

## **TECHNICAL NOTES**

### **Internet Access and Use by Households in the MIMAROPA Region (2020 Census of Population and Housing)**

#### **I. Introduction**

The Philippine Statistics Authority (PSA) conducted the 2020 Census of Population and Housing (2020 CPH) in September 2020, with 01 May 2020 as the 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 an inventory of the total population and housing units in the country and collect information about their characteristics.

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

#### **II. Data Limitation**

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 the 20 percent of the total households based on the 2020 CPH.

#### **III. Methodology**

##### **III.1. 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 item for the sample household questionnaire was administered through questions asked by the enumerator, which is as follows:

1. Household Conveniences/ICT Devices/Vehicles (*“Does this household have the following household conveniences/devices/ vehicles in working condition?”*)

Household conveniences

- a. Refrigerator/freezer
- b. Stove with oven/gas range
- c. Microwave oven
- d. Washing machine
- e. Air conditioner
- f. Electric fan and other cooling equipment

ICT Devices

- a. Radio/radio cassette (AM, FM, and transistor)
- b. Television
- c. CD / VCD / DVD player
- d. Audio component / stereo set / karaoke / videoke
- e. Landline / wireless telephone
- f. Mobile phone
- g. Tablet
- h. Personal computer (desktop, laptop, notebook, netbook, and others)

Vehicles

- a. Car/van/jeep/truck
- b. Motorcycle/motor scooter/tricycle
- c. Bicycle/pedicab
- d. Motorized boat/banca
- e. Nonmotorized boat/banca

### III.2. 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.

### III.3. 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 Definition of Terms

### Household

This refers to a social unit consists of a person or a group of persons who sleep in the same housing unit and have a common arrangement in preparing and consuming 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 listed where they were found.

## **Presence of Household Conveniences / Information and Communication Technology (ICT) Devices / Vehicles**

This item provides information on selected housing conveniences, information, and communications technology (ICT) devices, and vehicles, the presence of which in the household indicates the means of communication through which the population can be most easily reached. This also provides a basis for leisure statistics. The presence of vehicles in the household provides data about access to private transport. It can also provide information for the construction of roads/bridges and solution to traffic problems.

In general, the presence of household conveniences/devices can be used as proxy indicators in determining the socio-economic status of the household.

Excluded are household items which have not been in working condition for six months or longer (although intended to be repaired).

Also excluded are vehicles (car / jeep / van / truck, motorcycle / motor scooter / tricycle, bicycle / pedicab, motorized banca / boat or nonmotorized banca / boat) which are used exclusively for business purposes.