

Gearing Up for 2010 Census of Population and Housing Philippines National Statistics Office¹

I. Introduction

The Philippines National Statistics Office (PNSO) will conduct the 2010 Census of Population and Housing (2010 CPH) in May 2010 to take an inventory of the country's total population and its characteristics, as well as the living quarters in the country.

The data that will be obtained shall provide government planners and policy makers with up-to-date statistics on population and housing. The data will also be used as new basis for the Internal Revenue Allotment (IRA) of our local government units (LGUs) and for the creation of new LGUs and the conversion of an LGU to a higher level, pursuant to the provisions of the Local Government Code.

Furthermore, 2010 CPH will also obtain information on the characteristics of barangays, which are the lowest political units in the country. These information will be used as basis for the urban-rural classification of barangays.

II. Mandates

The authority of the PNSO to conduct the 2010 CPH emanates from these legalities:

Section 2 of Commonwealth Act No. 591, approved on August 19, 1940, authorized the Bureau of the Census and Statistics (now the *National Statistics Office* or *NSO*) to collect by enumeration, sampling or other methods, statistics and other information concerning population and to conduct, for statistical purposes, investigations and studies of social and economic conditions in the country, among others.

Batas Pambansa Bilang 72, passed on June 11, 1980, further accorded the PNSO the authority to conduct population censuses every 10 years beginning in 1980 without prejudice to the undertaking of special censuses on agriculture, industry, commerce, housing, and other sectors as may be approved by the National Economic and Development Authority (NEDA).

Executive Order No. 121, otherwise known as the *Reorganization Act of the Philippine Statistical System*, which was issued on January 30, 1987, declared that the NSO shall be the major statistical agency responsible for generating general-purpose statistics and for undertaking such censuses and surveys as may be designated by the National Statistical Coordination Board (NSCB).

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III. Resources

The conduct of 2010 CPH will be funded in whole by the National Government subject to availability of funds. But due to the huge requirement of resources, there are plans to solicit public and private sectors sponsorships. The plan will include identification of potential donors for the census, and strategies on coordination mechanism to solicit assistance from various government agencies in terms of logistics and fund sourcing. Local government units, as one of the major users of census data, will also be sought for assistance in the publicity campaign, information drive and transportation for the shipment of census materials at the municipality level. Another strategy is to acquire a corporate sponsorship or a donor agency that will shoulder the cost of other activities of the census like the publicity and campaign drive. Assistance from private sector and international organizations shall also be sought.

IV. Plans for 2010 CPH

A. Coordination Mechanism

The PNSO Central Office will coordinate with all the departments and agencies at the national level while the field offices will be responsible for setting-up a coordinating mechanism and implementing activities at the local level. The following assistance will be sought to these agencies:

- Transport and communication facilities
- Publicity and information campaign
- Agency-specific tasks such as release of funds, enumeration of Filipinos employed in embassies and missions abroad, military camps, tribal population, institutional population, calamity-affected areas, relocation centers, legal assistance, security and advice on peace and order situations and medical support
- Training venues and facilities
- Personnel as additional trainers and supervisors

Within PNSO, the following units will be formed specific for the 2010 CPH to serve as the census operation center at the Central Office, Regional and Provincial Offices, namely; 2010 Census Project Staff, 2010 Regional Project Staff, and 2010 Provincial Project Staff, respectively. With the creation of these units, all communications and problems encountered during enumeration will be acted upon immediately. The staffs in these units will be relieved from their respective assignments to devote their full-time on census matters until the completion of the census operation.

Outside the PNSO, there will be creation of census boards at the different geo-political levels, namely; region, province, city and municipality. They will be organized by the Provincial Statistics Officers and District Statistics Officers of the PNSO in order to have an inter-agency cooperation and involvement in carrying out the huge task of census taking at the local level. Some of the assistance that may be asked from these boards are:

- Transport and communication facilities
- Security
- Publicity and information campaign

- Settling boundary disputes

B. Variables/Data Items to be Included

One important activity during the preparatory phase of a census undertaking is the selection of items to be included in the census questionnaire. The following will be the proposed list of variables to be included for the 2010 CPH:

1. Population Variables

Demographic Characteristics:

- Name
- Relationship to Household Head
- Family Nucleus
- Date of Birth
- Birth Registration to Local Civil Registrar Office
- Age as of Last Birthday
- Sex
- Marital Status
- Religious Affiliation
- Citizenship

Socio-Economic Characteristics

- Whether Overseas Workers
- Ethnicity
- Functional Difficulty
- Residence 5 Years Ago
- Highest Educational Attainment
- Literacy
- School Attendance
- Place and Type of School
- Usual Activity/Occupation
- Kind of Business or Industry
- Place of Work and Class of Worker

Other Variables:

- Upland/Forestland Population
- Number of Children Born Alive and Still Alive and Number of Children Born Alive from May 1, 2009 to April 30, 2010
- Age at First Marriage
- Language/Dialect Generally Spoken

2. Housing Variables

- Type of Building/House
- Construction Materials of the Roof
- Construction Materials of the Outer Walls
- State of Repair
- Year Building/House Built
- Floor Area of the Housing Unit

- Tenure Status of the Lot and Housing Unit
- Fuel for Lighting and Cooking
- Source of Water Supply for Drinking and/or Cooking, for Laundry and/or Bath
- Acquisition of Housing Unit
- Sources of Financing
- Monthly Rental of Housing Unit and/or Lot
- Usual Manner of Garbage Disposal
- Kind of Toilet Facility
- Presence of Household Conveniences
- Land Ownership

These sets of variables will be contained in either short or long form of census questionnaire, that is, for common household questionnaire or sample household questionnaire.

C. Consultation with Data Users

Series of consultative meetings between the PNSO and the data users will start in 2007. The objectives of the meetings are as follows:

- To come up with a list of priority items to be included in the census
- To standardized the definitions and categories to be utilized for specific items in the questionnaire

These meetings will not be limited at the national level but will also be undertaken at the sub-national level, as the census is the only official source of lower level data. Letters will also be sent to data users to inquire about their data needs.

D. Coordination with Partner Agencies

Coordination will be done at the national level with the partner agencies like the National Commission for Indigenous Peoples (NCIP), the Department of Environment and Natural Resources (DENR) and the National Council for the Welfare of Disabled Persons (NCWDP) for the discussion of concepts, finalization of items and other information needed for the questionnaires and manuals of instructions, in preparation for the training and enumeration. The reason for this coordination will be for the improvement of data collection on ethnicity and functional difficulty, and for inclusion of forestland in the 2010 CPH. The PNSO field offices will also coordinate with their corresponding field offices.

E. Census Publicity

An important phase in any census undertaking is the publicity campaign. This is necessary since cooperation among all sectors of society is the key factor in the success of the census taking. The following activities will be conducted in 2009 in line with the 2010 CPH publicity and information campaign:

- Printing and dissemination of the 2010 CPH primer in major local dialects;
- Printing of 2010 CPH poster; and
- Conceptualization and production of other publicity materials.

A similar set-up done in the 2000 CPH publicity strategies will be employed for the 2010 CPH wherein an agency will be tapped to take the lead role in the publicity and information campaign. There will be conceptualization and development of campaign materials, i.e., posters, streamers, primers and t-shirts. CPH logo and slogan will be included in the letterhead of the office. Translation of the primer into local dialects will also be done.

F. Training for Field Operations

Training techniques in the previous censuses like the conduct of trainers' training before the actual training for census field operations will be utilized.

The pyramidal structure being employed by PNSO in conducting the training of personnel involved in the field enumeration will be adopted as it has proven to be an effective technique. The training will be conducted in four levels with subject matter specialists, as the main trainers on the first level of training and selected participants on the first level of training will become trainers for the next levels of training.

Aside from the training techniques used in the previous censuses (i.e., use of visual aids such as posters, flipcharts and blown up census questionnaire, and conduct of mock interviews and field practice); the PNSO will also explore the possibility of using multi-media such as television, video, and other adult learning techniques and media.

G. Training of Key Staff About the Census and Demographic Statistics

In order to strengthen the capability of PNSO personnel who will be involved in the census, the following trainings shall be conducted:

- Training of trainers;
- Evaluation of census results;
- Training on the art of interviewing;
- Analysis of census results;
- Statistical tools for analysis and evaluation;
- Mapping
- Publicity and information dissemination strategies
- Technical report writing

To realize the said trainings, technical support from both the local and international organizations shall be sought.

H. Census Work Calendar

For an efficient conduct of a census, preparatory activities shall commence at least three years prior to the census year. Moreover, the timetable of activities shall be strictly followed in order not to delay each phase of data collection. In 2007, among the major preparatory activities, which will be undertaken, is the delineation of census enumeration areas (EAs) and preparation of EA maps. Also, the series of training modules for the census operations for the PNSO personnel shall commence in 2007. It will be also in this year that consultation with data users will be started. Development of questionnaires and preparation of manual of instructions, including the pre-testing of these materials shall be scheduled in 2008. Pilot testing and finalization of the Questionnaires and Manuals shall be undertaken in 2009.

I. Delineation and Mapping of Enumeration Areas

Preparation of maps for the entire census operation will involve various stages – updating of barangay list, verification of areas and significant landmarks, ocular inspection of the areas to be delineated, delineation of EAs, preparation of sketch maps and reproduction of maps to be used during the actual census. For the 2010 CPH, these maps will be digitized where important landmarks will be incorporated. There will be consultative meetings with the field office staff to improve and develop more efficient procedures for delineation and mapping activities. A field operation to delineate large barangays will be conducted throughout the country. The PNSO-Central Office staff will closely supervise the operation. This plan shall include the use of Global Positioning System (GPS) in order to plot important landmarks. There will also be a series of training for the preparation of maps and the use of GPS to be conducted with the field office staff as participants.

J. Testing of Census Materials and Procedures

Several pretests will be conducted to test the design, format, and items of the census questionnaires together with the instructions manual. In addition, the conduct of pretests will determine the interview time allotted for a household, which will be used in the computation of the workload for enumeration. One year before the actual census, a pilot test will be conducted to test all census materials that will be used for the entire census operations. Moreover, all procedures and data processing set-up will be tested in the pilot census in order to identify problems, issues, and concerns that may arise during the actual field operation. Its conduct is essential as a dress rehearsal for a nationwide census.

K. Quick Count Operation

Quick count operation will be employed during enumeration to keep track of the progress of enumeration and to verify as early as possible areas, which are over- and under-enumeration. The Quick Count System will be developed in which selected demographic indicators from previous censuses will be stored for quick evaluation both by central and field offices. Quick count through text messaging using a mobile phone

will also be implemented in the 2010 round of census to speed up the reporting system from the field.

L. Enumeration including Enumeration of Group Quarters, Nomads, Homeless Population, and Transient Population

A Census Working Group on Special Areas will be created to identify strategies that will be adopted during the actual field enumeration. This group will be responsible for the field operation plan of special groups such as the Chinese community, residents living in posh and exclusive barangays, as well as residents in critical areas due to peace and order situation.

The use of Self Administered Questionnaire will be employed to enumerate households residing in high-rise condominiums, barangays, subdivisions, and Chinese communities. The PNSO will also explore the use of E-questionnaire through the PNSO website in gathering data for these households.

M. Data Processing

Processing of census questionnaires will consist of manual and machine processing. The provincial office will be responsible for the manual processing which will involve verification of geographic identification and completeness of forms, checking for consistency between data items and completeness of entries, checking and coding of write-in entries, checking for legibility of entries, and bundling or packaging of forms for transmission. The Regional Office, on the other hand, will be responsible for the machine processing. Imputations of missing entries and summarization of data according to predetermined table format, further evaluation and final tabulation will be done at the Central Office.

Improvement in data processing will be one of the main concerns for the coming census. For 2010 CPH, the initial proposal for data processing is the use of traditional data entry due to lack of equipment for scanning. The processing set-up with the use of Intelligent Character Recognition (ICR) technology will require 17 scanners with licensed Eyes and Hands for Forms (EHF) software to be provided for all regions in the country. However, this set-up will entail huge financial resources as compared to procurement of additional computers and printers if data entry, which is considered to be less costly.

Hence, the PNSO will concentrate its efforts in looking for alternative and viable options in data processing to augment the resources that will be provided for the census.

N. Sampling Design

Two types of questionnaires will be used for the enumeration of household members. These are CPH Form 2 or the Common Household Questionnaire (short form) and CPH Form 3 or the Sample Household Questionnaires (long form). In previous censuses, the procedure to select sample households for administering CPH Form 3 was through a systematic sampling with clusters as the sampling units. Under this scheme, the households in an EA are grouped in clusters of size five. Clusters are

formed by grouping together households that have been assigned consecutive serial numbers in the listing of households. The sampling rate varies from one EA to another, which can either be 100 percent, 20 percent, or 10 percent.

O. Production and Dissemination of Results

Aside from the six main reports, special reports, releases and studies on specific topics, press releases, and fact sheets will be prepared, research studies will also be undertaken after the census to improve the quality of data, methodology and procedures of census taking. The census raw data that contain individual records of the population will be available in Public Use File (PUF) where users can generate statistical tables down to barangay level.

Dissemination activity will be conducted at the national, regional and provincial levels with participants from the national and local government offices, academe, press and media, non-government organizations and other concerned agencies. Dissemination will present highlights and use of census data to local planning, inform data users on the types of census products available at PNSO, and demonstration on how to access and generate tables using the census PUF.

P. Financial Requirements

The proposed budget for the 2010 CPH amounts to P2.7 billion. Below are the details of the proposed budget by major activity.

Activity	Budget (in million Pesos)
1. Coordination	3.7
2. Publicity and Campaign	20.0
3. Printing of Forms and Manuals	328.0
4. Training	378.6
5. Enumeration and Supervision	1,759.9
6. Quick Count	10.0
7. Miscellaneous	11.9
8. Manual and Machine Processing	130.9
9. Publication	25.0
10. Dissemination	1.4
Total	2,699.4

Q. Manpower Requirements

Almost 93 thousand personnel will serve as census enumerators, supervisors and processors for this undertaking; most are data collectors (enumerators). With an estimated population of 94 million and estimated households of 18.4 million by year 2010, the computed manpower requirements for the 2010 CPH is as follows:

Participating Personnel	Number of Personnel
Total	93,872
Central Office Staff	150
Regional Office Staff	67
Provincial Office Staff	330
District Statistical Officer/Statistical Coordination Officer	700
Census Area Supervisors	1,714
Team Supervisors	15,582
Enumerators	70,829
Processors	4,300
Others (additional contractual staff)	200

V. Concluding Remarks

The multi-dimensional task of conducting the 2010 CPH in the Philippines will coincide with the world census program. In the country, the PNSO will take the lead in the conduct of 2010 CPH with the assistance and support of several government agencies, local government units, and the private sector. Careful planning and implementation of the census activities are necessary so as not to waste huge resources it will require. Definitions of terms, concepts and operational procedures shall be balanced between national practice and international recommendations. Uniform standards for quality control shall be set across the different phases of data collection across the country.

Challenges lie ahead for the PNSO in the planning and conduct of census. We will start with the preparatory activities in 2007 by conducting users fora to determine the data needs. The delineation of EAs for the 2010 CPH will also begin in 2007. Detailed technical and operational plans shall also be prepared in order to guide the PNSO in its conduct of the 2010 CPH.

The final output of this enormous endeavour – census results – will definitely offer meaningful information for use not only to provide a snapshot of the counts and characteristics of the Filipinos but also to be used as basis for improving their lives. Success in this undertaking can partly be measured with how widely the census results will be used.