

Vietnam Population and Housing Census in 1999

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Population and Housing Census conducted on the 1st April, 1999 is the third national census in Vietnam. Unlike the previous censuses, this census was conducted in a complicated socio-economic context and condition, such as a remarkable growth in the demand for information, accelerating transition to a market economy and the rapid development in information technologies. The census has mainly adopted the 1989 census' s strategy and design, including a core and sample questionnaire and the provision of key information on housing.

The preparation for the 1999 Population and Housing Census was started in March 1997, two years in advance. Within two years, main preparation activities for the census were completed, including: content determination and questionnaire design, compilation of census manuals, pretest and pilot census; mapping and household listing; recruitment and training of census field-workers; pre-census communication and preparation of material condition, finance for the census, etc., Due to the complexity and requirement on accuracy of census data, all preparation for the census were strictly, carefully and scientifically implemented with a concrete plan and logical process.

The success of the census is due largely to the dedication of many individuals and organization. The census was received the due concern of the leaders of the country and authorities at all levels, the enthusiastic support of the people. The Prime Minister has entrusted the responsibility of directly steering the census to authorities at all levels and some line - ministries. With a decisive mind and responsible consciousness, they promoted all possibilities and available resources, were active and creative in finding measures to overcome difficulties to fruitfully conduct the census. In a condition that the national budget for the census is limited, the census was set under the direct steering of authorities at all levels, co-coordinated by line-ministries, assisted by the people and supported by international organization and foreign countries, which have created favor condition to the success of the census.

1. Implementation organization

Due to the importance and complexity of the census, the Prime Minister decided to establish census steering committee at all levels from central to commune. The Central Census Steering Committee was headed by Vice-Prime Minister, Leaders of the line-Ministries participated as member, and Leaders of General Statistics Office (GSO) acted as vice-chairman and standing member. At local levels and in three Ministries of separate-plan enumeration each committee was also headed by a Leader of the Ministry/Chairman or Vice-chairman of the local People Committee. To steer and guide the implementation of the instruction of the Central Census Steering Committee, census Committees at central, provincial, district levels and three Ministries were allowed to organize census offices. Members of a census office were mobilized from line-branches among which representatives from GSO played the leading role on enumeration profession and methodology. This is the most favorable factor to ensure the success of the census. The fact that Prime Minister entrusted authority at all levels and in some Ministries/Branches directly steer the census indicates a due to concern of leaders of the country on role, importance of population and housing information, requests all levels, branches to enhance their responsible awareness, overcome difficulty, active and creative in finding measures to successfully conduct the census.

2. Determination of census content

Unlike the previous two censuses, before deciding the conduct of this third national census, the Prime Minister had a Directive to entrust the GSO with leading role in collaborating with line-ministries to prepare the census plan. Commencing from a real condition of budgetary constraints, the determination of content for the census was carefully considered. There were many workshops conducted by GSO with line-ministries and data users to discuss on determination of necessary indicators for inclusion into the census.

Based on comments and suggestions from main users, requirements on international comparison and budgetary constraints, finally the Census Preparation Group determined a reasonable census

scope of 41 questions. Several new questions, which were considered necessary, possible to collect with quality and not many funds, have been added to the core questionnaire. Coverage for the housing questions has been widened and for the first time ever a complete housing census has been conducted. Additional questions have also been asked of households, some covering all households in the country and others more relevant to rural households and communes. Especially the census included questions to collect information on living amenities and production means in rural areas to serve for studying the process of agriculture industrialization and urbanization and rural development as well as the level environment condition in rural areas. The census also added some questions to collect information on population present at midnight 31 March 1999, on migration flows between regions and trend of urbanization; on employment status; on widening of scope and content of research on education.

3.Design of questionnaires and manuals The design of questionnaires and manuals was carefully implemented following a strict process, taking into consideration all factors and relations possibly affecting the interviewing ability of the enumerator, the level of education and literacy of the respondent, the capacity of organization, steering, implementation and the requirement of census data processing. Together with the questionnaire design is the compilation of the directing and professional guiding materials, including: census plan; supervisor's manual and enumerator's manual; mapping and listing manual; stipulations on steering and interviewing chart; and lists of occupation, training categories, industries, ethnic groups, religions, administrative units, etc., All these must be studied, completed with participation of national and international experienced consultants. The practical census operation has indicated an assessment that census questionnaires and manuals were carefully compiled, and in general they caught the requirement and were suitable to the real situation. This is considered as an important factor leading to the success of the census.

4. Pre-test and pilot census

The test was considered as an important practical exercise and was conducted on content and enumeration technique in December 1997 in three provinces. A pilot census was organized by the Central Census Steering Committee in collaboration with one Provincial Census Committee. Representatives from the Provincial Census Committees in 61 provinces and 3 Ministries were participated in the pilot. This pilot aimed at wholly testing the census plan, from mapping, household listing, recruitment and training of supervisors and enumerators, data collection and data processing. Also, questionnaires of this pilot census were used for testing the coding, data entry, and preparation of plan and program for processing the census data at the Central Data Processing Center and 8 regional computer centers.

5. Recruitment and training of enumerators and supervisors

The recruitment of enumerators and supervisors for the census in almost provinces was done in accordance with the requirement with various flexible and creative solutions to scope with the condition and education level of people in each location. In mountain and remote areas, it was difficult to select enumerators and supervisors among local men, provincial, district census staff or teachers were mobilized from other areas to work as enumerators. By the census date, all communes have finished the recruitment and training of enumerators and supervisors with persons of different occupations such as: teachers, students, staff of the Youth Union, Women' Association, Farmers Association, Commune People Committees, statistical cadres, accountants, managers, chiefs of village, etc., These persons were trained to reach the required quality standard for acceptance of assigning to work for the census.

As the number of enumerators and supervisors was too numerous, the training was conducted in several steps. The central level conducted training for master trainers at provincial level; the provincial level provided training to trainers at district level and the district conducted training for enumerators and supervisors. To help the training courses reach the stipulated requirement, the Central Census Committee has improved the method of compiling training materials with detailed and clear stipulations on training program (time for theory, time for practice) and prepared facilities used for training at all levels. By the date of 27 March 1999, about 250,000-recruited persons were trained in nearly 5,000 training courses.

6. Data Processing

In late 1998, the Central Data Processing Center (CDPC) of SGO conducted test runs to develop its data processing system, using records from the pilot census. Three different applications were tested for data entry (adapting standard packages known as IMPS, ISSA and FoxPro). The version based on ISSA was used because of the best suited to the Vietnam census.

Data entry and on-line editing facilities were provided at 9 centers. Each center established a computer network for census data processing with a server HP LH3 and 12 to 53 PCs. A total of 450 data entry operators were engaged to work in two shifts. The network in each regional computer centers is connected to the CDPC network through a telephone dial-up system. Thus, data files were transferred to the CDPC server as soon as data entry in each province is completed.

There was a number of checks provided to ensure the keyed data were valid, but most of these checks were in the form of warning messages to control for key stroke errors and column shifting. All editing operations were undertaken at the CDPC. Tables were produced progressively from September 1999, using the CENTS module. A number of consistency checks were carried out and the edits were specified in CONCOR. Records in error were edited on-line by special editors. As soon as data entry for a district was completed, a listing of inconsistencies was printed out for checking and, correction and updating of files.

A system of management and control was developed by CPDC (using a FoxPro application) to help managers to monitor the processing. All stages in the cleaning of data, including receiving of the questionnaires, data entry, verification, checking, listing of inconsistencies, data correction, combining EA data files into higher geographic levels, production of frequency tables, and data backup, are monitored under this system. The system also provides the mechanism to validate the geographic identification of keyed data, to avoid duplication or omission of enumeration areas (EAs). For managers, the system generates different kinds of reports, for example, to keep track of the status of each EA, to calculate the quantity and quality of work of the data entry operators and print salaries due, or to provide frequencies of imputed values to subject matter specialists to ensure the rules are properly applied.

7. Fieldwork and quality control

All the efforts made in the preparation stage have facilitated the data collection stage. By 31 March 1999, all enumerators and supervisors were thoroughly equipped with professional skills and material facilities, they were ready for work at their assigned enumeration areas, carrying out the final checks to update necessary material for each enumeration area, visiting every house, every household of arrange time schedule for interview.

The census steering committees at all levels and census staff was, according to the plan, present at enumeration areas throughout the census days to guide, steer and check the work performed by supervisors and enumerators. This would help their work run properly in accordance with census procedure, content, method and workload. It is also during these days that the 1999 population and housing census was considered as an urgent and concentrated work. Leader of the Authorization and line-Ministries/Branches at provincial and district levels have spent most of their time to go on field trip to supervise, check and encourage the census work. Especially, the Commune Census Committee, People Committee and commune branches in all communes throughout the country, depending on their own ability and assigned responsibility, were directly or indirectly participated in steering, guiding, encouraging and resolving all problems arisen to ensure the field work being progressively implemented in plan, in process and in high quality.

A number of field procedures were adopted to ensure that the information collected was accurate. The main responsibility rested with the supervisors, who were responsible for the day to day field enumeration. Apart from their tasks of observing and checking the work of enumerators, supervisors were also instructed to re-interview a small sample of households and to make random spot checks in others to make sure the enumerators maintained high standards.

On completion of the enumerators work, the questionnaires were vetted by members of the communal/ward level steering committees. Where they felt errors had occurred they could discuss the problems with the supervisors and return to respondents to check and correct responses if necessary. Once cleared by the communal/ward level steering committees, the batches of completed forms were passed to the steering committees at district and provincial and central levels. These committees also followed checking and verification procedures, mainly to ensure that forms were properly filled in and all households were accounted for.

8. Data storage and data dissemination technologies

In order to ensure widespread use of 1999 census information, GSO has made preparation of information booklets, newsletters, publications (in various formats and media) for different target audiences, with technical assistance from international advisers and national experts, and providing following output where appropriate:

- Micro data and access software to allow creation of user specified output.
- Standard tables in electronic format with access and manipulation software.
- Electronic databases for storing tables available on demand.
- Electronic products including software such as POPMAP.
- Brief documents providing main findings of census data.
- Hardcopy publications containing census information at all geographic levels.
- Thematic and analytical publications, and electronic versions of these publications.

Immediately following publication of each census products, GSO convenes a workshop/press conference to present the results of publications/electronic products to policy makers, planners and researchers from other ministries and institutes. The workshop and press conference informs the participants of the results of the analysis and how the results may be incorporated into their sectoral planning/research.

The results of the 1999 census are published and disseminated in the following publications and electronic products:

1. Electronic population atlas for provincial and district levels using the POPMAP software package.
2. Macro database on tables of completed results on CD-ROM and GSONet (Jun. 2001)
3. Brochure "The 1999 population and housing census: Completed results" (Apr. 2001)
4. Summary report on completed results (Apr. 2001)
5. Monograph on labor and employment (Jun. 2001)
6. The system of computer printout tables on completed results (Apr. 2001)
7. Monograph on migration and urbanization (Jun. 2001)
8. Monograph on fertility and mortality (May 2001)
9. Micro database together with software package used for producing tabulations from the 3% sample results (Sep. 2000)
10. Website of the computer printout tables on the 3% sample results (July 2000)
11. Brochure "The 1999 Population and Housing Census" (May 2000)
12. Computer printout tables on 3% sample results (Jan. 2000)
13. Vietnam Population and Housing Census 1999: Sample Results (Aug. 2000)
14. Summary report on sample results (Mar. 2000)
15. Vietnam Population and Housing Census 1999: Preliminary Results (Sept. 1999)