

TECHNICAL NOTES

I. Introduction

The Philippine Statistics Authority conducted the 2020 Census of Population and Housing (2020 CPH) in September 2020, with 01 May 2020 as reference date.

The 2020 CPH was the 15th census of population and 7th census of housing that was undertaken in the Philippines since the first census in 1903. It was designed to take inventory of the total population and housing units in the country and collect information about their characteristics.

The Philippine Standard Geographic Codes as of March 2022 was used for the disaggregation of geographic levels of the 2020 CPH.

II. Data Limitations

The statistics presented in this report were based on the information provided by the respondent or any responsible household member who may provide accurate answers to the questions and give correct information about all the household members. Likewise, the statistics presented are based on responses from a sample that represents about 20 percent of the total households in Marinduque based on the 2020 CPH.

III. Methodology

A. Method of Enumeration

The population and housing censuses in the Philippines are conducted on a “de jure” basis, wherein a person is counted in the usual place of residence or the place where the person usually resides. The enumeration of the population and collection of pertinent data in the 2020 CPH referred to all living persons as of 01 May 2020.

Information on household characteristics contained in this release are based on the information provided by the household respondents and by observation of the enumerator during the data collection of the 2020 CPH. The data were collected using CPH Form 3 (Sample Household Questionnaire) and CPH Form 7 (Self-Administered Questionnaire for Sample Household).

The items for the sample household questionnaire were administered through questions asked by the enumerator, which are as follows:

- a. Usual manner of kitchen garbage disposal (*“How does this household usually dispose of your kitchen garbage such as leftover food, peeling of fruits and vegetables, fish and chicken entrails, and others?”*)
- b. Kind of toilet facility (*“What type of toilet facility does this household use?”*)
- c. Fuel for lighting (*“What type of fuel does this household use for lighting?”*)
- d. Fuel for cooking (*“What kind of fuel does this household use most of the time for cooking?”*)
- e. Source of water supply for drinking (*“What is this household’s main source of water supply for drinking?”*)
- f. Source of water supply for cooking (*“What is this household’s main source of water supply for cooking?”*)

B. Sampling Scheme

The 2020 CPH was carried out using a combination of complete enumeration and sampling. The sampling rate or the proportion of households selected as sample households was 20 percent.

The sampling rate for the city/municipality is applied to all enumeration areas (EAs) in the city/municipality. Each city/municipality was treated as a domain to obtain efficient and accurate population and housing estimates at the city/municipality level. A 20 percent systematic cluster sampling rate was adopted to minimize the enumerator’s selection bias.

In this sampling scheme, an EA was divided into clusters composed of five households each. Clusters were formed by grouping five households assigned with consecutive numbers as they were listed. A sample selection of one in every five clusters of households was carried out, with the first cluster selected randomly. A random start was predetermined for each EA.

C. Estimation Procedure

The estimation procedure produces a set of household weights. The weights for each sample household corresponds to the number of households that the total household represents. These weights are applied to the sample data to produce estimates from the sample questionnaire. Estimates are summary measures calculated from the sample for various characteristics of interest.

Household weight is computed at the city/municipal level. Compute the household weight as the inverse of probability of inclusion at the city/municipality level.

This can be done by determining the probability of inclusion for each city/municipality and then taking the inverse of this probability.

The inverse of probability of inclusion is computed as

$$HHwgt_i = \frac{N_i}{n_i},$$

where N_i is the total number of households in the i -th city / municipality, n_i is the total number of sample households in the i -th city / municipality, and $HHwgt_i$ is the household weight for all households in the i -th city / municipality.

The computed household weight at the city/municipality level was further calibrated to ensure that the resulting tables will conform to that of the household distribution in terms of tenure status of the housing unit/lot.

IV. Concepts and Definitions of Terms

Household

A household is a social unit consisting of a person living alone or a group of persons who sleep in the same housing unit and have a common arrangement in the preparation and consumption of food.

Homeless

Homeless refers to individuals or households living in the streets or public spaces (such as parks and sidewalks) and all without shelter. For 2020 CPH, those homeless or persons living in the street or public spaces who have no usual place of residence or are not certain to be enumerated elsewhere were listed where they were found.

Usual Manner of Kitchen Garbage Disposal

The proportion of households with access to sanitary garbage disposal provides knowledge of the population's environmental living conditions. Health planners need to formulate plans and programs for general health conditions. If the household has various ways of disposing its kitchen garbage, the manner in which the kitchen garbage is disposed most of the time was reported by the household.

Kind of Toilet Facility

Data on the kind of toilet facility provide the minimum data required for evaluating toilet facilities in housing units available to households. A sanitary toilet facility is necessary to prevent diseases and improve the general health condition of the household members. Likewise, the presence of sanitary toilet facilities indicates the sanitation as well as the economic status of the household.

Fuel for Lighting

The proportion of households with access to electricity will allow planners to identify areas where community lighting needs to be provided. Data on fuel types for lighting can be analyzed to forecast future demands for various energy sources, hence, helping to plan for power installations. If two or more types of fuel for lighting, except electricity (for instance, kerosene and oil, oil and candle, and other combinations), the type of lighting used most of the time was reported by the household.

Fuel for Cooking

Information on fuel for cooking is relevant in assessing energy planning decisions, energy conservation programs, and developing marketing strategies. It also serves as a benchmark for studying changes in household energy use and patterns over time. Likewise, it helps monitor supply and demand requirements for alternative fuels. If two or more kinds of cooking fuel are used (for instance, electricity and LPG, LPG and wood, kerosene and charcoal, and other combinations), the fuel used most of the time for cooking was reported by the household.

Source of Water Supply for Drinking and Source of Water Supply for Cooking

Information on the main source of water supply for drinking/cooking provides the number of households with ready access to potable water supply and the availability of piped water for each housing unit. The provision of a piped water installation to every housing unit is one of the primary objectives of a sound housing policy and public health policy. If there are two or more sources of water supply for drinking and cooking, the source used most of the time during the past 12 months was reported by the household.

V. Dissemination of Results

The 2020 CPH Press Release and statistical tables are publicly available at the PSA website, <https://psa.gov.ph/population-and-housing>.