enumerated.

6. Data dissemination and utilization:

In the 1999 census, efforts were made to provide census products and services to the public as much and easy as possible. Thanks to the rapid development in computer technology, apart from the traditional mode of census data dissemination through printed publications, electronic media such as CD-ROM, data bases, were being used to release the 1999 census results.

The GSO also established two databases of the census results, one on 3% sample data and results and the other on completed census results. While the former contains both micro and macro data files of the 3% sample results, the latter is a

macro data file of the completed census results. However, by now these data bases are just operating within the GSONet - a local area network (LAN).

The system of maps and lists described above are being used as mainframe for drawing up samples for various kinds of surveys. Notably among these samples are those, which were designed and drawn for the National Health Survey 2001-2002 (funded by the World Bank), Survey on Labor Force and Employment 2001 (conducted by the Ministry of Labor, Invalid and Social Affairs), and the Household Survey on Living Standard 2002 (conducted by GSO).

III. Experiences with the 1999 census – weak points:

The 1999 population and housing census had successfully ended, but there also were problems which should be overcome to objectives with better goals. Among these, the following shortcomings need to be addressed.

1). According to the sample design, a sample size of approximately three percent of the total population allowed precise estimation at the national and tolerably good results for each province and municipality. However, because of very low level of fertility and mortality, a minimum sample of at least 20000 per sub-cluster was set to provide very small number of births and deaths (around 250 births and 120 deaths only). This number didn't allow a good mortality and fertility estimation.

2). Process of industrialization and internationally economic integration was leading to change in labor structure in Viet Nam and appearance of new occupations. But the old classification of occupation didn't allowed account all occupation in Viet Nam at time.

3). Data processing in the 1999 population and housing census in Viet Nam was based on the old technology (keyboard data entry). This affected to accuracy and timelines of results of census.

IV. Future plans:

As the three national population censuses in Viet Nam in 1979, 1989 and 1999 were carried out with technical and financial support of UN agencies and followed the standard international procedures, there is no much difference from one census to the other, especially the last two censuses. However, after the census in 1999 changes have been taking place in Viet Nam, creating new characteristics in economy and society's life. Based on the 1999 population and housing census, the main characteristics, which should be taken into consideration when preparing, designing and implementing the next census in 2009, are:

First, by the time of the next census, the population of Viet Nam would increase by 10 million people in comparison with the last census in 1999. This is added with changes in administrative boundary in many localities. By the 1999 census the whole country had 61 provinces, it is now increased to 64. The separation of administrative units at district and commune levels is more often than the

provincial level. This could cause problems to the mapping and listing work and to the tracing of census data over time.

Second, the process of urbanization is taking place rather rapidly. The population statistics has shown that the percent of urban population was 20.9% in 1995, it increased to 23.6% in 1999 and 27.0% in 2005. Many cities, towns and district centers were upgraded.

Third, migration with a main stream of spontaneous migration from rural to urban centers, industrial parks and processing zones to look for jobs and education opportunities is a matter of concerns today. Results of the survey of population change in 2004 have shown a high in-migration rate in some provinces. Migration is an important topic for censuses, but it is also a main factor likely causing duplication and omission when listing household members.

Forth, the process of industrialization, urbanization and internationally economic integration is leading to changes in labor structure in Vietnam and appearance of new occupations. The proportion of labor in Group I (agriculture, forest and fishery) decreased from 71% in 1996 to 56.8% in 2005.

Fifth, Vietnam is encouraging a market-based economy with socialism orientation and international integration. The reverse side of the market-based economy and international integration can have a significant impact on perception and thinking of the people, especially to social problems, including census because it has to collect information from the people.

Sixth, by the time of the next census, the population of Vietnam is projected at about 86 – 87 million people. With such a large population size and the tendency of separation of administrative units being taken place at all local levels, the data processing, tabulation and dissemination become a big exercise. The implication of optical-reading technology in data processing is very important to increase the level of accuracy and timelines of results of census.

Seventh, to provide robust estimates of birth and death rate, it was necessary to increased sample size to 5 percent of total population with a minimum sample of at least 35000 per sub-cluster.

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