
Symposium 2001/16
6 July 2001

English only

**Symposium on Global Review of 2000 Round of
Population and Housing Censuses:
Mid-Decade Assessment and Future Prospects**

Statistics Division

Department of Economic and Social Affairs

United Nations Secretariat

New York, 7-10 August 2001

The Philippines Census 2000*

CONTENT

[A. Involving stakeholders in census activities](#)

[B. Adapting new technologies to census operations](#)

[C. Maintaining census-related activities during the intercensal years](#)

[D. Post-enumeration surveys](#)

1. The Philippine census placed the population of the country, as of 1 May 2000, at 76.5 million. This figure is higher by 7.9 million persons than the 1995 census figure of 68.6 million and higher by 15.8 million persons than the 1990 census count of 60.1 million persons.

2. The Philippine National Statistics Office (NSO) conducted the 2000 Census of Population and Housing, more popularly known as Census 2000. Aware of the gargantuan task of collecting census data, the NSO coordinated and established partnerships with government and non-government agencies and individuals. This report will describe briefly the Philippine NSO experience on census taking in the major topics identified for the UN Symposium.

A. Involving stakeholders in census activities

3. One of the major uses of Philippine census counts is the allocation of internal revenue allotment to local government units—that is, municipalities and barangays. As such, census results are a politically sensitive issue. Involvement of local government units in census taking emanates from the Philippine Census Law (Batas Pambansa 72) with the organization of provincial, municipal and city census-coordinating boards. The same law provides for the composition of these boards, with the provincial governor and city/municipal mayors acting as chairpersons of the provincial and city/municipal census boards, respectively, and the division/city superintendents of schools as vice-chairpersons. To serve as a link between the Philippine NSO and the census boards, NSO provincial and district officers act as the executive officers in their respective census boards. Members include officers from various offices in the local government units (LGUs) and agencies. The direct involvement and roles of local officials in the census boards has increased their support in the undertaking.

4. Consultations and meetings with the data users or stakeholders were vital to census planning. For Census 2000, the House of Representatives' Committee on Population and Family Relations sponsored a public hearing with the following objectives: (1) to recommend the concept on household membership to be adopted; (2) to discuss the definitions and categories to be utilized for urban and rural classification, ethnicity and disability; and (3) to come up with a list of items to be included in the census questionnaire. The committee invited several government agencies and academic and research organizations to two separate committee hearings. About 18 government agencies and universities/organizations participated during the hearings.

5. A series of meetings was also organized to clarify concepts and categories to be utilized for the census taking to best respond to the needs of special sectors. After the public hearing, specific agencies like the National Commission on the Indigenous Population, National Commission on the Welfare of Disabled Persons and Philippine Council for Evangelical Churches helped, respectively, in the finalization of categories for ethnicity, the definition and coverage of disability and the further classification of the Protestant category for religion.

6. Involvement of other government offices was facilitated with the organization of an inter-agency task force. The task force representatives were asked about the indicators needed for their policy and plan formulation. The indicators were then ranked as to their common usage. A tie-up between the household survey programme and the items suggested for the census was then discussed. Task force representatives discussed the need for detailed screening of indicators for surveys to ensure accurate and reliable results and to streamline the census questionnaire. Task force representatives were also oriented on the availability of previous census and survey results that they could use to address their concerns.

B. Adapting new technologies to census operations

7. As in the past, the latest technologies were adapted to monitor census enumeration nationwide. For Census 2000, provincial and regional officers utilized e-mail (computer), fax, land and cellular phones and telegrams to relay problems to regions and the central office. The Philippine NSO established the "C2K Watch", an Internet-based census monitoring system using maps. The "C2K Watch" is part of an "Over-all Quick Count System" developed to produce preliminary results from Census 2000. Inputs to this system emanated from the "Quick Count" forms that contained population tallies in an enumeration area. Summaries, which were generated from "Quick Count" forms, were encoded by the enumerators using handheld computers. The data contained in the handheld computers were uploaded to the computers in provincial offices, which in turn transmitted the data to the central office via e-mail. After evaluation, this became the basis of the preliminary results of population count by province and selected cities released on 21 August 2000 in Malacanang.

8. For Census 2000, the NSO utilized digital-processing technology using Intelligent Character Recognition (ICR) in its data processing. NSO acquired more than 20 scanners distributed in four data capture centres (DCCs), which are located in Manila, Pampanga, Cebu and Davao. In the DCCs, the questionnaires are read by scanners and undergo automatic mark and character recognition and, when needed, manual verification so that the scanned images and database outputs will serve as the basis for the final population counts by *barangay*. Together with the basic data on growth rates, sex ratio and average household size, the final population counts were released in April 2001 after the president of the Philippines proclaimed the results as official. The presidential proclamation of the census counts is provided for in the Philippine Census Law.

9. Since ICR digital processing is sensitive to the quality of the paper, the shade of the ink used in printing the questionnaires and the presence of specific markings on a page, particular attention was given to the printing of the forms for Census 2000. The scanners used for the image capture of Census 2000 forms reject forms that do not conform to a specific shade of magenta, the drop-out colour selected. Also, the printing had to be done under strict security to ensure non-pilferage of the census materials.

10. The Philippine NSO invited bidders to provide the equipment for the ICR digital processing as well as to develop the system for the data recognition. Given the relatively new technology for census processing, problems in the interpretation of the scanned forms were encountered that resulted in the delay of the processing of the population counts.

C. Maintaining census-related activities during the intercensal years

11. The regional and provincial NSOs documented census operations in the Philippines at the local levels. A summary of the preparatory and field operations activities was compiled in *The 2000 Census Procedural History, Volume I*. Photos taken during the preparatory activities and the field operations, throughout the country, have also been compiled. A second volume to cover the processing of the census results is planned. One of the constraints in a census activity is the lack of documentation. Efforts to document all key census-related activities must remain a priority.

12. For the Philippine NSO, an ad hoc census project staff (CPS) within the Household Statistics Department (HSD) was organized six months before census taking and dissolved six months after the end of the enumeration. The CPS served as the operations centre during the enumeration period and coordinated the various census activities within and outside the Philippine NSO. Responsibility for processing of the census results was assumed by the unit in charge of census in the office.

13. In the past, census questionnaires were kept in the 15 Philippine NSO regional offices nationwide, as these are used for sample selection for household surveys. This arrangement also reduces the volume of forms stored in one place. The same arrangement is being contemplated for Census 2000.

14. Census raw data are available as public-use files. However, the lack of proper storage facilities and the shift in the technology utilized for census processing resulted in the inability to use the magnetic tapes that contained the census data from the 1970s and 1980s.

D. Post-enumeration surveys

15. A post-enumeration survey, or the Census Evaluation Survey (CES), was designed to evaluate coverage error at the regional level for Census 2000. An ad hoc group within the Household Statistics Department conceptualized and monitored the conduct of the CES. It was constituted about six months before census taking. Processing of the CES results was the responsibility of one of the divisions within HSD.

16. The CES operations involved intensive re-enumeration of a sample of the population and matching these results with the corresponding census records. The CES results were expected to be used in the evaluation of the final population counts, but processing is still under way at this time. The CES for National Capital Region, one of the 16 regions in the country, experienced problems specifically with the delay in the main census operations, resulting in a larger time gap between the census enumeration and the CES interview. In addition, the absence of maps caused difficulty in locating enumeration areas. Processing of the CES results was delayed due to more pressing activities in the regular unit assigned to process and evaluate the CES. Traditionally, the Philippine NSO does not adjust census results using an evaluation survey.

*

This document was reproduced without formal editing.

National Statistics Office, Philippines. The views expressed in the paper are those of the author and do not imply the expression of any opinion on the part of the United Nations Secretariat.