CBMS Handbook

Celia M. Reyes
Anne Bernadette E. Mandap
Jasminda A. Quilitis
Joel E. Bancolita
Marsmath A. Baris, Jr.
Novee Lor C. Leyso
Steffie Joi I. Calubayan

CBMS METHODOLOGY | DATA COLLECTION | DATA PROCESSING | POVERTY MAPPING
CBMS Handbook
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Eighteen years after it was pilot-tested in Pandi, Bulacan, the Community-Based Monitoring System (CBMS) methodology continues to make lasting impacts even as it evolves amid an ever-changing local development context. Currently, it has already been implemented in more than half of the country’s barangays and municipalities, a testament to how it has effectively responded to the demand for a system that can provide a reliable and credible information base for policymaking, program design, and impact monitoring.

Undoubtedly, the CBMS would not enjoy the success it continues to experience now without the support of local government units who invest in the system and provide valuable inputs not only on the design and implementation of the methodology but on its wide scope of concrete and potential uses as well.

The CBMS has also benefited tremendously from the outstanding contributions of national government agencies – notably, the Department of the Interior and Local Government (DILG), National Anti-Poverty Commission (NAPC), and National Economic and Development Authority (NEDA) – toward efforts at addressing information gaps in development planning at the local level.

To ensure comparability and consistency with the statistics produced by national government agencies, the CBMS uses concepts and definitions of indicators that are similar to what these agencies have. The CBMS International Network Coordinating Team is therefore grateful to the Philippine Statistics Authority (PSA) and National Nutrition Council (NNC) for allowing us to use official codes from their standards and classification systems.

Numerous individuals, nongovernment organizations and development partner agencies have also contributed resources and valuable insights to the distillation of the CBMS thought and methodology and we would like to thank them collectively.

Finally, the significant headways that CBMS has made over these years would not have been possible were it not for the support of the International Development Research Centre (IDRC) of Canada which has helped us conceive and nurture the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP) Project which spawned into the CBMS Project. We are also grateful for the support of the Canadian International Development Agency (CIDA) in the enhancement of the CBMS methodology; the Department for International Development (DFID) of the United Kingdom in the development of the CBMS Accelerated Poverty Profiling (APP); and the Australian Agency for International Development (AusAID) in the development of the CBMS climate change module.
Preface

While the core community-based monitoring system (CBMS) methodology has remained the same, certain facets of the system have evolved and dramatically changed over the years in response to technological advances as well as changing data requirements of local government units. The Household Profile Questionnaire, for instance, has undergone several revisions owing to emerging issues and data needs at the local level. Recently, there has also been a shift from the traditional paper and pen approach to tablet-based data collection. The data processing system which originally used manual tally sheets was discarded in favor of computerized tabulations. Poverty mapping, or the spatial representation and analysis of indicators of human wellbeing, was also eventually incorporated into the system which proved useful in actively engaging policymakers in a robust dialogue on these important issues. The uses of the CBMS data have expanded from poverty monitoring and budget planning and evaluation to tracking the Millennium Development Goals and monitoring household shocks. No matter the period and how diverse the social milieu it finds itself in, what is for certain is that the CBMS has provided a richer body of information and data on the welfare of the poor.

This CBMS Handbook is the product of the distillation of the CBMS thought and methodology over the years. An electronic version of this handbook was made available online in 2008 on the CBMS section of the Partnership for Economic Policy (PEP) Research Network’s website. However, this is the first time that handbook will be published in book form.

The handbook is further subdivided into four parts. Part 1 presents a comprehensive overview of the development of the CBMS methodology and the capacity-building that the CBMS International Network Coordinating Team, in collaboration with accredited trainers from Department of the Interior and Local Government and National Anti-Poverty Commission, provides to its LGU partners. Part 2 focuses on the data collection process while Part 3 covers the data processing system: from encoding of accomplished household profile questionnaires to doing simple computations and tabulations using the CBMS Statistics Simulator. Part 4 provides a comprehensive introduction into the use of the QGIS software in digitizing spotmaps for the CBMS database up to its final output: the CBMS poverty maps.

Overall, the handbook aims to equip end users with a comprehensive understanding of the CBMS process and a better appreciation of its importance in providing reliable and credible information base for policymaking at the local level.
Part 1
Community-Based Monitoring System in the Philippines

Celia M. Reyes
Anne Bernadette E. Mandap
Jasminda Asirot-Quilitis
Joel E. Bancolita
Marsmath A. Baris, Jr.
A. Background

Poverty reduction remains to be one of the biggest challenges faced by the Philippines. Not surprisingly, the country has adopted poverty reduction as the main goal of all its development efforts. However, to wage a successful fight against poverty, it is important to know the nature and extent of poverty—who the poor are, where they are, and why they are poor.

Meanwhile, the effects of structural and stabilization policies on the vulnerable groups, along with other global shocks, further add pressure to the challenge of poverty reduction. In the early 1990s, a research initiative on the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP) examined this concern and pointed out the lack of information, monitoring, and feedback system to assess the impact of macro adjustment policies at the micro level (Lamberte et al. 1991). While there are regular and timely data on macro variables, there is no systematic and regular collection of information to monitor the poverty situation. Among the tools developed and recommended by MIMAP to address this concern is the community-based monitoring system (CBMS), which aims to provide a regular source of information for policymaking, program design, and impact monitoring.

The design of CBMS evolved from a review of existing monitoring systems conducted by Reyes and Alba (1994). Although there are a number of existing monitoring systems, this study found them mostly limited to small geographical areas. Data being collected are almost similar if not redundant to health and nutrition data, which are present in many monitoring systems. There was no attempt to consolidate data from the different areas thus the use of the data has been very limited. Moreover, time-series data on socioeconomic variables were not available even for barangays with long-running monitoring systems. It was noted that, generally, the collection of data among the existing systems reviewed were co-terminus with the lifetime of a specific program or project.

Drawing from the strengths and weaknesses of existing monitoring systems, Reyes designed the CBMS that will tap the capabilities of local government units (LGUs) to collect, process, analyze, and use household and community data to ensure sustainability of the monitoring system (Reyes and Alba 1994). Moreover, instead of sentinel sites as proposed earlier by Florentino and Pedro (1992), as part of MIMAP Phase I Project, the proposed CBMS is designed to be implemented by all local government units as part of their regular functions. The CBMS was designed to complement the existing national statistical system on poverty monitoring by addressing information gaps at the local level. It was also intended as a tool to empower LGUs and communities by supporting their greater role and accountabilities in the decentralization process.

Sections B and C of this paper provide a backdrop on the state of poverty monitoring and decentralization in the country at the time of the development of the CBMS.

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1 Some sections of this paper have been drawn from earlier research and technical papers written by the CBMS International Network Coordinating Team.
An initial design of the CBMS was pilot-tested in 1995 (Reyes and Ilarde 1996). It was first adopted as a tool for local planning by the Provincial Government of Palawan in 1999 (Mandap 2001). From thereon, the CBMS has been adopted by several LGUs in the country as a tool for poverty diagnosis, local planning and budgeting, program design and implementation, and for monitoring the Millennium Development Goals (MDGs) as a country commitment to the United Nation’s blueprint for development, which is agreed upon by all the world’s countries and all leading development institutions. This paper, thus, documents the development of the CBMS and some of its applications in the Philippines. A timeline of significant CBMS milestones is presented at the end of this paper.

B. State of Poverty Monitoring in the Philippines

Data on the different dimensions of poverty in the country are traditionally obtained from national censuses and surveys conducted by the former National Statistics Office (NSO), now Philippine Statistics Authority (PSA), as shown in Table 1. These surveys and censuses, however, are conducted infrequently and at irregular intervals. Moreover, they are conducted at different time-periods making it impossible to have a comprehensive picture of the different dimensions of poverty at a particular point in time. Thus, it is difficult to determine if the ones who are poor based on income are also poor in terms of literacy, nutrition, and housing, among others.

It must be noted that data from these sources are very much aggregated. The available national, regional, and sometimes provincial data are not sufficient to meet the demands of LGUs, particularly cities/municipalities and barangays, which need disaggregated information to diagnose poverty at the local level and to identify appropriate interventions.

Overtime, there has been greater emphasis on targeted programs because of limited financial resources to implement poverty reduction assistance programs. For instance, several programs of national government agencies such as the PhilHealth—a government subsidized health insurance program for indigents—and of LGUs such as livelihood and scholarship programs, are intended for the poor. Unfortunately, data are not available to support such targeting schemes. Consequently, there have been difficulties in identifying eligible beneficiaries. When disparities are large within municipalities/cities and barangays, pure geographic targeting is not enough. Geographic targeting can be used as the first step in prioritizing areas, but targeting at household/individual level is needed to minimize leakages and reduce exclusions.

<table>
<thead>
<tr>
<th>Available Sources of Data</th>
<th>Implementing Agency</th>
<th>Frequency of Collection</th>
<th>Data Obtained</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Income and Expenditures Survey (FIES)</td>
<td>National Statistics Office (NSO)</td>
<td>Every 3 years</td>
<td>Family income and living expenditures and related information affecting income and expenditure levels and patterns in the Philippines, including poverty incidence</td>
</tr>
<tr>
<td>Annual Poverty Indicator Survey (APIS)</td>
<td>NSO</td>
<td>Every year when the FIES is not conducted</td>
<td>Socioeconomic profiles of families and other information relating to their living conditions but not poverty incidence</td>
</tr>
<tr>
<td>National Nutritional Survey (NNS)</td>
<td>Food and Nutrition Research Institute (FNRI)</td>
<td>Every 5 years</td>
<td>Food situation and nutritional status of the population</td>
</tr>
<tr>
<td>Census of Population and Housing (CPH)</td>
<td>NSO</td>
<td>Every 10 years</td>
<td>Size, composition, and distribution of population in the Philippines</td>
</tr>
<tr>
<td>Functional Literacy, Education and Mass Media Survey (FLEMMMS)</td>
<td>NSO</td>
<td>Irregular</td>
<td>Number of functionally literate population and their socioeconomic characteristics</td>
</tr>
<tr>
<td>National Demographic and Health Survey (NDHS)</td>
<td>NSO</td>
<td>Every 5 years</td>
<td>Demographic, maternal, and child health issues in the Philippines</td>
</tr>
<tr>
<td>Labor Force Survey (LFS)</td>
<td>NSO</td>
<td>Every quarter of the year</td>
<td>Levels and trends of employment, unemployment and underemployment</td>
</tr>
</tbody>
</table>
C. Decentralization Policy and Local Governance Structure

The passage of the Local Government Code (LGC) in 1991 represented a major step in decentralization in the Philippines. Before the LGC, the LGUs’ main functions were levying and collection of local taxes; regulation of business activities; and administration of garbage collection, public cemeteries, public markets, and slaughterhouses. The LGC paved the way for increased local autonomy, expenditure responsibility, and revenue authority. In particular, the principal responsibility for the delivery of basic social services and the operation of the facilities were devolved to LGUs. The devolved areas are agricultural extension and research, social forestry, environmental management and pollution control, primary health and hospital care, social welfare services, repair and maintenance of infrastructure, water supply and communal irrigation, and land use planning. Consequently, personnel of national government agencies (NGAs) who were doing these tasks before the passage of the LGC were devolved to the LGUs.

The LGUs were also given the authority to collect taxes to be able to generate resources to complement the Internal Revenue Allotment (IRA) that they get from the national government. A new scheme was devised to determine the share of LGUs from the revenues collected by the national government and this is based primarily on population and land size.

Likewise, the Social Reform and Poverty Alleviation Act of 1997 gave the LGUs the frontline role in the fight against poverty. The law mandates the LGUs to be responsible for the formulation, implementation, monitoring, and evaluation of the Anti-Poverty Reduction Agenda within their areas of jurisdiction.

In the Philippines, there are five geopolitical levels. A region is a subnational administrative unit comprising several provinces and having more or less homogenous characteristics such as ethnic origin of inhabitants, dialect spoken, and agricultural produce, among others.

The province is the largest unit in the political structure and is headed by an elected governor. It consists, in varying numbers, of municipalities and, in some cases, of component cities. Its functions and duties in relation to its component cities and municipalities are generally coordinative and supervisory.

The municipality/city is a political corporate body endowed with the facilities of a municipal/city corporation and exercised by and through the municipal/city government in conformity with law. The municipality is headed by an elected mayor. It is a subsidiary of the province, which consists of a number of barangays within its territorial boundaries, one of which is the seat of government found at the town proper (poblacion). There are three classes of cities in the Philippines: (i) the highly urbanized city, (ii) the independent component city that is independent of the province, and (iii) the component city that is part of the province where it is located and is subject to its administrative supervision.

The barangay is the smallest political unit that generally comprises cities and/or municipalities. It consists of less than 1,000 inhabitants residing within the territorial limit of a barangay and administered by a set of elective officials headed by a barangay chairman (punong barangay).

As of September 2014, the Philippines has 17 regions, 81 provinces, 144 cities, 1,490 municipalities and 42,029 barangays or villages.

Implementation of targeted programs has been a major weakness of most LGUs in the country as they lack reliable and credible baseline data, particularly poverty statistics. LGUs still rely on centrally produced data from the National Statistics Office (NSO) and the National Statistical Coordination Board (NSCB) for their planning. These data, however, are not disaggregated at the municipal/city government and barangay government levels—the lower level LGUs that are primarily at the forefront of policy or program execution—hence, the difficulty of accurate targeting and proper programming.

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3 The Philippine Statistics Authority (PSA) was created by virtue of Republic Act No. 10625 otherwise known as the Philippine Statistical Act of 2013. It combined together the following statistical agencies: National Statistics Office (NSO), the National Statistical Coordination Board (NSCB), the Bureau of Labor and Employment Statistics (BLES), and the Bureau of Agricultural Statistics (BAS).
A. The Role of CBMS

The community-based monitoring system (CBMS), as shown in Figure 1, seeks to address the existing gaps in data at the local level to diagnose the extent of poverty at that level, determine the causes of poverty, formulate appropriate policies and programs, identify eligible beneficiaries, and assess the impact of policies and programs. It also supports the decentralization process by capacitating LGUs to collect, process, validate, analyze, and use data in local planning and program implementation.

FIGURE 1. Administrative Structure, Information Availability, and CBMS

Features of the CBMS

The CBMS was designed as an organized way of collecting, processing, and validating data at the local level and encourages the use of such data in local level planning and program implementation while empowering communities to participate in the process.

The CBMS has the facilities to generate individual and household-level data on the different dimensions of poverty to facilitate evidence-based policymaking and program implementation. CBMS data can be also processed at the barangay, municipal/city, and provincial levels.

The CBMS is also intended to support the greater role of LGUs in the decentralization process. It builds the capacities of LGUs to develop appropriate policies and programs that meet the needs of the people.

The CBMS has the following key features:

1. **CBMS is an LGU-based tool that promotes community participation.**

   The LGU takes the lead in the adoption and implementation of the CBMS. Focal persons from the LGU are involved in each step of the CBMS process. The LGU has primary access and ownership of the database of their locality. The LGU also serves as the immediate repository of its database for use in the formulation of its development and investment plans. Members of the community are likewise involved and trained in data collection, processing, validation, analysis, and in the use of CBMS data for the formulation of local development programs.

   The CBMS empowers the communities by ensuring their participation in diagnosing poverty and identifying appropriate interventions. It builds the capacity of local governments in using poverty statistics for their development plans and in the formulation of poverty reduction programs and projects.

   This feature of the CBMS establishes a sense of ownership of the system among the LGUs and makes it sustainable.

2. **CBMS taps existing LGU personnel and community volunteers to act as monitors.**

   The CBMS taps local personnel to do the data collection, processing, validation, and analysis of the data.
The Provincial Planning and Development Office, Municipal Planning and Development Office, or City Planning and Development Office of the LGUs act as oversight units in the implementation of the CBMS process, and in the maintenance and management of the database. Local enumerators and data processors, who are based in the communities, are identified based on a given criteria and are trained on the use of the CBMS data collection and processing instruments.

As shown in the CBMS flow of information (Figure 2), coordination among the different levels of government is very important.

3. **CBMS has a core set of indicators.**

There are 14 core indicators (Table 2) that are being monitored by the CBMS to determine the welfare status of the population. These indicators capture the multidimensional aspects of poverty and have been confined to outcome and impact indicators. Since the CBMS was designed to be LGU-based, it is important that indicators are easy to collect and process at the local level. Data is collected through a census of all households in the community undertaken by trained local enumerators and data processors.

The system is flexible and can accommodate community-specific indicators and other development concerns, such as those on community/ political participation, environment and risks of disasters and climate change, indigenous peoples, persons with disabilities, child workers, migration, and access to programs, among others.

While the CBMS monitors a core set of poverty indicators, the system generates a host of data on demography, education and literacy, political participation, economic activity, income sources, assets, agriculture, climate change, and access to infrastructures and social programs among others that are useful for local planning, program design, and implementation.

4. **CBMS involves enumeration of all households.**

The CBMS entails the conduct of a household census to collect information at the household and individual levels. It involves complete enumeration of all households to provide information on not just how poor the barangay or municipality/city/
province is but more importantly, on who and where the poor are.

A census would provide the LGU with a comprehensive profile of households that would allow household and individual-level targeting.

5. **CBMS establishes databanks at all geopolitical levels.**

   The CBMS process was designed in such a way that databanks are established, maintained, and can be accessed at the barangay (village), municipal/city, and provincial levels. In particular, CBMS databases are established at each geopolitical level to facilitate easy access of the data for use in local development planning and program implementation.

   Repository of the CBMS data at the municipal, city, and provincial levels are recommended to be lodged at the planning and development offices/units of the municipality, city, or province.

   At the national level, the Department of the Interior and Local Government (DILG) and the National Anti-Poverty Commission (NAPC) are currently the offices that serve as national repositories of the CBMS data. A national repository can serve as the source of data for identifying the eligible beneficiaries to targeted programs of the national government.

### The CBMS Process

The process of implementing the CBMS is illustrated in Figures 3a and 3b.

1. **Advocacy/Organization**

   This step entails the (i) conduct of orientation and consultation meetings among key LGU stakeholders, (ii) creation of a CBMS technical working group within the LGU, (iii) preparation of a memorandum of agreement (MOA) and work plan, (iv) resource mobilization, and (v) preparation of data and training requirements. The organization of these activities is usually spearheaded by the Provincial Planning and Development Office (PPDO), the Municipal Planning and Development Office (MPDO), or the City Planning and Development Office (CPDO) of the LGUs. In some cases, the LGU creates a technical working group composed of the different heads/designated

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**TABLE 2. The CBMS Core Indicators**

<table>
<thead>
<tr>
<th>Basic Needs</th>
<th>Core Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Health</strong></td>
<td>1 Proportion of children under 5 years old who</td>
</tr>
<tr>
<td></td>
<td>died</td>
</tr>
<tr>
<td></td>
<td>2 Proportion of women deaths due to pregnancy-related</td>
</tr>
<tr>
<td></td>
<td>causes</td>
</tr>
<tr>
<td><strong>B. Nutrition</strong></td>
<td>3 Proportion of children 0–5 years old who are</td>
</tr>
<tr>
<td></td>
<td>malnourished</td>
</tr>
<tr>
<td><strong>C. Housing</strong></td>
<td>4 Proportion of households living in makeshift housing</td>
</tr>
<tr>
<td></td>
<td>5 Proportion of households who are informal settlers</td>
</tr>
<tr>
<td><strong>D. Water and Sanitation</strong></td>
<td>6 Proportion of households without access to safe water supply</td>
</tr>
<tr>
<td></td>
<td>7 Proportion of households without access to sanitary toilet facilities</td>
</tr>
<tr>
<td><strong>E. Basic Education</strong></td>
<td>8 Proportion of children 6–11 years old who</td>
</tr>
<tr>
<td></td>
<td>are not in elementary school</td>
</tr>
<tr>
<td></td>
<td>9 Proportion of children 12–15 years old who</td>
</tr>
<tr>
<td></td>
<td>are not in secondary school</td>
</tr>
<tr>
<td><strong>F. Income</strong></td>
<td>10 Proportion of households with income below the poverty threshold</td>
</tr>
<tr>
<td></td>
<td>11 Proportion of households with income below the food threshold</td>
</tr>
<tr>
<td></td>
<td>12 Proportion of households that experienced hunger due to food shortage</td>
</tr>
<tr>
<td><strong>G. Employment</strong></td>
<td>13 Proportion of persons who are unemployed</td>
</tr>
<tr>
<td><strong>H. Peace and Order</strong></td>
<td>14 Proportion of persons who were victims of crime</td>
</tr>
</tbody>
</table>

*a CBMS core indicators follow official standard definitions used by the Philippine Statistical System.*
representatives of departments within the LGU to collaborate in the conduct of the activities.

Conduct of orientation and consultation meetings of key LGU stakeholders. Advocacy is vital in the CBMS implementation. It involves a series of orientation and consultation meetings among key personnel and stakeholders within the LGU. This is a necessary step toward soliciting the support of the local chief executives—the governors, provincial board members, mayors, municipal councilors, barangay captains, as well as concerned department heads of the LGUs.

Preparation of the MOA. Once the consultation meetings have been completed, and the adoption of CBMS is agreed on by the LGU, a resolution is prepared and passed by the Provincial/Municipal/City Development Council. This becomes the takeoff point for the processing of the MOA with stakeholders for the CBMS implementation. In some LGUs, the governor or mayor issues an executive order to institutionalize the CBMS in the LGU and designates a CBMS Technical Working Group (TWG) to coordinate the smooth implementation of CBMS activities.

The MOA between the LGU and key stakeholders, such as the DILG (central and regional offices), and the CBMS International Network Coordinating Team, is processed prior to the start of the capacity development activities on CBMS implementation. Said agreement serves as a legal document that spells out the commitment of the LGU for the adoption and implementation of the CBMS and of the key stakeholders’ support to the LGU in the process of CBMS implementation. The MOA also sets the expected outputs of the collaboration, the terms of use of the CBMS instruments shared to the LGUs, and the extent of work to be done for the duration of the CBMS implementation by the LGUs. It also includes the timetable and resource requirements and designates the key players and their corresponding responsibilities. More importantly, the MOA signifies the commitment of all concerned groups to carry out their respective roles and responsibilities in the conduct of CBMS activities.

The work plan and timetable of activities is prepared by the PPDO in consultation with a CBMS-TWG in the LGU and the DILG.

The LGU forms the CBMS-TWG, comprising key department officials or their representatives. This group shall ensure the timely completion of planned CBMS activities in the LGU. In most cases, this CBMS-TWG is spearheaded by the Provincial/Municipal/City Planning and Development Office. The TWG, in particular, evaluates the data requirements of the LGU, reviews the existing monitoring systems or sources of data, and identifies data gaps. This entails a review of available sources of needed information in the locality vis-à-vis recent requirements for planning and monitoring. Sources of information may be reviewed on the basis of frequency of data collection, level of disaggregation of data provided, and access to the said information. Common sources of information are administrative reports, socioeconomic profiles, national statistical yearbooks, online databases, and other reports on special surveys conducted by the national government, as well as local and international nongovernment organizations (NGOs).

Once the gaps between data requirements and available sources of information have been identified and assessed, the next step would be to assess how to incorporate these gaps into the core CBMS data collection and processing instruments.

(2) Data Collection

The collection of data under the CBMS process is undertaken through a household census covering all households in all barangays in a particular city, municipality (town), or a province. Trained enumerators from the barangay are tapped to administer the census.

Data Collection Instruments

The CBMS data collection is carried out using two forms: (i) a household profile questionnaire (CBMS Form 1), which is referred to as CBMS-HPQ, and (ii) a barangay profile questionnaire (CBMS Form 2), also referred to as CBMS-BPQ.

The CBMS-HPQ captures household and individual information on various socioeconomic characteristics. It focuses on obtaining information on the CBMS core indicators from households. Demographic and other social characteristics are also captured in this questionnaire. To ensure comparability and consistency with the statistics
produced by national government agencies, the CBMS uses concepts and definitions of indicators that are similar to what these agencies have.

The CBMS-HPQ has two accompanying manuals: an enumerator’s manual and a field editing manual. The former guides enumerators on how to conduct the census. The latter, meanwhile, provides pointers for the trained local enumerators on how to check and review the accomplished household profile questionnaire before leaving the census sites during the field operations.

Another questionnaire that needs to be accomplished is the barangay profile questionnaire (or CBMS-BPQ). This is a 7-page questionnaire that gathers data on the physical and demographic characteristics and available basic services and service institutions in the barangay. The barangay chairman or secretary is the intended respondent for this questionnaire. This form also has a corresponding manual (manual on accomplishing BPQ) that, along with the two manuals for the HPQ, is given during the CBMS training for enumerators as references.

Additional modules for the household and barangay profile questionnaires can be provided to get information on other indicators deemed relevant to the community. These indicators are identified by the community during the evaluation of their existing monitoring systems and information gaps.

Enumerators

The proposed enumerators for the census are the barangay (village) health workers and nutrition scholars. Every village in the Philippines has these two officers. They perform a vital role in the care and monitoring of the nutritional welfare of children who are 0–5 years old. Other community volunteers can be tapped as enumerators depending on the need and size of the population of the community. The census operation is under the supervision of the barangay captain (village head) and other officers of the village.

A basic requirement for the choice of enumerators is that they should be able to write, read, and do simple computations. Enumerators are tasked to completely interview all households in their assigned area or barangay.

The number of enumerators needed in a barangay can be determined by calculating the number of persons needed to finish the census operation in one month (22-man-days) given that an enumerator can accomplish 10 household questionnaires per day. This is the standard procedure. The computation, however, may vary depending on other factors: manpower and financial capacity of the LGU, the household population, and land area that will be covered during the census operation.

CBMS Data Collection Tracks

2.1. CBMS Paper

CBMS PAPER Training Module 1. Paper-Based Data Collection

Enumerators undergo a 3-day CBMS orientation and training program for data collection (see Appendix A). The training covers the following: (i) a general orientation on the background and rationale for CBMS, (ii) procedures and hands-on exercises on the CBMS data collection forms, and (iii) the data collection field operations.

A training of trainers is conducted at the provincial level. The participants are technical staff from the provincial and municipal offices like the planning and development office, social welfare and development office, and local government office. Each LGU can send some 3–5 participants who will act, after this training, as trainers in their respective localities. Box 1 enumerates the role of the CBMS Data Collection Trainers.

<table>
<thead>
<tr>
<th>BOX 1. Role of CBMS Data Collection Trainers</th>
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<tr>
<td>• Conduct the training of enumerators in their respective municipalities.</td>
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<tr>
<td>• Make sure concepts and definitions are well understood by enumerators and supervisors.</td>
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<tr>
<td>• Ready to train additional enumerators or replacement enumerators, if necessary.</td>
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</table>
The training of CBMS enumerators at the barangay level is also a 3-day training program. It is conducted at the municipal level and participants are enumerators from the barangays. Each training should have only 50 participants. If there are more participants than the prescribed number, this training can be done in several batches.

The training is intensive and technical in nature and is conducted using Prezi presentations. In this training, participants are introduced to the CBMS concept and their role as CBMS enumerators is emphasized. They are taught how to conduct an interview and how to systematically carry out the census operation. Box 2 details the contents discussed during the data collection module.

**BOX 2. Content of CBMS Data Collection Training**

- Overview of the CBMS.
- Role of enumerators, team leaders, and supervisors.
- Pointers on how to conduct an interview.
- Field enumeration forms and procedures.
- Concepts and definitions found in the CBMS questionnaires.
- Preparation of spot maps.
- Classroom, field, and field editing exercises.

At the same time, there are also assigned field supervisors from the MPDO and/or PPDO. These officers from the municipality or province supervise and ensure that the enumerators are doing the data collection activity.

Participants are likewise introduced to the field enumeration forms (Barangay Profile Questionnaire [BPQ] and Household Profile Questionnaire [HPQ]) and a step-by-step procedure on how to accomplish these forms. Here, the participants are also introduced to the concepts and definitions so they could fully understand and collect the needed information in the HPQ and BPQ.

Part of the BPQ is the barangay spot map. Here, the enumerators are taught how to construct barangay spot maps. The spot map would be very useful in (i) locating and plotting households in the barangay, (ii) updating the barangays’ household population, and (iii) planning the census operation.

In administering the HPQ, for instance, participants are taught how to collect income from various sources, such as salary and wages, entrepreneurial activities, and other sources of income, and to compute for total income of the households from all identified income sources. During the training, participants are given the manuals for both HPQ and BPQ as references.

The trainings also engage participants in classroom exercises and field exercises to test and hone their skills in asking the questions and tallying the respondent’s answers in the questionnaires. They are also trained to correct their own work by doing field editing procedures so that errors and non-responses can be minimized during enumeration.

Box 3 provides the objectives and details done in each exercise.

**Census Proper**

The census operation usually starts not later than a week after the training has been conducted. The duration of census operations depends on the number of barangay households and the area in which the enumerators have to cover for the census operation. Usually, however, it takes one month, more or less, to finish the census operation in one barangay, given that an enumerator can accomplish 10 questionnaires in one day.

From the pool of enumerators, a barangay team leader is assigned. These team leaders act as coordinators of the census operation at the purok/barangay level. Aside from conducting interviews, the barangay team leaders also act as supervisors.

The barangay team leader is also responsible for the updating the barangay spot maps. The barangay spot map and a masterlist of households are used as guides in locating households in the barangay.

Field supervisors from the MPDO, CPDO, or PPDO are also assigned. These officers supervise and ensure that the enumerators are doing the data collection activity. The duties and functions of the enumerators and field supervisors are explained in detail in the CBMS enumerator’s manual.
2.2 CBMS APP

The CBMS Accelerated Poverty Profiling (APP) entails the organized, systematic and efficient combined use of latest information and communication technology tools and the standard CBMS instruments for data collection (core household profile and village questionnaire), processing (StatSim), poverty mapping and data management instruments.

It was built to fast-track the generation of CBMS results in order to serve as timely inputs in local development planning and budgeting. It uses both web technology and mobile devices to collect household and community data. The collected data are then transmitted to the CBMS web portal that serves both as the data repository and as a hub for managing user accounts and workgroups. By integrating household and global positioning system (GPS) data capture and data entry, the CBMS APP is expected to enhance data collection procedure and data quality.

The key players in the LGU data collection are the CBMS-TWG, together as a team with the field editor, field coordinator, and enumerator. A 5-day CBMS orientation and training program for data collection is organized for the LGU (see Appendix B).

BOX 3. Training Exercises

Objective of the exercises:

- To help enumerators familiarize themselves with the Household Profile Questionnaire.
- To equip enumerators on how to ask questions found in the questionnaire.
- To practice conducting an interview.
- To teach enumerators how to check accomplished questionnaires.

Exercise 1: Classroom Exercise

Participants group themselves into two.
Undertake role-playing exercise—Enumerator and Respondent.
Evaluate the classroom exercise.

Exercise 2: Field Exercise

Conduct actual field interview.
Each participant needs to interview one household.
Evaluate the field exercise.

Exercise 3: Field Editing Exercise

Done during the lecture on field editing.
Participants are asked to check accomplished questionnaires from the classroom and field exercises.

The first day is devoted to the LGU-TWG members only, which covers discussion on the CBMS PORTAL, CBMS-SCAN and concepts of the CBMS-BPQ. The 2nd and 3rd days are devoted to the discussion of concepts and definitions in the CBMS HPQ. The 4th day is a hands-on training in filling up the CBMS form in the Android gadget using CBMS SCAN.

Field exercises and discussion of field operations are discussed on the last day. As such, enumerators should not only be able to write, read, and do simple computations, they should also be computer literate and knowledgeable in Android platform.

Development of CBMS Scan and Portal

Since early 2000s, mobility has been envisioned as the avenue to enhance the efficiency of CBMS data capture. With computerization, the main objective is to directly capture and input the responses in an electronic device. Many hardware protocols were explored and assessed—whether a set of toolset can be more cost-effective compared to a paper-based data collection. Africa (1998) has emphasized the
feasibility of using Handheld Personal Computer (HPC) units for succeeding data collection activities based on the initial experience during the Annual Poverty Indicators Survey (APIS). Short messaging service (SMS) using mobile phones have also been explored to send and receive real-time CBMS data has made a proof of concept for this media for use in web applications. In 2008, Tarlac province has implemented the use of netbooks in Computer-Assisted Personal Interviews (CAPI) through the CSPro. This was followed by Agusan Del Sur’s similar innovation in data collection.

For all these initiatives, the common constraints noted during the period was cost. CSPro Mobile for Windows Pocket PC has been around for a number of years already and the existing CBMS encoding system developed since 2004 can be already deployed using this platform. However, the major deterring factor has been the cost of hardware. For instance, the cost of a netbook is usually less than the cost of a pocket PC, which makes the netbook more attractive for LGUs since it can be reused more for other computing purposes.

The rise of Android OS and the emergence of manufacturers offering competitive pricing opened another avenue for innovation. This was coupled with data connection and other computing devices getting cheaper (e.g., storage and other microchips). This has spawned many mobile applications that can satisfy the needs of a CBMS census. One of them is Open Data Kit (ODK)\(^5\) and the latest beta version of CSPro Mobile for Android.\(^6\)

Several innovations in the past have also refined the CBMS INCT’s envisioned data capture system, which can consolidate and summarize data in real-time through the use of mobile and web technology. In early 2012, the CBMS INCT, through a partnership with the DLS Salle University College of Computer Studies (DLS-CCS), embarked on a development of tools for the CBMS Accelerated Poverty Profiling (CBMS APP) for CBMS INCT partners and country teams. The tools were later named CBMS Scan and Portal (Figure 4).

The development of tools aimed to tailor-fit an accelerated poverty profiling for CBMS implementers using stand-alone and fully customized tools. CSPro Mobile for Android Beta was not yet available at that time, hence, ODK tools were reviewed and tested. In late 2012, the review of ODK by the CBMS INCT has identified specifications as bases for the DLS-CCS team to design a prototype of the whole stand-alone system (Table 3).

<table>
<thead>
<tr>
<th>Aspect</th>
<th>CBMS APP</th>
<th>ODK</th>
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<tbody>
<tr>
<td>Device</td>
<td>Mobile phone, Tablet or Phablet</td>
<td>Mobile phone, Tablet or Phablet</td>
</tr>
<tr>
<td>Client</td>
<td>Scan</td>
<td>Collect</td>
</tr>
<tr>
<td>Backend</td>
<td>Portal</td>
<td>Aggregate (or Formhub) and Briefcase</td>
</tr>
<tr>
<td>Form development</td>
<td>FormGen</td>
<td>XLS / Build</td>
</tr>
<tr>
<td>Data storage and transport format</td>
<td>JSON</td>
<td>XML</td>
</tr>
</tbody>
</table>

\(^5\) [www.opendatakit.org](http://www.opendatakit.org)  
\(^6\) [http://www.csprousers.org/category/android](http://www.csprousers.org/category/android)
The review identified potential improvements and customization on the base ODK application to fit CBMS census requirements. Some of the major considerations identified were as follows:

1. Client—Enhancing the client application has been a major consideration since this is the vital link of CBMS database to the households.
   a. Maximizing the visible scope of questions by making the relevant fields more dynamic to enhance interactive interview. The CBMS questionnaire features sets of questions that are more appropriate to be displayed at the same time. For instance, some fields have to be immediately shown/hidden given the choice of other fields.
   b. Inducing number of interviews per full charge and speeding up loading of forms.
   c. Enforcing security based on CBMS training framework. Only authorized users through the CBMS Portal can enter CBMS Scan. Furthermore, the enumerator-field editor structure has been implemented in conjunction with CBMS Portal. For instance, only field editors can flag a valid interview and send it to the portal.

2. Backend—The efficiency and security of data collection and storage is a major priority of the CBMS INCT, hence, the portal was designed as such.
   a. Security. This is enforced based on the CBMS training framework. Several types of user access have been formulated to emulate the enumerator-field editor hierarchy. For instance, only members of the CBMS-TWG can be set as user administrator or a set of users can only enter and view/download data.
   b. Workgroups. Innate in the CBMS design is the consolidation of data in each geopolitical unit. This is implemented through hierarchical workgroups in the CBMS Portal.
   c. Census management. Tools were identified and put in place to monitor the progress of a CBMS census.

3. Form development—Forms, together with the client, determine how the data is collected. Hence, form design must be familiar but easy to replicate.
   a. Excel-based form development. Similar to the XLSForm of ODK, the FormGen of CBMS APP has been developed to generate data definitions.
   b. Improved form components. Some aspects have been improved such as the main and translated language. Subforms are introduced to effectively manage internal rosters such as member record, program record, and others. Additional widgets have been incorporated, such as searchable fields to enhance coding, and linked fields to relate between records.
   c. Revised structure. The form structure has been revised to fully emulate the familiar format of the questionnaire.

4. Storage—Since the CBMS database is expected to be populated by millions of records, the choice of storage format is crucial in the design. Several studies have argued the efficiency of JavaScript Object Notation (JSON) over the Extensible Markup Language (XML). The case study of Nursetitov et al. (2009) has shown that JSON is faster and uses fewer resources than XML. Peng et al. (2011) also performed experiments that showed better performance of JSON than XML in being parsing and serialization.

The prototype of the CBMS APP to be used by the CBMS INCT was presented during the 9th CBMS National Conference in January 2013. The above considerations and improvements were verified and confirmed by conducting field tests on the ODK Collect, Aggregate and Briefcase by the CBMS INCT in Mabini, Batangas and Carmona, Cavite during the first quarter of 2013. Refinements were documented and presented during several meetings with DLS-CCS Team.

By the end of the 2nd quarter of 2013, after several consultations and simulations, the beta version of CBMS APP tools were presented by the DLS-CCS team to the CBMS INCT for testing. The CBMS Portal has now been deployed at the DLSU as http://cbms.dlsu.edu.ph to house the collected and sent dataset.

During the 3rd quarter of 2013, the CBMS APP tools were pilot-tested in Pasay City. Several devices were tested such as phones, phablets, and 7-inch and 10-inch tablets of several manufacturers.
Further recommendations were discussed during the focus group discussion (FGD) and these include:

a. The optimality of 7-inch tablets;
b. A set of recommended tablets based on battery life, GPS locking, and interview efficiency;
c. The average interview duration is almost the same as the paper if not less;
d. The use of battery packs as backup power supply;
e. Revise the delineation of tasks of field editors and enumerators; and
f. Costing of CBMS APP implementation.

After refining the CBMS APP tools based on the pilot test, CBMS APP was provisionally launched in September 2013 during the DILG Training of Trainers using the new CBMS APP Module 1. The accredited trainers have since been addressing the growing interest of a paperless CBMS implementation. In October 2013, the CBMS INCT has trained CBMS Network Country teams to use the CBMS APP in implementing CBMS.

(3) Data Processing

One of the most critical steps in the CBMS implementation is data processing since results that will come out from this procedure will be the basis for planning and program implementation.

3.1 Data Processing in the CBMS PAPER Track

3.1.1 Encoding of Questionnaires and Digitized Mapping (Module 2)

The CBMS computerized data processing system (CBMS-CDPS) for CBMS Paper was developed to process household-level information gathered through the CBMS census in order to produce indicators/statistics from the household level up to the highest geopolitical level. The computerized processing is done mostly at the municipal level mainly because most barangays neither have computers nor the capacity to do computerized processing. Computerized data processing involves data encoding, map digitizing, database consolidation and database building, and indicator/poverty mapping. Processing can be done in three months.

Three softwares are used in the CBMS computerized processing system, namely:

i. the CBMS computerized data encoding system (based on the Census and Survey Processing [CSPro] software);
ii. the CBMS StatSim—an application needed to output the CBMS indicators and custom indicators from the encoded data; and
iii. QGIS—the software used to digitize and generate CBMS poverty maps.

The qualifications of data processors include the following:

2. Must have attended the previous CBMS PAPER Module 1.
3. Must be a regular staff or under contract with the LGU for the duration of the CBMS implementation.
4. Must have the capability to train the other members of the data processing team.

The technical staffs of the planning office are usually assigned as data processors. Other technical staffs from the social welfare office, local government operations office, and health office are also tapped as encoders and processors. The LGUs also utilize other personnel such as practicum/on-the-job trainees/students, which is under the under the Special Program for Employment of Students (SPES) of the LGU in partnership with the Department of Labor and Employment.

For equipment, it is preferred that aside from available computers that will be used to encode household-level data and digitize
maps, a computer that will house solely all CBMS data will be made available.

For the computerized data processing, the training is divided into two parts. The first part is the Training on Encoding Accomplished Questionnaires and Digitizing Maps (Module II). This 3-day training workshop has two parts, namely, (i) encoding raw census data, and (ii) digitizing of spot maps (see Appendix C).

The CBMS encoding system is used to encode the data from the questionnaire. The CBMS INCT customizes the encoding system using the Census and Survey Processing software (CSPro).

The CSPro is a public domain software package for entering, editing, tabulating, and disseminating census and survey data. It is designed to be “as user-friendly as possible, yet powerful enough to handle the most complex applications.” CSPro was developed and supported by the U.S. Census Bureau and ICF Macro, the organization that implements the Demographic and Health Surveys (DHS).

It is a user friendly Open Source Geographic Information System (GIS) licensed under the GNU General Public License. An official project of the Open Source Geospatial Foundation (OSGeo), QGIS runs on Linux, Unix, Mac OSX, Windows and Android and supports numerous vector, raster, and database formats and functionalities.

At the end of the training, the participants are expected to be competent in encoding household-level CBMS data and in digitizing barangay spot maps with infrastructure facilities, purok boundaries, and household locations.

3.1.2 Processing Encoded Data, Poverty Mapping, and Building of the CBMS Database (Module 3)

The second training on computerized data processing for the CBMS Paper track is on Processing of Encoded Questionnaire, Poverty Mapping, and Building of the CBMS Database (CBMS PAPER Module 3). This is conducted once the LGUs have met the training requirements of submitting a 100 percent encoded data and at least digitized data for at least three barangays.

During the training, the participants are taught how to consolidate the encoded household data with the digitized maps using the CBMS StatSim to form the CBMS database of the barangay (see Appendix D). At this stage, the CBMS core indicators are computed together with additional indicators that the LGUs deem necessary. Many of these data such as indicators for the Millennium Development Goals (MDGs), climate change-related indicators, data for the Comprehensive Development Plan, and other key indicators are automatically generated in the CBMS StatSim. Participants in the training should also be able to create a database for the barangays and municipal or city. Matching data coming from the encoding system with the digitized data from the QGIS is a crucial step in this module. However, LGUs that used the paper track have the option to encode the household coordinates in the CSPro-based encoding system to eliminate the matching procedure. Lastly, they should be able to produce poverty maps (see Map 1 for a sample poverty map) for the CBMS core and other related indicators.

3.2 Data Processing in the CBMS APP track

This is a 5-day training that discusses the consolidation of household data gathered from CBMS Scan and shared through the
CBMS Portal (see Appendix E). Whether using a paper-based or mobile-based data collection track, the CBMS StatSim is used to generate all the automatically generated data results needed by the LGU.

As part of the CBMS APP Module 1 is getting the coordinates of households during data collection, matching is no longer a step that hinders the fast generation of the poverty maps.

(4) Data Validation

This activity entails field and desk validation of census results. Field validation involves presenting the processed data from the census to the community members in organized fora to elicit their reaction on the accuracy of the data, and to gather feedback on the possible explanations for specific outcomes of the census.

This community validation is a vital component of the implementation of a CBMS. For one, it is an important mechanism to ensure that the local leaders and the rest of the community are informed of the results of the census. It also provides an avenue for verifying the accuracy of the census findings by facilitating discussion on the possible reasons for the said findings. The census results are presented in table and map forms to be validated by the community during this half-day field validation exercise.

This validation exercise also serves as venue for identifying the major problem areas of the community and identifying the possible interventions needed to resolve these problems. This mechanisms facilitates the integration of CBMS results in the preparation of the community’s annual development plan and in the drafting of a socioeconomic profile.

This validation activity is to be undertaken at all geopolitical levels and participated in by the CBMS focal persons, the community/sectoral leaders, and volunteers.

Barangay Level: Key participants in this assembly are the barangay (village) captain and development
council members, barangay health workers and nutrition scholars, the enumerators themselves, and the other officers in the barangay, such as teachers, sector representatives, indigenous leaders, and people from the community.

**Municipal Level:** Key participants are members of the municipal or city development council, the league of barangay captains, sectoral leaders or department heads, concerned NGOs, and the CBMS TWG members.

**Provincial Level:** Key players in this validation exercise are the provincial development council members, the league of mayors, sectoral leaders or department heads, CBMS TWG members, NGOs, and private organizations.

A standard validation guideline is given to the LGU on how to conduct the activity. The standard program includes an overview of the objectives of the activity, presentation of CBMS census results, discussion on the results of the census, identification of major problems and prioritization, recommendation from development council members, and identification of next steps and timeline of activities.

An expected output of this activity is a documentation of the proceedings, including the discussions and comments of the community on the data presented, explanations/reasons for the findings, information/data that need to be corrected, priority needs identified and possible interventions, and next steps/timeline.

**Database Management**

Database management refers to the storage, modification, and extraction of information from a database to produce the desired outputs such as reports, maps, and proportions. The CBMS Database System has been developed consisting of several modules on data encoding, processing, digitizing, and mapping. The system uses all freeware such as CSPRO, QGIS, and the CBMS Statistics Simulator (StatSim) developed by the CBMS INCT.

Data collected from the CBMS census are encoded and stored into the database system, which will be used to generate processed data in the form of proportions, maps, and reports. These results are used during the validation exercises to ensure accuracy of the data. If there are corrections in the data as a result of the validation exercise, the revised data are then incorporated in the database.

Database management is done by the CBMS monitors at the provincial, city and/or municipal levels. In most cases, the database is maintained by the staff of the local planning and development offices.

(6) **Plan Formulation**

Once the data have been processed and validated, CBMS data can be used by the LGU in its preparation of development plans and budgets. A 4-day writeshop is organized that focuses on the strategic use of CBMS data to improve the empirical basis of local planning and budgeting (see Appendix F). Workshop participants are expected to mainstream or integrate their evidence-based local situational analysis by incorporating relevant policy or program responses in their local development plans and budgets. Special focus is also given on how focused-targeting of eligible beneficiaries in terms of geographic areas and basic sectors can be done. This writeshop also highlights the need to treat local development plans as policy, rather than technical documents, which have influence on project implementation.

**Box 4. Data Sources for the Preparation of Socioeconomic Profile (SEP) and Barangay Development Plan (BDP)**

- Validated CBMS census results
- Documentation of validation workshop in the barangay
- Completed Barangay Profile Questionnaire
- Barangay Spot Map
- CBMS maps
- List and description of existing projects and programs in the barangay
- List of proposed projects for the barangay in response to the top problems identified during the CBMS validation workshop and also discussed during a Barangay Development Council meeting
- Other relevant administrative reports and documents
- Other existing database
The module is a four-day training program. There are 11 mini-writeshop sessions. A workbook is used to guide participants through the writing process. A BDP Template is also available which will serve as a style-guide in encoding the writeshop outputs. General guidelines and tips for writing the SEP are discussed first before every writing session. There is sharing of learning experiences after every writing session. At the end of the sessions, a draft of SEP & BDP is produced.

(7) **Dissemination/Implementation and Monitoring**

Advocacy is a critical component of the CBMS. Through advocacy, findings from the CBMS surveys are disseminated to policymakers and program implementers with the aim of generating corresponding actions for possible interventions. At the local level, CBMS findings are presented at the barangays, municipal/city, provincial and regional levels. The uses of CBMS and good practices in its implementation at the local level are likewise presented and shared by LGUs during national fora which include the annual CBMS national conference. In addition, CBMS information are likewise being shared through websites, social networking sites (e.g., Facebook), and publications.

**Costs of CBMS Implementation**

While the CBMS data collection tools and computerized encoding, processing and poverty mapping systems and training modules are being shared by the CBMS INCT to LGUs at no cost/charges, resources for the following core items need to be mobilized by the LGU once it decides to adopt CBMS:

1. **Conduct of Training Workshops**—includes full-day workshop meals of participants and resource persons, reproduction of training manuals, workshop supplies, equipment, and venue rental in the conduct of the four basic CBMS modules.

2. **Conduct of Field Data Collection/Household Census**—includes reproduction of forms, if adopting the CBMS Paper track (HPQ, BPQ and field editing, spot maps, and monitoring forms), procurement of tablet units and required internet service facility, if adopting the CBMS-APP track, and honorarium for trained local enumerators.

3. **Data encoding and processing**—includes required computers to be used for encoding (only for LGUs adopting the paper-based module), processing, and consolidation of data from the CBMS census, and honorarium for CBMS census data encoders and processors, and map digitizers.

4. **Data Validation**—includes cost (e.g., ½ day workshop meals) of the field data validation workshops to present the census results.

5. **Database Management**—includes the cost of hardware/computer to be used as CBMS data repository/database of the LGU and honorarium for the designated LGU personnel who will maintain and update the database over time.

**Some Cost-Saving Measures or Strategies Used by LGUs**

LGUs have adopted the following strategies to efficiently use their existing resources and minimize their cost of CBMS implementation:

1. Cost-sharing arrangement among stakeholders—provincial, municipal, city, or barangay level.
2. Use of SPES, on-the-job trainees, scholars, and other community volunteers.
3. Use of existing LGU facilities for the conduct of training workshops.
4. Presentation of CBMS findings as part of the regular LGU development council meetings.
5. Collaboration with NGOs, people’s organizations, and other development stakeholders.

**Uses and Applications of CBMS**

CBMS has a number of uses particularly in the areas of local governance and poverty monitoring.

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9 The CBMS instruments and training modules for data collection and processing have been developed by the CBMS International Network Coordinating Team as an output of its research activities under the MIMAP and the PEP Projects, supported by the International Development Research Centre (IDRC)-Canada.

10 Further uses and applications of CBMS by LGUs in the Philippines are documented in the proceedings of the CBMS Philippines National Conferences available at http://www.pep-net.org/programs/cbms/books/
Data gathered from CBMS have been proven useful in the following ways:

CBMS builds the capacities of LGUs and communities

CBMS can be used to further nourish, if not build, the capacities of LGUs and other members of communities in addressing the needs of their respective localities by maximizing the use of their existing resources.

The system provides an organized process that can be used to empower communities for a more evidence-based and participatory approach to development planning and welfare monitoring. As the CBMS process is implemented in a locality, capacities of LGUs and community members are enhanced through trainings in data collection, processing, and validation, and in analyzing and using the set of information that they have collected. The CBMS process also develops capacities of local and community leaders for mobilizing human and financial resources. CBMS also steers up the spirit of volunteerism among local communities and paves the way for a greater sense of accountability among them in diagnosing, addressing, and monitoring their respective community’s development concerns.

CBMS creates databases at the local level

One of the features of the CBMS is that databanks are established at each geopolitical level. CBMS can help enrich these databanks by providing a complete set of household information at the barangay, municipal/city, and provincial levels.

With the CBMS processing system lodged at the local level, the LGUs are able to create their own CBMS databases. The CBMS databases are recommended to be established and maintained at the planning and development office of the LGU. Establishing a local database enables them to share and disseminate CBMS results to other offices/departments, non-government organizations and other interest groups with development programs/initiatives in their locality.

The CBMS database is also shared among the barangays. Since most barangays do not have computers to enable them to establish their own CBMS database, the local planning and development offices (MPDO/CPDO) likewise serve as a CBMS resource center for barangays. For those areas with computers, the MPDO/CPDO assists these barangays in establishing their barangay CBMS database and provides training to barangay staff on how to use the database.

Once the municipal database is established, the database is shared to the province. The provincial planning and development office is tasked to collect all municipal/city databases at their level. These municipal/city databases are then consolidated to come up with the provincial CBMS database.

The CBMS can likewise complement existing databases. Since it provides a regular source of information on socioeconomic attributes of communities, households and individuals derived from conduct of CBMS census, LGUs can use the CBMS information to further enrich the contents and usefulness of existing local databases.

A number of LGUs were able to get funding support from international organizations in the past for setting up databanks containing information on children, environment, and the like. CBMS can help enrich these databases by providing a complete set of information at the household, barangay, municipal/city, and provincial levels.

CBMS provides useful information for poverty reduction programs and other development initiatives at the national level

While CBMS databases have been established at the local level, a national repository of CBMS data has also been developed and established by the CBMS INCT at the CBMS Network Office at DLSU Manila since 2000 in partnership with the LGUs in the country adopting the CBMS methodology as part of the memorandum of technical collaboration between the CBMS Network and the LGUs. Data is being shared by the LGUs to the CBMS Network for its use in further development of the CBMS methodology and instruments, and for its conduct of poverty studies.

The national repository of CBMS data is a database containing individual and household level information generated from the CBMS censuses of various LGUs implementing the
CBMS METHODOLOGY

CBMS methodology. The database is intended to be used, in consultation with respective LGUs, by national government agencies, private sector, donor agencies and other relevant stakeholders as inputs for poverty reduction programs and other related development initiatives.

In 2006, the repository was also established at NAPC in line with its oversight functions in terms of poverty reduction initiatives in the country. The repository was likewise established at the DILG central office through through the Bureau of Local Government Development (BLGD), being the lead government agency in the country in charge of capacity building activities of LGUs for use of CBMS for local development planning and other program initiatives (e.g., such as the localization of millennium development goals, disaster risk reduction management, grassroots participatory budgeting, and others).

The CBMS national repository is currently being maintained and regularly updated by the CBMS INCT in collaboration with partner LGUs in the country that are currently implementing CBMS.

Meanwhile, with the launch of the CBMS APP module in 2012, the CBMS data portal has also been designed to facilitate transmission of data from field census operations. The data portal is currently being hosted by the CBMS INCT at DLSU.

Specifically, the CBMS national repository would:

• Facilitate the access and use of the integrated CBMS database by national entities in their advocacy work with key decision makers.

• Support government and nongovernment funding sources to strengthen evidence-based planning and monitoring, to align their interventions to national priorities, and to facilitate the implementation of targeted programs.

Most importantly, the repository would facilitate evidence-based targeting of eligible beneficiary households or individuals and regular monitoring of programs of national government agencies, thereby facilitating efforts towards improving transparency in use of resources, and sustaining development initiatives overtime.

CBMS serves as inputs in poverty mapping

One of the outputs of the CBMS database is poverty maps. Through the CBMS-NRDB platform and more recently through QGIS customized by the CBMS INCT for use of CBMS implementers, LGUs are able to produce poverty maps to present and report CBMS results in a spatial representation. With poverty maps, policymakers, planners, and other stakeholders can easily understand and analyze situations and problems in communities within their jurisdiction. Poverty maps are useful in identifying spatial patterns and can provide insights on the reasons affecting specific aspects of poverty. They can also be used in visualizing the location of the poor and in describing their conditions. CBMS, through poverty mapping, aids in identifying the location of municipalities, cities, barangays, and even households that are in dire need of basic services. Poverty maps can help local planners identify the priority areas and target beneficiaries of anti-poverty programs.

CBMS serves as inputs for the preparation of development profiles

CBMS also provides vital baseline information for the preparation of barangay, municipal/city, and provincial socioeconomic profiles, annual investment plans, land use plans, infrastructure project proposals, and other related development reports. Since the year 2000, a growing number of LGUs in the Philippines have been using their CBMS data to enrich their existing profiles, reports and plans.

For instance, the Province of Palawan, the first LGU in the Philippines to adopt CBMS as a tool for local planning, was able to produce its first Provincial Human Development Report using the results of the conduct of its first round of CBMS implementation in the year 2000. The LGU continues to implement and use CBMS as a tool for its development planning, and is now on its 6th round of CBMS implementation.

In Camarines Norte particularly in the Municipality of Sta. Elena which adopted CBMS in 2003, the CBMS data have been used as benchmark information for the preparation of Barangay Socioeconomic Profiles and project proposals for development projects.
In 2005, through a collaboration between selected local government units (LGUs) and the CBMS INCT with support from NEDA and UNDP-Philippines, the first set of sub-national reports on the status of meeting the millennium development goals using CBMS data was produced. The report covered 10 provinces including Agusan del Norte, Agusan del Sur, Batangas, Biliran, Camarines Norte, Eastern Samar, Marinduque, Romblon, Sarangani and Siquijor. A second batch of sub-national MDG report was produced in 2013 which covered 7 provinces and 3 cities which include Benguet, Ifugao, Kalinga, Mindoro Oriental, Mindoro Occidental, Surigao del Sur, Pasay City, Puerto Princesa City, and Tabaco City. Said reports provided empirical data at the local level on the status of meeting the MDGs using CBMS indicators, and documented good practices of LGUs in meeting the development targets.

**CBMS facilitates resource allocation**

One of the most common dilemmas among local chief executives is how to efficiently and effectively use and manage the meager financial resources of the LGU given the many competing projects and programs that are needed in their localities. CBMS tries to address this issue by providing the necessary information that would reveal to decision makers an up-to-date development situation of communities in terms of core areas of welfare. A case in point is that of the Provincial Government of Palawan. CBMS data have been used as a basis for providing a general report to provincial planners and to the different sector leaders on the status of human development in the province.

In other CBMS sites, local chief executives are likewise faced with simultaneous funding requests for development projects like water project, health centers, road construction, among others. In this case, the barangay/household-level information that CBMS provides can help local chief executives assess and decide on which areas should be prioritized, such as the information presented in Map 2. Such a map can be crucial to the local chief executive as he makes the necessary project prioritization.

**CBMS information aids the design, targeting, and impact monitoring of social services and development programs**

CBMS provides the necessary disaggregated information that reveals the community’s needs based on the CBMS household census and points out corresponding explanations for such deficiencies as gathered during the validation forum and supplemented by information gathered from the barangay profile questionnaire. In this light, CBMS serves as a useful tool for the design of appropriate interventions to address particular development needs as shown in Map 3.

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**MAP 2. Proportion of Households with Access to Safe Water in Two Barangays in Labo Camarines Norte, 2003**
CBMS can also facilitate targeting by providing information on who are the eligible beneficiaries for specific programs. Sector-specific indicators can be used to identify who should receive the interventions. For instance, households with malnourished children should be the beneficiaries of supplemental feeding programs. Composite indicators (combining the different indicators using statistical techniques) can be used to rank the poorest households in the barangay or municipality. Several methods were already explored and are being tested to integrate the CBMS core indicators to identify the poor. This will be particularly useful in identifying eligible beneficiaries for programs such as the PhilHealth for the indigents and the scholarship program for the poorest families.

Finally, CBMS can serve as a supplemental tool or even a main source of vital information for monitoring the impacts of development programs that have been implemented in the communities by various organizations.

**CBMS can be used as a tool in localizing the MDGs**

CBMS can be used as a tool in monitoring the MDGs at the local level. With the Philippines’ commitment to meet the MDGs, it becomes imperative to be able to monitor the performance of the country vis-à-vis the targets. Initial monitoring indicates that spatial disparities are large, necessitating concerted action in areas where performance is very low. Through CBMS, indicators of the MDGs can be generated, providing LGUs with critical information needed to attain the MDGs.

CBMS indicators were also harmonized with the MDGs. Through a memorandum circular, the DILG was able to harmonize the CBMS indicators with the MDGs, which LGUs may use to assess their situation and gather baseline information to institute measures to help meet the country’s MDGs by 2015. A minimum set of 13 Local Poverty Indicators was introduced in 2003, and in 2004, one more indicator was added on maternal mortality rate. These are now known as the 14 Core Local Poverty Indicators (Table 4). They are matched with the MDGs in order to allow the monitoring of each goal and target as set in the MDGs. The monitoring of achievement may be done not only at the municipal level but also at the barangay level.

**CBMS data can be used as inputs for profiling the extent of vulnerability of communities to risks of impacts of climate change**

CBMS data can be used as inputs for profiling the extent of vulnerability of communities to risks of impacts of climate change.

In 2011, the CBMS INCT in collaboration with the Economy and Environment Program for Southeast Asia pilot tested the use of CBMS data for climate change vulnerability assessment and mapping in...
selected sites in the Philippines. The study provided empirical evidence on the usefulness of CBMS data for producing vulnerability maps of localities in terms of exposure, sensitivity and adaptive capacity that can serve as inputs for the design of adaptation strategies and preparation of disaster risk and environment management plans of LGUs.

Some sample vulnerability maps using data from Marinduque are shown in Figures 5 to 6.

**Status of Implementation and Next Steps**

CBMS is now being adopted and used as part of the local development planning and monitoring process by a growing number of local government units in the country. As of October 8, 2014, CBMS is being implemented in 73 provinces covering 862 municipalities, 69 cities and 23,276 barangays.

**TABLE 4. CBMS Indicators in Correspondence with the MDGs**

<table>
<thead>
<tr>
<th>MDG</th>
<th>CBMS Core Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 1: Eradicate Extreme Poverty</td>
<td>Proportion of households with income less than the poverty threshold</td>
</tr>
<tr>
<td></td>
<td>Proportion of households with income below the food threshold</td>
</tr>
<tr>
<td></td>
<td>Proportion of 0-5 year old children who are moderately and severely underweight</td>
</tr>
<tr>
<td></td>
<td>Proportion of households who eat less than 5 full meals a day</td>
</tr>
<tr>
<td>Goal 2: Achieve Universal primary Education</td>
<td>Proportion of 6-12 year old children who are not in elementary school</td>
</tr>
<tr>
<td></td>
<td>Proportion of 13-16 year old children who are not in secondary school</td>
</tr>
<tr>
<td>Goal 3: Promote Gender Equality</td>
<td>(Data can be generated from indicators of Goal 2 since it can be disaggregated by gender)</td>
</tr>
<tr>
<td>Goal 4: Reduce Child mortality</td>
<td>Proportion of children under 5 years old who died</td>
</tr>
<tr>
<td>Goal 5: Improve Maternal Health</td>
<td>Proportion of women who died due to pregnancy-related causes</td>
</tr>
<tr>
<td>Goal 7: Ensure environmental sustainability</td>
<td>Proportion of households without access to safe water</td>
</tr>
<tr>
<td></td>
<td>Proportion of households without access to sanitary toilet facilities</td>
</tr>
<tr>
<td></td>
<td>Proportion of households who are squatters</td>
</tr>
<tr>
<td></td>
<td>Proportion of households with makeshift housing</td>
</tr>
<tr>
<td>Goal 8: Develop a Global Partnership for Development</td>
<td>Proportion of 15 years old and above who are not working but are actively seeking work</td>
</tr>
</tbody>
</table>

**FIGURE 5. Exposure Index, by Municipality and Barangay, Province of Marinduque, Philippines, 2011**
The implementation of CBMS for local planning, poverty monitoring and other development initiatives by LGUs are supported by local policy issuances and corresponding budget appropriations by LGUs since 2000. Capacity building activities on the implementation of CBMS by LGUs are being provided by a pool of accredited CBMS trainers from the Department of the Interior and Local Government (DILG)-Bureau of Local Government Development (BLGD). The accredited trainers have been trained by the CBMS INCT on the CBMS modules on data collection and data processing.

Meanwhile, over time, concerned national government agencies as well as national leagues of LGUs have likewise produced the following policy issuances in support of the use of CBMS in the country:

- **DILG Memorandum Circular 2001-105**
  
  Issued in August 2001, the circular enjoins all local chief executives to undertake local programs on poverty reduction and economic transformation and emphasizes the need to designate Local Poverty Reduction Action Officers (LPRAOs) and to formulate a Local Poverty Reduction Action Plan (LPRAP).

- **NAPC En Banc Resolution No. 7**
  
  Issued in March 2003, the resolution directs LGUs to adopt the 13 core local poverty indicators as the minimum set of community-based information for poverty diagnosis and planning at the local levels and to integrate such information in their local poverty monitoring system and local level action plans and program.

- **DILG Memorandum Circular 2003-92**
  
  Issued in April 2003, it provides policy guidelines for the adoption of the 13 core local poverty indicators for planning. The guidelines shall aid the LGUs in assessing and understanding poverty and its dimensions at the barangays, municipalities, cities, and provinces, with the end view of formulating an LPRAP and implementing the plans and programs to reduce poverty.

- **DILG Memorandum Circular 2004-152**
  
  Issued in November 2004, the circular encourages LGUs to intensify efforts in implementing programs, projects, and activities toward the achievement of the MDGs.
LGUs are further encouraged to conduct a monitoring system such as the MBN-CBIS, CBMS, IRAP, among others, to monitor and diagnose the nature and extent of poverty using the 13+1 core indicators in order to determine appropriate interventions and achieve focused targeting.

- **NSCB Resolution No. 6, Series of 2005**

  In 2005, the Executive Board of the National Statistical Coordination Board (NSCB) issued a resolution recognizing the CBMS as a tool for strengthening the statistical system at the local level that will generate statistics for monitoring and evaluation of local development plans, including the progress of the local governments in attaining the MDGs.

  The NSCB Technical Staff has initiated an advocacy program for the adoption of the CBMS by the LGUs through the RSCCs, the technical arm of the Board in the regions.

- **LMP MC-027-2006**

  The LMP has enjoined all municipalities to adopt/sustain the adoption of CBMS as a tool for local poverty diagnosis and to institutionalize CBMS as part of the system of local governance;

- **SDC Resolution No. 3, Series of 2006**

  Issued on July 19, 2006, the resolution recognizes the CBMS as a viable and cost efficient system that can be used to generate the Core Local Poverty Indicators (CLPIs) and ensure uniformity and standardization of CLPI databases of all LGUs. It further enjoined the NAPC, DILG, other government agencies and LGUs to coordinate with the CBMS International Network Coordinating Team towards the fast-tracking and full implementation of the CBMS.

- **PDBM-DILG-DSWD-NAPC Joint Memorandum Circular No. 1, Series of 2012**

  Issued on March 8, 2012, the joint memorandum circular identifies the collection of relevant economic and social data, such as those that can be obtained from CBMS, as one of the main components in empowering poor LGUs and in the bottom-up planning and budgeting approach.

- **DILG Memorandum Circular 2012-73**

  Issued on April 17, 2012, the circular provides that the Local Disaster Risk Reduction and Management Fund can be utilized for disaster prevention and mitigation projects including the implementation of a CBMS with CCA/DRRM indicators.

- **DILG Memorandum Circular 2012-142**

  Issued on August 10, 2012, the circular enjoins all local chief executives to utilize the CBMS in planning and project development. It also recommends for the adoption of CBMS to coincide with the synchronized local planning and budgeting calendar and with the bottom up planning and budgeting preparation calendar.

- **DBM-DILG-DSWD-NAPC Joint Memorandum Circular No. 5, Series of 2014**

  Issued on October 1, 2014, the circular reiterates that one of the key roles that the local chief executive plays in the grassroots participatory budgeting process is making available information and data sets, such as those that can be generated from the CBMS, for poverty situation analysis.

### Lessons Learned

Below are some of the lessons gained from the various experiences in implementing the CBMS:

1. Local poverty monitoring system is an important component of the overall poverty reduction strategy. It facilitates the diagnosis of the extent of poverty, identification of the causes of poverty, formulation of appropriate interventions, targeting of eligible beneficiaries, and assessment of impact.

2. The chances for a nationwide institutionalization are better if CBMS data are proven useful at both the national and local levels.
3. Previous targeting schemes of national government agencies suffered from the lack of information to identify eligible beneficiaries. The need for household-based information by the national government agencies creates the demand for CBMS data at the national level.

4. The decentralized system of governance creates local demand for CBMS data.

5. It is important to work with local governments at the outset since they will ultimately bear the costs and enjoy the benefits of the CBMS. Local governments are willing and able to implement local monitoring systems.

6. It is important to include only a core set of indicators to make the system viable. Whenever relevant, a few community-specific indicators may be added to the core set of indicators.

7. It is important to adapt the CBMS system to realities/capacities in the country. Thus, indicators, data collection methodology, data processing, and other aspects of the CBMS may be customized.

8. Capacity building of local government personnel on diagnosing poverty at the local level using CBMS data is critical. Introducing a new system requires capacity building over a period of several years.

9. It is useful to incorporate new technologies in the processing, analysis, and dissemination of data.

10. Computerized processing facilitates the analysis and retrieval of data.

11. The use of the geographic information system (GIS) in presenting data is very effective. With GIS maps, spatial disparities are readily highlighted, households with unmet needs are easily located, and projects to address unmet needs are correctly positioned.

12. Data on household incomes are difficult to collect in the CBMS partly because of the irregularity and multiplicity of sources. However, income is a very useful indicator since it is very sensitive to economic changes and shocks. One way to address this problem is to provide adequate training to enumerators to be able to collect good and reliable estimates of household income through the CBMS. Other indicators can be used in combination with income to validate income-based poverty status.

13. It takes a long time for a monitoring system that involves many stakeholders to be institutionalized. Continuing advocacy efforts are thus needed to convince national and local policymakers and program implementors to adopt a system. It is critical that a resource center for CBMS, which can provide technical assistance to LGUs that are planning to adopt the system, is present. Even for LGUs that have been implementing it, capacity-building programs are still needed so they could switch to new CBMS technologies and do further analysis of the data. The first version of the CBMS computerized processing was used only at the municipal and provincial levels, but the current version promotes the use of computerized processing at all levels.

14. Incentives should be developed to encourage other LGUs to adopt the system. For example, the use of CBMS data by national government agencies to identify beneficiaries of national programs will encourage LGUs to adopt the system.
Timeline of Development of the CBMS Methodology

1991–1992

- Publication of research results of the Micro Impacts of Macroeconomic Adjustment Policies (MIMAP)-Philippines research paper by Lamberte et al. (1991a), which points out to the lack of a monitoring, information, and feedback system to assess impacts of macroeconomic adjustment policies on the vulnerable groups. It also notes that there is no systematic and regular collection of information on the “human dimension” on the impacts of macro-adjustment policies.

- Publication of research results of the MIMAP-Philippines research paper of Florentino and Pedro (1992), which recommends the development of a MIMAP-CBMS that will tap the capabilities of communities for data generation and utilization, and identifies key features of the CBMS and indicators to monitor household welfare. It highlights the importance of simple and easy-to-collect indicators that people at the grassroots level can appreciate, and the identification of sentinel areas for the implementation of CBMS. The following basic elements of the CBMS have been recommended: (i) focus on poor households and disadvantaged population groups, (ii) disaggregate the collected information into functional groups, (iii) adopt the concept of mobilizing and developing the capability of communities for data generation and utilization, (iv) report the collected data to the next higher geopolitical level for immediate intervention—to address welfare gaps among the vulnerable groups, and ultimately reach macro planners in order to influence adjustment programs.

1993–1994

- Publication of the MIMAP research paper of Reyes and Alba (1994) on the Assessment of Community-Based Systems Monitoring Household Welfare, with recommendations on how to improve the recommended design of MIMAP-CBMS by Florentino and Pedro (1992). In particular, it addressed in detail the following key issues in the design of the recommended CBMS: (i) what types of data need to be collected, (ii) who will be the community-based monitors, (iii) who has access to the data, and (iv) how should the system be implemented.

- Reyes and Alba (1994) provided recommendations on the key features of the proposed CBMS, which includes the (i) identification of core indicators (with emphasis on the multi-dimensional nature of poverty and on output and impact indicators) to be monitored, (ii) frequency of data collection, (iii) process of data collection, (iv) processing and establishment of data banks, (v) flow of dissemination, and (vi) use of data for planning and policymaking at each geopolitical level. It also highlights recommendations on the key strategies for implementing CBMS, role of LGUs and its key personnel in the process, and the establishment of a nationwide statistical system at the grassroots level.

- Presentation of MIMAP Project Team in various consultation meetings on the recommended CBMS design and core indicators.

1995–1996

- Pretest by the MIMAP-CBMS Philippines Team of the CBMS process, data collection instruments, and processing instruments.

- Pilot test of CBMS methodology, indicators, instruments, and training modules in two barangays in the Province of Bulacan, Philippines (Reyes and Ilarde 1996).


- Publication of a MIMAP research study by Reyes (1996), which details results and recommendations on the implementation of CBMS, the use of proxy indicators for income for poverty tracking, and for the need to further validate the set of MBN indicators identified
by the government using the following criteria: (i) information content, (ii) reliability of data obtained, and (iii) ease in collecting data at the barangay level by the barangay monitors. It also highlights the need for further studies on how to use the MBN indicators in identifying who should be the beneficiaries of poverty alleviation programs.

1997–1998

1999
• Adoption of CBMS, through LGU Executive Order No. 15, by the Provincial Government of Palawan as basis for identifying provincial programs and projects, and as a tool for development planning (Mandap 2001).

2000
• First conduct of a series of CBMS training workshops on data collection and processing for LGUs for the province-wide implementation of CBMS in Palawan.

2001
• Adoption of CBMS by the City Government of Puerto Princesa, Palawan.
• Preparation of the First Provincial Human Development Report using CBMS data by the Province of Palawan.

2002
• Launching of the CBMS International Network Office that will spearhead the development and use of CBMS in countries in Asia and Africa.
• Development of the CBMS poverty mapping module using Geographic Information System (GIS) and Natural Resources Database (NRDB).

2003
• Start of the development and pilot testing of CBMS in Bangladesh, Cambodia, and Pakistan.
• Adoption of the CBMS methodology and instruments by the LGUs of Labo and Sta. Elena in Camarines Norte, Philippines.
• Issuance of a NAPC-En Banc Resolution No. 7 in the Philippines, which formalizes the adoption of the core indicators for poverty monitoring.
• Issuance of DILG-MC 2003-92 in the Philippines, which provides guidelines to LGUs for the utilization of the core local poverty indicators and area-specific indicators when they formulate their local poverty reduction action plans and implement their poverty reduction policies and programs.

2004
• Start of the development and pilot testing of CBMS in the Lao People’s Democratic Republic, Benin, and Ghana.
• Adoption of CBMS by the Provincial Government of Bulacan, Philippines for use in planning, program formulation, and impact monitoring.
• Adoption of CBMS by the City Government of Pasay City as a tool for MDG monitoring.
• Presentation on the actual uses of CBMS for local governance by the LGU of Labo, Camarines Norte during the CBMS International Network Meeting in Dakar, Senegal.

2005
• Start of the development and pilot testing of CBMS in Indonesia.
• Development and pilot testing on the use of CBMS for gender-responsive planning and budgeting module in the Philippines.11
• Adoption of CBMS methodology and instruments as a tool for local planning by the Provincial Government of Agusan del Sur.

11 http://www.pep-net.org/fileadmin/medias/pdf/CBMS_country_proj_profiles/Philippines/GRB.pdf
• Presentation on the actual uses of CBMS for local planning and program implementation by the LGU of Sta. Elena, Camarines Norte during the CBMS International Network Meeting in Sri Lanka.

• Launching of the CBMS-UNDP-NEDA-PEF Development Grant Program for LGUs and NGOs, which fosters the use of CBMS data for the design and implementation of poverty alleviation programs.

• DILG, through the WB-ASEM project, pilot tested the implementation of CBMS in selected LGUs covering the provinces of Marinduque, Masbate, and Camiguin in the Philippines.

• RDC-MIMAROPA Resolution 12-074-2005, adopting CBMS as the database management system in Region IV-B.

• RDC-Davao Region RKCG XI Resolution No. 3 (2005), recognizing CBMS as an effective tool in diagnosing poverty at the local level thus supporting the use of CBMS in monitoring the poverty situation in the region.

2006

• Start of the development and pilot testing of CBMS in Tanzania.

• RDC-Eastern Visayas Resolution 8A (2006), endorsing the conduct of poverty mapping in all barangays of the region using the CBMS as a tool.

• CBMS was already adopted by LGUs in 22 provinces (11 of which are province-wide), covering 243 municipalities, 20 cities, and 6,761 barangays.

• NAPC, through the UNDP-supported Strengthening Institutional Mechanisms for the Convergence of Poverty Alleviation Efforts (SIMCPAE) project, pilot tested the implementation of CBMS in selected provinces in Mindanao (Agusan del Norte, Sarangani, Zamboanga del Norte, and Zamboanga del Sur).

• The League of Municipalities of the Philippines, through LMP MC-027-2006, has enjoined all municipalities to adopt/sustain the adoption of CBMS as a tool for local poverty diagnosis and to institutionalize CBMS as part of the system of local governance.

• Social Development Committee-Resolution No. 3-Series of 2006 was issued following the assessment of CBMS as a viable and cost-effective system for generating core local poverty indicators and ensuring uniformity and standardization of core local poverty indicators databases at the local level. The Social Development Committee-Cabinet Cluster, co-chaired by NEDA, has recommended the adoption and use of CBMS as the prescribed monitoring tool and system for the core local poverty indicators, and has enjoined NAPC, DILG, and other government agencies and LGUs to fast track the implementation of CBMS.

• Development and establishment of the CBMS-Philippines National Repository.

• Conduct of the first training workshop on the CBMS-Philippines National Repository by the CBMS INCT.

2007

• Start of development and pilot testing of CBMS in Kenya.

• Release of CBMS HPQ 2007 incorporating new official definition of employment in the Philippines.

• CBMS was already adopted by LGUs, through local policy issuances, in 37 provinces (17 of which are province-wide), covering 382 municipalities, 27 cities, and 9,860 barangays.

• Issuance of Philhealth Board Resolution No. 982-Series of 2007, where CBMS was recognized—together with other LGU-based poverty monitoring tools and system—as a source of data in identifying the indigent families to be enrolled in the sponsored program of the National Health Insurance Program.

2008

- Start of the Accreditation Program by the CBMS International Network Coordinating Team for CBMS Trainers in the Philippines.
- On March 11, 2008 at the 20th Cabinet Meeting in the Philippines, the DILG was instructed to lead in the implementation of CBMS to ensure effective targeting and monitoring of project beneficiaries.
- The Province of Tarlac made innovation on its implementation of CBMS by making use of net books in CBMS field data collection to fast track the CBMS process.
- CBMS was already adopted by LGUs, through local policy issuances, in 52 provinces (26 of which are province-wide), covering 531 municipalities, 42 cities, and 13,498 barangays.

2009

- Development and pilot testing of CBMS for gender-responsive local planning and budgeting in Peru, in collaboration with the United Nations Development Fund for Women (UNIFEM).
- Start of collaboration with Oxford Poverty and Human Development Initiative (OPHI) on the use of the CBMS methodology to pilot test the OPHI survey modules on missing dimensions of poverty particularly those relating to (i) safety from violence, (ii) empowerment, (iii) employment quality, (iv) dignity and self-respect, and (v) meaning and value.
- Use of CBMS data (Philippines, Cambodia, and Ghana) to examine the impacts of food and fuel price shocks on poverty.
- Implementation of CBMS in Burkina Faso to monitor impacts of shocks with focus on child poverty.
- The Province of the Agusan del Sur made innovation on its implementation of CBMS by making use of laptop units in CBMS field data collection to fast track the CBMS process.
- Presentation to the CBMS INCT of an innovation on the processing of CBMS data using web-based application and SMS-technology by a student of the De La Salle University (DLSU).
- Launching of the NEDA-UNDP-led program on the Preparation of Sub-national MDG Reports Using CBMS Data (Batch 1).
- CBMS was already adopted by LGUs, through local policy issuances, in 58 provinces (29 of which are province-wide), covering 622 municipalities, 48 cities and 16,197 barangays.

2010

- Start of the development and pilot testing of CBMS in Argentina and South Africa.
- Pilot test of the CBMS shocks module including indicators to monitor climate change impact at the local level by the CBMS Network.
- Conduct of CBMS studies (Cambodia, Kenya, Lao People’s Democratic Republic, Nigeria, Philippines, and Zambia) on impacts of global financial crisis on poverty.
- CBMS was already adopted by more LGUs in the Philippines, through local policy issuances, in 61 provinces (32 of which are province-wide), covering 710 municipalities, 46 cities, and 18,706 barangays.
- Inclusion of CBMS modules as part of the training courses offered to LGUs by the Statistical Research and Training Center in the Philippines.
- Start of collaboration with the Commission on Filipinos Overseas (CFO) on the use of CBMS data as input for its program targeting and implementation.

2011

- Release of the CBMS-HPQ Version 2011, which incorporates information on climate change impact and other related information for disaster risk management.
- Start of technical collaboration with IDRC’s Economy and Environment Program for
Southeast Asia (EEPSEA) on the development and pilot testing of CBMS module on the use of CBMS data and other subnational level data for vulnerability risk and hazard mapping to assist LGUs in developing countries in preparing appropriate plans and programs to address evolving pressures on the environment particularly that of climate change.12 The study covered CBMS sites in the Philippines, Indonesia, and Viet Nam.

- Start of technical collaboration with the International Labour Organization (ILO) on the use of CBMS data to examine the situation of working children in selected CBMS sites in the Philippines.

- The League of Provinces of the Philippines (LPP) issued GA Resolution 2011-01 urging the Department of Social Welfare and Development and the Department of Health to adopt CBMS, among other locally developed monitoring systems, in identifying beneficiaries of the 4Ps and PhilHealth’s Sponsored Program for the indigents.

- CBMS was already adopted by LGUs in 67 provinces (35 of which are province-wide), covering 796 municipalities, 64 cities, and 21,895 barangays.

- In August 2012, the DILG issued Memorandum Circular 2012-142 enjoining all local chief executives to utilize CBMS in planning and project development. The circular recognizes the CBMS as a tool that will help local governments in evidence-based planning, programming, and project prioritization. It also notes that through CBMS, information gaps will be narrowed down, making it possible to diagnose multi-dimensional aspects of poverty and to identify appropriate interventions for target beneficiaries. It also stresses the use of CBMS data for disaster risk reduction management (DRRM) and climate change adaptation (CCA). Thus, the circular recommends the adoption of CBMS to coincide with the synchronized local planning and budgeting calendar, and the bottom–up planning and budgeting calendar.

- Expansion of the NEDA-UNDP-led program on the Preparation of Sub-national MDG Reports Using CBMS Data (Batch 2).

- Start of NAPC’s innovation, under its Rapid CBMS (RCBMS) initiative, on the use of tablets and mobile phones (using ODK application) for CBMS census data capture in the municipality of Sta. Elena, Camarines Norte, for the latter’s 4th round of CBMS implementation, among its pilot sites.

- Start of the development and pilot testing of CBMS in Bolivia, Haiti, and Niger.

- Development and pilot testing of the CBMS module and instruments to examine key issues on social protection, youth employment, and entrepreneurship.

- Publication of the research findings of the CBMS study on Monitoring the Impacts of the Global Financial Crisis on Poverty.

- Publication and launching of the CBMS Network’s book, Many Faces of Poverty, Volume

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12http://www.pep-net.org/programs/cbms/special-initiatives/ eepsea/
4, featuring the poverty profiles of 10 provinces in the Philippines using CBMS data.

- Pilot testing of the CBMS Data Portal and CBMS APP, developed by the CBMS International Network.

- Conduct of training for CBMS Accredited Trainers in the Philippines on “CBMS Data Portal and Tablet-Based Data Collection Module” for deployment to LGUs in the Philippines.

- CBMS was already adopted by LGUs in 69 provinces (32 of which are province-wide), covering 799 municipalities, 63 cities, and 21,562 barangays.

- Use of CBMS data as inputs to the rehabilitation efforts in communities that were affected by typhoon Yolanda (Haiyan) in Eastern Visayas.

- Publication of the Philippines’ Subnational MDG Report Using CBMS Data (covering 7 provinces and 3 cities).

2014


- Actual implementation by LGUs of the pretested CBMS tablet-based module (using the *CBMS Scan*) of the CBMS Network.

- Launching of the CBMS Network’s publication, the *CBMS Handbook*, containing users’ guide for the adoption of CBMS modules 1–4. This includes the latest module on CBMS APP, with corresponding code book.
References


Part 2

Data Collection
## A. IDENTIFICATION

### I. Location
- **a. Province:**
- **b. City/Municipality:**
- **c. Zone:**
- **d. Barangay:**
- **e. Purok/Sitio:**
- **f. Street:**
- **g. House Number:**

### II. Household Identification Number:

### III. Coordinates
- **A.1 Latitude:**
- **A.2 Longitude:**

### IV. Name of Respondent:

### V. Date of Interview:

### VI. Time Started:

### VII. Time Finished:

### VIII. Name and Signature of Enumerator:

### IX. Name and Signature of Field Editor/Coordinator:

## B. HOUSING CHARACTERISTICS

1. **In what type of building does the household reside?**
   - **1 Single house**
   - **2 Duplex**
   - **3 Multi-unit residential (three units or more)**
   - **4 Commercial/industrial/agricultural building/house (e.g., office, factory, or others)**
   - **5 Other housing unit (boat, cave, and others)**

2. **How many bedrooms does this housing unit have?**

3. **What type of construction materials are the roof made of?**
   - **1 Strong materials (galvanized iron, aluminum, tile, concrete, brick, stone, asbestos)**
   - **2 Light materials (cogon, nipa, anahaw)**
   - **3 Salvaged/makeshift materials**
   - **4 Mixed but predominantly strong materials**
   - **5 Mixed but predominantly light materials**
   - **6 Mixed but predominantly salvaged materials**
   - **7 Not applicable**

4. **What type of construction materials are the outer walls made of?**
   - **1 Strong materials (aluminum, tile, concrete, brick, stone, wood, plywood, asbestos)**
   - **2 Light materials (bamboo, sawali, cogon, nipa, anahaw)**
   - **3 Salvaged/makeshift materials**
   - **4 Mixed but predominantly strong materials**
   - **5 Mixed but predominantly light materials**
   - **6 Mixed but predominantly salvaged materials**
   - **7 Not applicable**

## C. HOUSEHOLD CHARACTERISTICS

(5) **How many household members are overseas workers?**

(6) **How many nuclear families are there in the household?**

(7) **Is any member of the household pregnant?**

(8) **Is any member of the household a solo parent?**

(9) **Is any member of the household disabled?**
<table>
<thead>
<tr>
<th>HOUSEHOLD?</th>
<th>1</th>
<th>YES, USE NEW FORM</th>
<th>2</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOUSEHOLD?</td>
<td>1</td>
<td>YES, USE NEW FORM</td>
<td>2</td>
<td>NO</td>
</tr>
<tr>
<td>How many members are there in the household, including OFWs?</td>
<td>(15)</td>
<td>Relation to head of the household</td>
<td>(17)</td>
<td>Marital (Civil) Status</td>
</tr>
<tr>
<td>Who is the head of the household?</td>
<td>(13)</td>
<td>Code</td>
<td>(11)</td>
<td>Mother/Father</td>
</tr>
<tr>
<td>Who are the other members of the household?</td>
<td>(14)</td>
<td>Codes</td>
<td>(12)</td>
<td>Head</td>
</tr>
<tr>
<td>Surname</td>
<td>(12)</td>
<td>First Name</td>
<td>(14)</td>
<td>Middle Name</td>
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<tr>
<td>First Name</td>
<td>(14)</td>
<td>Middle Name</td>
<td>(16)</td>
<td>Age</td>
</tr>
<tr>
<td>Middle Name</td>
<td>(16)</td>
<td>Age</td>
<td>(17)</td>
<td>Marital Status</td>
</tr>
<tr>
<td>Date of Birth</td>
<td>(18)</td>
<td>Yes/Others, specify</td>
<td>(19)</td>
<td>Overseas worker?</td>
</tr>
<tr>
<td>Place of Birth</td>
<td>(19)</td>
<td>Yes/Others, specify</td>
<td>(20)</td>
<td>FOR 3 YEARS OLD AND ABOVE</td>
</tr>
<tr>
<td>Age</td>
<td>(20)</td>
<td>FOR 3 YEARS OLD AND ABOVE</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**
- **I.D. Number:**
- **CBMS Form 1 PAGE 2**
### E. Education and Literacy

<table>
<thead>
<tr>
<th>N NUMBER</th>
<th>1. Yes</th>
<th>2. No (GO TO (24))</th>
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</table>

#### FOR 3 YEARS OLD AND ABOVE

<table>
<thead>
<tr>
<th>IF YES IN (21)</th>
<th>1. Yes</th>
<th>2. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>What grade or year is currently attending?</td>
<td>(SEE CODES BELOW)</td>
<td></td>
</tr>
<tr>
<td>NOTE: CODES 100, 200, 210, 300 AND 400 ARE NOT APPLICABLE</td>
<td></td>
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<tr>
<td>IF NO IN (21)</td>
<td>1. Public</td>
<td>2. Private</td>
</tr>
<tr>
<td>Where does attend school?</td>
<td>(SEE CODES BELOW)</td>
<td></td>
</tr>
</tbody>
</table>

#### FOR 5 YEARS OLD AND ABOVE

<table>
<thead>
<tr>
<th>IF YES IN (27)</th>
<th>1. Yes</th>
<th>2. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the highest educational attainment completed by ?</td>
<td>(SEE CODES BELOW)</td>
<td></td>
</tr>
<tr>
<td>If college graduate, what is his/her course?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### FOR 15 YEARS OLD AND ABOVE

<table>
<thead>
<tr>
<th>IF YES IN (27)</th>
<th>1. Yes</th>
<th>2. No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can read and write a simple message in any language or dialect?</td>
<td>(SEE CODES BELOW)</td>
<td></td>
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<tr>
<td>Is a registered voter?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### F. Political Participation

<table>
<thead>
<tr>
<th>IF YES IN (27)</th>
<th>1. Yes</th>
<th>2. No</th>
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</thead>
<tbody>
<tr>
<td>Did vote in the last election?</td>
<td>(GO TO (29))</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IF OFW, GO TO THE NEXT MEMBER</th>
<th>1. Yes</th>
<th>2. No</th>
<th>3. Don’t know</th>
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<tbody>
<tr>
<td>LEAVE BLANK</td>
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</tbody>
</table>

#### Grade level (25) Highest educational attainment

<table>
<thead>
<tr>
<th>0</th>
<th>No Grade</th>
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<tbody>
<tr>
<td>1</td>
<td>Day Care</td>
</tr>
<tr>
<td>2</td>
<td>Kindergarten/Preparatory</td>
</tr>
</tbody>
</table>

**GRADE SCHOOL**

<table>
<thead>
<tr>
<th>11</th>
<th>Grade I</th>
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<tbody>
<tr>
<td>12</td>
<td>Grade II</td>
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<td>13</td>
<td>Grade III</td>
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<td>14</td>
<td>Grade IV</td>
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<tr>
<td>15</td>
<td>Grade V</td>
</tr>
<tr>
<td>16</td>
<td>Grade VI</td>
</tr>
</tbody>
</table>

**JUNIOR HIGH SCHOOL**

<table>
<thead>
<tr>
<th>17</th>
<th>Grade 7</th>
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<tbody>
<tr>
<td>18</td>
<td>Grade 8</td>
</tr>
<tr>
<td>19</td>
<td>Grade 9/3rd Year HS</td>
</tr>
<tr>
<td>20</td>
<td>Grade 10/4th Year HS</td>
</tr>
<tr>
<td>21</td>
<td>Grade 11</td>
</tr>
<tr>
<td>22</td>
<td>Grade 12</td>
</tr>
<tr>
<td>23</td>
<td>1st Year PS/N-T/TV</td>
</tr>
<tr>
<td>24</td>
<td>2nd Year PS/N-T/TV</td>
</tr>
<tr>
<td>25</td>
<td>3rd Year PS/N-T/TV</td>
</tr>
</tbody>
</table>

**SENIOR HIGH SCHOOL**

<table>
<thead>
<tr>
<th>26</th>
<th>1st Year College</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>2nd Year College</td>
</tr>
<tr>
<td>28</td>
<td>3rd Year College</td>
</tr>
<tr>
<td>29</td>
<td>4th Year College or higher</td>
</tr>
<tr>
<td>30</td>
<td>Post Grad w/ units</td>
</tr>
</tbody>
</table>

**Masters/PhD**

<table>
<thead>
<tr>
<th>31</th>
<th>Grade school graduate</th>
</tr>
</thead>
<tbody>
<tr>
<td>32</td>
<td>College graduate, specify course</td>
</tr>
<tr>
<td>33</td>
<td>Masters/PhD graduate, specify course</td>
</tr>
</tbody>
</table>

### Reason for not attending school (24)

<table>
<thead>
<tr>
<th>1</th>
<th>Schools are very far</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>No school within the bgy</td>
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<tr>
<td>3</td>
<td>No regular transportation</td>
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<tr>
<td>4</td>
<td>High cost of education</td>
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<tr>
<td>5</td>
<td>Illness/Disability</td>
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<tr>
<td>6</td>
<td>Housekeeping/Taking care of siblings</td>
</tr>
<tr>
<td>7</td>
<td>Marriage</td>
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<tr>
<td>8</td>
<td>Employment/looking for work</td>
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<tr>
<td>9</td>
<td>Lack of personal interest</td>
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<tr>
<td>10</td>
<td>Cannot cope with school work</td>
</tr>
<tr>
<td>11</td>
<td>Finished schooling</td>
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<tr>
<td>12</td>
<td>Problem with school record</td>
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<tr>
<td>13</td>
<td>Problem with birth certificate</td>
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<tr>
<td>14</td>
<td>Too young to go to school</td>
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<tr>
<td>15</td>
<td>Others, specify</td>
</tr>
</tbody>
</table>

**CBMS Form 1 PAGE 3**
### G. Economic Activity

<table>
<thead>
<tr>
<th>Number</th>
<th>Write the First Names of Each Member</th>
<th>1. Yes (Go to (31))</th>
<th>2. No (Go to (40))</th>
<th>Primary Job, Occupation, or Business</th>
<th>Leave Blank</th>
<th>Business/Industry</th>
<th>Leave Blank</th>
<th>(See Codes Below)</th>
<th>Number of Hours</th>
<th>Number of Hours</th>
<th>Did ___ want more hours of work during the past week?</th>
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</thead>
<tbody>
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</tbody>
</table>

### Nature of Employment

1. Permanent job/business/unpaid family work

2. Short-term or seasonal or casual job/business/unpaid family work

3. Worked for different employers or customers on day-to-day or week-to-week basis
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(10D) Class of worker
1. Working for private household
2. Working for private business/establishment/farm
3. Working for government/government corporation
4. Self-employed with no paid employee
5. Employer in own family-operated farm or business
6. Working with pay on own family-operated farm or business
7. Working without pay on own family-operated farm or business

(39) Class of worker
4. Self-employed with no paid employee
5. Employer in own family-operated farm or business
6. Working with pay on own family-operated farm or business
7. Working without pay on own family-operated farm or business

(42) Job search method
1. Registered in public employment agency
2. Registered in private employment agency
3. Approached employer directly
4. Approached relatives or friends
5. Placed or answered advertisements
6. Searched and applied online
7. Others, specify

(44) Reason for not looking for work
1. Tired/Believes no work is available
2. Awaiting results of previous job application
3. Temporary illness/disability
4. Bad weather
5. Waiting for rehire/job recall
6. Too young/old or retired/permanent disability
7. Household, family duties
8. Schooling
9. Others, specify
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<td>9</td>
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<tr>
<td>10</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(53) Disability</th>
<th>(57)a. Crime</th>
<th>(57)b. Location of Crime</th>
<th>(58) Nutritional Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Total blindness</td>
<td>1 Theft</td>
<td>1 Within the barangay</td>
<td>1 Above normal</td>
</tr>
<tr>
<td>2 Partial blindness</td>
<td>2 Robbery</td>
<td>2 Outside the barangay but within municipality/city</td>
<td>2 Normal</td>
</tr>
<tr>
<td>3 Low vision</td>
<td>3 Rape</td>
<td>3 Outside the municipality/city but within province</td>
<td>3 Below normal (moderate)</td>
</tr>
<tr>
<td>4 Totally deaf</td>
<td>4 Physical injury</td>
<td>4 Outside the province</td>
<td>4 Below normal (severe)</td>
</tr>
<tr>
<td>5 Partially deaf</td>
<td>5 Carnapping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Oral defect</td>
<td>6 Cattle rustling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 One hand</td>
<td>7 Others, specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 No hands</td>
<td>8 Mental retardation</td>
<td>1 Above normal</td>
<td></td>
</tr>
<tr>
<td>9 One leg</td>
<td>9 Multiple impairment</td>
<td>2 Normal</td>
<td></td>
</tr>
<tr>
<td>10 No legs</td>
<td>10 Others, specify</td>
<td>3 Below normal (moderate)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(50)</th>
<th>(51)</th>
<th>(52)</th>
<th>(53)</th>
<th>(54)</th>
<th>(55)</th>
<th>(56)</th>
<th>(57)</th>
<th>(58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>
**K. WATER AND SANITATION**

(59) What is your household's main source of water supply?  
1 Own use faucet, community water system  
2 Shared faucet, community water system  
3 Own use tubed/piped deep well  
4 Shared tubed/piped deep well  
5 Tubed/piped shallow well  
6 Dug well  
7 Protected spring  
8 Unprotected spring  
9 Lake, river, rain, and others  
10 Peddler  
11 Bottled water  
12 Others, specify  

ASK (60) IF ANSWER IN (59) IS '2', '3', '4', '5', '6', '7', '8', '9', OR '12'. IF THE ANSWER IN (59) IS '1', '10 or '11', GO TO (61).

(60) How far is this water source from your house?  

IN METERS  

(61) What type of toilet facility does the household use?  
1 Water-sealed, sewer septic tank, used exclusively by household  
2 Water-sealed, sewer septic tank, shared with other households  
3 Water-sealed, other depository, used exclusively by household  
4 Water-sealed, other depository, shared with other households  
5 Closed pit  
6 Open pit  
7 Others (pail system, and others)  
8 None  

**L. HOUSING**

(62) What is the tenure status of the housing unit and lot occupied by your household?  
1 Own or owner-like possession of house and lot  
2 Rent house/room including lot  
3 Own house, rent lot  
4 Own house, rent-free lot with consent of owner  
5 Own house, rent-free lot without consent of owner  
6 Rent-free house and lot with consent of owner  
7 Rent-free house and lot without consent of owner  
8 Living in a public space with rent  
9 Living in a public space without rent  
10 Other tenure status, specify  

ASK (63) IF ANSWER IN (62) IS '1', '3', '4', '5', '6', '7', '8', '9'. IF THE ANSWER IS '3,' ASK ONLY FOR THE IMPUTED RENT FOR THE HOUSE. IF THE ANSWER IN (62) IS '2' OR '8,' GO TO (64).

(63) By your own estimate, how much is the imputed rent per month for the house and/or lot?  
1 Yes (GO TO 65)  
2 No (GO TO 66)  

(64) Is there any electricity in the dwelling place?  
1 Yes (GO TO 65)  
2 No (GO TO 66)  

(65) What is the source of electricity in the dwelling place?  
1 Electric company  
2 Generator  
3 Solar  
4 Battery  
5 Others, specify  

(66) How many of each of the following items does the household own?  
1 Radio/Radio casette  
2 Television  
3 CD/VCD/DVD player  
4 Component/Stereo set  
5 Karaoke/Videoke  
6 Refrigerator/Freezer  
7 Electric fan  
8 Flat iron  
9 LPG gas stove/range  
10 Washing machine  
11 Microwave oven  
12 Computer/Laptop/Netbook  
13 Internet connection  
14 Cellphone  
15 Landline telephone  
16 Air conditioner  
17 Sewing machine  
18 Car, Jeep, etc.  
19 Tricycle, motorcycle, etc.  
20 Land (Agricultural)  
21 Land (Residential)  
22 Land (Commercial)  
23 Sala/Sofa set  
24 Dining set  
25 Others, specify  

(68) Do you have an insurance for the following?  
1-Yes  
2-No  

(69) Who is the insurance provider?  
1- Government insurance  
2- Private insurance company  
3- Bank  
4- Others, specify  

**M. WASTE MANAGEMENT**

(70) What is the system of garbage disposal adopted by the household?  
1 Garbage collection  
2 Burning  
3 Composting  
4 Recycling  
5 Waste segregation  
6 Pit with cover  
7 Pit without cover  
8 Throwing of garbage in river, vacant lot, etc.  
9 Others, specify  

ASK QUESTIONS (71) AND (72) IF CODE 1 IN (70.1)

(71) Who collects the garbage?  
1 Municipal/city collector  
2 Barangay collector  
3 Private collector  
4 Others, specify  

(72) How often is the garbage collected?  
1 Daily  
2 Thrice a week  
3 Twice a week  
4 Once a week  
5 Others, specify
### N. SOURCES OF INCOME

#### N.1. ENTREPRENEURIAL ACTIVITIES

During the past 12 months, did you or any member of your household operate any of the following entrepreneurial activities?

<table>
<thead>
<tr>
<th>ENTREPRENEURIAL ACTIVITIES</th>
<th>(A) IN CASH</th>
<th>(B) IN KIND</th>
</tr>
</thead>
<tbody>
<tr>
<td>(73) CROP FARMING AND GARDENING such as growing of palay, corn, roots and tubers, vegetables, fruits, nuts, orchids, ornamental plants, etc.</td>
<td>73A</td>
<td>73B</td>
</tr>
<tr>
<td>(74) LIVESTOCK AND POULTRY RAISING such as raising of carabaos, cattle, hogs, horses, chicken, ducks, etc.; and the production of fresh milk, eggs, etc.</td>
<td>74A</td>
<td>74B</td>
</tr>
<tr>
<td>(75) FISHING such as capture fishing (with a boat of three tons or less); gathering of fry, shells, seaweeds, etc.; and culturing fish, oysters, mussel, etc.</td>
<td>75A</td>
<td>75B</td>
</tr>
<tr>
<td>(76) FORESTRY AND HUNTING such as tree planting (ipil-ipil), firewood gathering, small-scale logging (excluding concessionaires), charcoal making, gathering of forestry product (cogon, nipa, rattan, bamboo, resin, gum, etc.) or hunting of wild animals/birds</td>
<td>76A</td>
<td>76B</td>
</tr>
<tr>
<td>(77) WHOLESALE AND RETAIL including market vending, sidewalk vending, and peddling</td>
<td>77A</td>
<td>77B</td>
</tr>
<tr>
<td>(78) MANUFACTURING such as mat weaving, tailoring, dressmaking, bagoong making, fish drying, etc.</td>
<td>78A</td>
<td>78B</td>
</tr>
<tr>
<td>(79) COMMUNITY, SOCIAL, RECREATIONAL, AND PERSONAL SERVICES such as medical and dental practice, practice of trade, operation of schools, restaurants and hotels, etc.</td>
<td>79A</td>
<td>79B</td>
</tr>
<tr>
<td>(80) TRANSPORTATION, STORAGE AND COMMUNICATION SERVICES such as operation of jeepneys or taxis, storage and warehousing activities, messengerial services, etc.</td>
<td>80A</td>
<td>80B</td>
</tr>
<tr>
<td>(81) MINING AND QUARRYING such as mineral extraction like salt making, gold mining, gravel, sand and stone quarrying, etc.</td>
<td>81A</td>
<td>81B</td>
</tr>
<tr>
<td>(82) CONSTRUCTION or repair of a house, building, or any structure</td>
<td>82A</td>
<td>82B</td>
</tr>
<tr>
<td>(83) ACTIVITIES NOT ELSEWHERE CLASSIFIED including electricity, gas and water; financial, insurance, real estate, and business services</td>
<td>83A</td>
<td>83B</td>
</tr>
</tbody>
</table>

#### N.2 SALARIES AND WAGES FROM EMPLOYED MEMBERS

(85) TOTAL SALARIES AND WAGES

<table>
<thead>
<tr>
<th>(85A) Add all salaries/wages of all members in cash in Question 48A</th>
<th>(85B) Add all salaries/wages of all members in kind in Question 48B</th>
</tr>
</thead>
<tbody>
<tr>
<td>85A</td>
<td>85B</td>
</tr>
</tbody>
</table>

#### N.3. OTHER SOURCES OF INCOME

During the past 12 months, how much did you or any member of your household receive from the following?

<table>
<thead>
<tr>
<th>ACTIVITIES NOT ELSEWHERE CLASSIFIED including electricity, gas and water; financial, insurance, real estate, and business services</th>
<th>(95A): Add income from (86A) to (94A)</th>
<th>(95A): Add income from (86B) to (94B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(95) TOTAL INCOME FROM OTHER SOURCES OF INCOME</td>
<td>96B: Get the monthly imputed rent from (63) and multiply by 12</td>
<td>(97B) = 84B+ 85B+ 95B +96B</td>
</tr>
<tr>
<td>(96) TOTAL IMPUTED RENT FROM OWNED OR RENT-FREE HOUSE AND/OR LOT</td>
<td>(97A) = 84A + 85A + 95A</td>
<td></td>
</tr>
<tr>
<td>(97) TOTAL INCOME IN CASH AND IN KIND</td>
<td>98= (97A) + (97B)</td>
<td></td>
</tr>
<tr>
<td>(98) TOTAL HOUSEHOLD INCOME</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**O. AGRICULTURE-FARMING**

**ASK QUESTIONS (99)-(104) IF CODE ‘1’ IN (73). IF CODE ‘2’ IN (73), GO TO (105)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>99</td>
<td>What is the tenure status of the agricultural land being tilled by the household?</td>
</tr>
<tr>
<td>1</td>
<td>Fully-owned</td>
</tr>
<tr>
<td>2</td>
<td>Owner-like possession of Ancestral Land Title/ Certificate</td>
</tr>
<tr>
<td>3</td>
<td>Tenant of Ancestral Land Title (CADT/CALT)</td>
</tr>
<tr>
<td>4</td>
<td>Leased/Rented</td>
</tr>
<tr>
<td>5</td>
<td>Rent Free</td>
</tr>
<tr>
<td>6</td>
<td>Held under Certificate of Land Transfer (CLT) or Certificate of Land Ownership Award (CLOA)</td>
</tr>
</tbody>
</table>

**Q. AGRICULTURE-FISHING**

**ASK QUESTIONS (107)-(116) IF CODE ‘1’ IN (75). IF CODE ‘2’ IN (75), GO TO (111)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>107</td>
<td>Which fishing activity is the household engaged in?</td>
</tr>
<tr>
<td>1</td>
<td>Catching/gathering fishes, crabs, shrimps, etc.</td>
</tr>
<tr>
<td>2</td>
<td>Culturing fish, seaweeds, etc.</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (108)-(112) IF CODE 1 IN 107.1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>108</td>
<td>Where did household/s member/s fish in the past 12 months?</td>
</tr>
<tr>
<td>1</td>
<td>Marine waters</td>
</tr>
<tr>
<td>2</td>
<td>Inland waters</td>
</tr>
<tr>
<td>3</td>
<td>Both</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (109) IF CODE 1 IN 107.2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>109</td>
<td>How many of each of the following types of boats/vessels does the household use in fishing activities?</td>
</tr>
<tr>
<td>1</td>
<td>Boat with engine and outrigger</td>
</tr>
<tr>
<td>2</td>
<td>Boat with engine but without outrigger</td>
</tr>
<tr>
<td>3</td>
<td>Boat without engine but with outrigger</td>
</tr>
<tr>
<td>4</td>
<td>Boat without engine and outrigger</td>
</tr>
<tr>
<td>5</td>
<td>Raft</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (110) IF CODE 1 IN 107.1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>110</td>
<td>How many boats/vessels does the household own?</td>
</tr>
<tr>
<td></td>
<td>Number</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (111)-(112) IF CODE ‘1’ IN 107.1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td>What kind of gears/accessories/devices was/were used?</td>
</tr>
<tr>
<td>112</td>
<td>How many does the household own?</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (113)-(115) IF CODE 1 IN 107.1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>113</td>
<td>What type of aquafarm did the household member/s operate?</td>
</tr>
<tr>
<td>1</td>
<td>Fishpond</td>
</tr>
<tr>
<td>2</td>
<td>Fish pen</td>
</tr>
<tr>
<td>3</td>
<td>Fish cage</td>
</tr>
<tr>
<td>4</td>
<td>Seaweed farm</td>
</tr>
<tr>
<td>5</td>
<td>Oyster farm</td>
</tr>
<tr>
<td>6</td>
<td>Mussel farm</td>
</tr>
<tr>
<td>7</td>
<td>Fish tank</td>
</tr>
<tr>
<td>8</td>
<td>Hatchery</td>
</tr>
<tr>
<td>9</td>
<td>Others, specify</td>
</tr>
</tbody>
</table>

**ASK QUESTIONS (114)-(115) IF CODE 1 IN 107.1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>114</td>
<td>For the past 12 months, what were the fishes or aquatic animals cultured or caught by your household?</td>
</tr>
<tr>
<td>115</td>
<td>How much was the volume of fish harvested/caught in the past 12 months?</td>
</tr>
</tbody>
</table>

**P. AGRICULTURE-LIVESTOCK RAISING**

**ASK QUESTIONS (105)-(106) IF CODE ‘1’ IN (74). IF CODE ‘2’ IN (74), GO TO (107)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>For the past 12 months, what types of livestock or other animals were raised and provided the following products? (SEE CODES BELOW)</td>
</tr>
<tr>
<td>106</td>
<td>a) Volume of production sold [b) Volume of production consumed]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Live animals (number of heads)</td>
</tr>
<tr>
<td>2</td>
<td>Meat (weight in kilograms)</td>
</tr>
<tr>
<td>3</td>
<td>Milk (in liters)</td>
</tr>
<tr>
<td>4</td>
<td>Eggs (number)</td>
</tr>
<tr>
<td>5</td>
<td>Others, specify</td>
</tr>
</tbody>
</table>

**R. CLIMATE CHANGE**

**ASK QUESTIONS (107)-(116) IF CODE ‘1’ IN (75). IF CODE ‘2’ IN (75), GO TO (107)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>116</td>
<td>How many years has the household been living in the barangay?</td>
</tr>
<tr>
<td>1</td>
<td>3 years and above</td>
</tr>
<tr>
<td>2</td>
<td>Not more than 3 years</td>
</tr>
</tbody>
</table>

**R.1. CROP FARMING**

**ASK QUESTIONS (117)-(123) IF CODE ‘1’ IN (73) AND CODE ‘1’ IN 116**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>117</td>
<td>How many years has the household been engaged in crop farming?</td>
</tr>
<tr>
<td>1</td>
<td>3 years and above</td>
</tr>
<tr>
<td>2</td>
<td>Not more than 3 years</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>118</td>
<td>Compared with 3 years ago, did your harvest [[You can choose one of the following options: Decrease, Increase, Remain the same]]</td>
</tr>
<tr>
<td>1</td>
<td>Decrease</td>
</tr>
<tr>
<td>2</td>
<td>Increase</td>
</tr>
<tr>
<td>3</td>
<td>Remain the same</td>
</tr>
</tbody>
</table>
(119) What is the primary reason for the decrease in harvest?
1. Increase in cost of farm inputs
2. Affected by drought
3. Affected by typhoon
4. Affected by flood
5. Affected by pests
6. Decrease in supply of water such as seeds, fertilizer, etc. from the irrigation

(120) During the past 3 years, did you do the following in the last planting season?
120.1 Changed the variety of the same crop
120.2 Changed major crop

(121) Compared with 3 years ago, did the number of your livestock and poultry?
1. Increase
2. Decrease
3. Remain the same
4. Others, specify

(122) Do you have an insurance for the following? (SEE CODES BELOW)
1. Crops
2. Agricultural equipment/facilities

R.2. LIVESTOCK AND Poultry
ASK QUESTIONS (124)-(128) IF CODE '1' IN (74) AND CODE '1' IN 116

(124) How many years has the household been engaged in livestock and poultry raising?
1. 3 years and above (GO TO 125)
2. Not more than 3 years (GO TO 127)

(125) Compared with 3 years ago, did the number of your livestock and poultry?
1. Decrease (GO TO 126)
2. Increase (GO TO 127)
3. Remain the same (GO TO 127)

R.3. FISHING
ASK QUESTIONS (129)-(133) IF CODE '1' IN (75) AND CODE '1' IN 116

(129) How many years has the household been engaged in fishing?
1. 3 years and above (GO TO 130)
2. Not more than 3 years (GO TO 134)

(130) Compared with 3 years ago, did your fish catch?
1. Decrease (GO TO 131)
2. Increase (GO TO 132)
3. Remain the same (GO TO 132)

R.4. TEMPERATURE
(134) Compared with 3 years ago, is the temperature hotter now in your area?
1. Yes
2. No

R.5. ELECTRICITY
(135) Compared with 3 years ago, are brownouts more frequent now in your area?
1. Yes
2. No

R.6. SEA LEVEL
(136) Compared with 3 years ago, did the sea level in your area?
1. Increase
2. Decrease
3. Remain the same

R.7. WATER
(137) Compared with 3 years ago, did the water supply in your area?
1. Decrease
2. Increase
3. Remain the same

R.8. FLOODING
(138) What is the primary reason for the decrease in water supply?
1. Drought
2. Broken faucet/pump
3. Lower water level in the dam
4. Less frequent delivery of tanker truck/ peddler
5. Increase in number of consumers
6. Others, specify

(139) Compared with 3 years ago, do floods occur more often in your area now?
1. Yes (GO TO 140)
2. No (GO TO 144)
3. Did not experience flood (GO TO 144)

R.9. DROUGHT
(142) Compared with 3 years ago, does drought occur more often in your area now?
1. Yes (GO TO 143)
2. No (GO TO 144)
3. Did not experience drought (GO TO 144)

R.10. EVACUATION
(144) During the past 3 years, did you move out of/from your previous dwelling unit?
1. Yes (GO TO 145)
2. No (GO TO 146)

(145) What was your primary reason for moving out of your previous dwelling unit?
1. Calamity
2. Armed conflict
3. Infrastructure development project
4. Others, specify

(146) During the past 3 years, did you temporarily evacuate your house because of any calamity?
1. Yes (GO TO 147)
2. No (GO TO 148)

(147) Where did you stay when you temporarily evacuated?
1. School
2. Church
3. Covered court/gym
4. Relative's house
5. Neighbor or friend's house
6. Others, specify

(123), (128), (133)
1. Philippine Crop Insurance Corporation
2. Private insurance company
3. Bank
4. Others, specify

(121 Who is the insurance provider?
1. Yes
2. No

(SEE CODES BELOW)
R. 11. CALAMITY

<table>
<thead>
<tr>
<th>(148)</th>
<th>(149)</th>
<th>(150)</th>
<th>(151)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past 12 months, did your household experience destructive calamities such as a/an:</td>
<td>IF YES IN (148)</td>
<td>IF YES IN (149)</td>
<td>IF YES IN (150)</td>
</tr>
<tr>
<td>1. Typhoon</td>
<td>How many times did the __ happen?</td>
<td>Did you receive any kind of assistance?</td>
<td>Where did it come from?</td>
</tr>
<tr>
<td>2. Flood</td>
<td>1 - Yes</td>
<td>2 - No</td>
<td>1 - Yes</td>
</tr>
<tr>
<td>3. Drought</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Earthquake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Volcanic eruption</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Landslide/mudslide</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Tsunami</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Fire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Forest fire</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Armed conflict</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Others, specify</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

R. 12. DISASTER PREPAREDNESS

<table>
<thead>
<tr>
<th>(152)</th>
<th>(153)</th>
<th>(154)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you have a disaster preparedness kit?</td>
<td>1 - Yes</td>
<td>2 - No</td>
</tr>
<tr>
<td>1. Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Food (canned goods, biscuits, bread)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Matches/Lighter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Flashlight/Emergency light</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Radio/Transistor (battery-operated)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Candle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Medical kit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Whistle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Clothes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Blanket</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Battery (cellphone, flashlight, radio, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Important documents (land title, birth certificate, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Others, specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

S. HUNGER

<table>
<thead>
<tr>
<th>(155)</th>
<th>(156)</th>
<th>(157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last 3 months, did it happen even once that your household experienced hunger and did not have anything to eat?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Yes</td>
<td>(GO TO 156)</td>
<td></td>
</tr>
<tr>
<td>2 No</td>
<td>(GO TO 158)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(156)</th>
<th>(157)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past 3 months, how many days did your household experience hunger and did not have anything to eat?</td>
<td></td>
</tr>
<tr>
<td>NAME OF MONTH</td>
<td>NUMBER OF DAYS</td>
</tr>
<tr>
<td>a. First Month</td>
<td></td>
</tr>
<tr>
<td>b. Second Month</td>
<td></td>
</tr>
<tr>
<td>c. Third Month</td>
<td></td>
</tr>
</tbody>
</table>

T. HOUSEHOLD MEMBERS WHO DIED

<table>
<thead>
<tr>
<th>(158)</th>
<th>(159)</th>
<th>(160)</th>
<th>(161)</th>
<th>(162)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Were there any household members who died in the past 12 months?</td>
<td>What is the name of the person who died?</td>
<td>What is ___’s sex?</td>
<td>What was ___’s age at the time of death?</td>
<td>What was the cause of ___’s death?</td>
</tr>
<tr>
<td>1 Yes</td>
<td>(GO TO 159)</td>
<td>(SEE CODES BELOW)</td>
<td>(SEE CODES BELOW)</td>
<td>(SEE CODES BELOW)</td>
</tr>
<tr>
<td>2 No</td>
<td>(GO TO 163)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(159)</th>
<th>(160)</th>
<th>(161)</th>
<th>(162)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the name of the person who died?</td>
<td>What is ___’s sex?</td>
<td>What was ___’s age at the time of death?</td>
<td>What was the cause of ___’s death?</td>
</tr>
<tr>
<td>NAME</td>
<td>1 - Male</td>
<td>2 - Female</td>
<td>AGE</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

U. PROGRAMS

<table>
<thead>
<tr>
<th>(163)</th>
<th>(164)</th>
<th>(165)</th>
<th>(166)</th>
<th>(167)</th>
</tr>
</thead>
<tbody>
<tr>
<td>During the past 12 months, did you or any member of your household receive or avail of any of the following programs?</td>
<td>What is the name of the program?</td>
<td>How many household members are covered by or are members of this program?</td>
<td>What is/are the name/s of the household member/s who is/are beneficiary/ies/members of the program?</td>
<td>Who implemented this program?</td>
</tr>
<tr>
<td>TYPE OF PROGRAM</td>
<td>1 - Yes</td>
<td>2 - No</td>
<td>FULL NAME OF PROGRAM</td>
<td>NAME OF HOUSEHOLD MEMBER/S</td>
</tr>
<tr>
<td>1. Sustainable Livelihood Program (DSWD)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Food for School</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Food for Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Cash for Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Social Pension for the Indigent Senior Citizens</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(167)</td>
<td>1 - National</td>
<td>3 - City/Municipality</td>
<td>5 - Congress/District</td>
<td>7 - Don’t know</td>
</tr>
</tbody>
</table>
### U. PROGRAMS

During the past 12 months, did you or any member of your household receive or avail of any of the following programs?

<table>
<thead>
<tr>
<th>TYPE OF PROGRAM</th>
<th>(164)</th>
<th>(165)</th>
<th>(166)</th>
<th>(167)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Pantawid Pamilyang Pilipino Program (4Ps)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Agrarian Reform Community Development Program (ARCDP)</td>
<td></td>
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<tr>
<td>8. Training for Work Scholarship Program (TWSP)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>9. Community-Based Employment Program (CBEP)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Philhealth - OFW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Philhealth - Employed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Philhealth - Individually paying</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Philhealth - Sponsored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Philhealth - Lifetime</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Other health insurance (Maxicare, Medicare, Intellicare, etc.)</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Health assistance</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Supplemental feeding</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. Education/scholarship program</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Skills or livelihood training program</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Credit program</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Housing program</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. Other programs, specify</td>
<td>1.</td>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(167)</strong> 1 - National 2 - Province 3 - City/Municipality 4 - Barangay 5 - Congress/District 6 - Private Organizations/NGOs 7 - Don’t know 8 - Others, specify</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Procedures in Filling Up the Household Profile Questionnaire (CBMS FORM 1)

A. Identification Page

Fill up all the required information on the cover page.

I. Identify the location: Write the name of the province, city/municipality, zone, barangay, purok or sitio, street, and the house number.

Example:

I. Location
a. Province: Province 1
b. City/Municipality: Bayan 1
c. Zone: Zone 1
d. Barangay: Barangay 1
e. Purok/Sitio: Purok 1
f. Street: Sampaguita St
g. House Number: 1123B

II. Write the household identification number: This ID number is uniquely assigned to each household. This will help in the identification and control of the samples. The enumerator should check if each of the questionnaires handed out by the supervisor has a unique ID number before the conduct of the census. Always put the ID number at the space provided at the top right of each page. This is very important in case the pages of the questionnaire get separated.

II. Household Identification Number: 17 (ID No.)

REMINDER: The enumerator should ensure that a household ID number is written on the upper right corner of all pages of each questionnaire.

III. Record the coordinates. Data on geographic coordinates can be taken from GPS readings from mobile phones or GPS trackers. The geographic location of a household needs to be recorded in this section to be incorporated during encoding of data. This will minimize the work of matching the digitized household location in separate software. Refer to Chapter 4 of the Field Operations Manual—Census Forms and Procedures for additional information on GPS. The first example shows coordinates in degrees, minutes, and seconds. The second sample shows the GPS coordinates of the same example household location in decimal degrees only. For purposes of the CBMS census, the coordinates to be recorded should be in decimal degrees only.

III. Coordinates
A.1 Latitude: 14°34'4.934"
A.2 Longitude: 120°00'2.008"

III. Coordinates
A.1 Latitude: 14.5680
A.2 Longitude: 121.0033
IV. **Write the name of the respondent:** Ask for the complete name (first name and surname) of your respondent and write these down on the line provided.

V. **Record the date of the interview:** Note down the date when the interview was conducted using this format: month, day, and year. Ex. September 23, 2013

VI. **Record the time of the interview:** Before starting the interview, write down the current time. If the interview was conducted in the morning, indicate “AM.” If interview was conducted in the afternoon, write “PM.”

---

**IV. Name of Respondent:** Juliet dela Cruz  
**V. Date of Interview:** September 23, 2013  
**VI. Time Started:** 9:00 AM

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**B. Housing Characteristics**

**QUESTION 1 – TYPE OF BUILDING WHERE THE HOUSEHOLD RESIDES**

**Question:** “In what type of building does the household reside?”

There is no need to ask the respondent this question.” Just observe the building/house/dwelling unit of the household then write the appropriate code in the box provided. Some of the possible answers and the corresponding codes are provided below:

1. **“Single house”** – an independent residential structure intended for one household, separated by an open space or walls from the outer structures. It includes the so-called “nipa hut” or a small house built as a more or less permanent housing unit or a barang-barang, which is made of salvaged/makeshift/improvised materials.

2. **Duplex** – a residential structure intended for two households, with complete living facilities for each. It is divided vertically or horizontally into two separate housing units that are usually of identical features.

3. **Multi-unit residential (three units or more)** – a building intended for residential use only, consisting of three or more housing units. These houses may consist of one or more storeys in a row of three or more housing units, separated from each other by walls extending from the ground to the roof, or a building having floors to accommodate three or more housing units.

**Examples:**

(a) **Apartment** – a structure usually of several entrances from the internal hall or court. An apartment has one common entrance from the outside.

(b) **Accessoria** – usually a one- or two-floor structure divided into three or more housing units, each unit having its own separate entrance from the outside. An accessoria is sometimes referred to as a row house.

(c) **Condominium** – usually a high-rise building where the housing units are owned individually but the land and other areas and facilities are owned in common.

**Note:** A building that was originally constructed as a single house or duplex but is now partitioned into three or more rooms/groups of rooms (with separate entrance from a common hall or passage) without changing the outside structure or appearance will be classified as a single house or duplex, as the case may be.

4. **Commercial/industrial/agricultural (office, factory, and others)** – these refer to buildings that are not intended mainly for human habitation but are used as living quarters of households at the time of the census.

**Definitions:**

- Commercial building – a building built for transacting business or for rendering
professional services. Examples are a store, office, warehouse, rice mill, and others.

- Industrial building – a building built for processing, assembling, fabricating, finishing, and manufacturing or packaging operations, such as a factory or a plant.
- Agricultural building – any structure built for agricultural purposes, such as a barn, table, poultry house, granary, and others.

5. Other housing units (e.g., boat, cave, etc.) – these refer to living quarters that are neither intended for human habitation nor located in permanent buildings but are, nevertheless, used as living quarters at the time of the census. Caves, trailers, barges, carts, boats, and others fall into this category.”

QUESTION 2 – NUMBER OF BEDROOMS²

Question: “How many bedrooms does this housing unit have?”

“A bedroom is a separate space or quarter for sleeping. It is where household members usually sleep. Politely ask where the household members usually sleep. If there is NO space for sleeping quarters separate from where members dine and socialize, among others, in a common area in the house, then enter “0” in the box provided.”

QUESTIONS 3 AND 4 – CONSTRUCTION MATERIALS USED FOR THE ROOFS AND OUTER WALLS OF THE HOUSE³

There is no need to ask the respondent this question. Simply observe and classify the materials used for the roofs and for the outer walls of the house.

“Data on construction materials for the roof and outer walls provide information on the construction, replacement, and improvement of housing units. These items can be used as proxy variables to measure the economic condition of households.

Data on these items can also be used in evaluating construction statistics, in program implementation, and for estimating investments in housing construction. They can also be used to determine the number of households residing in structurally acceptable housing units.

Structural acceptability of housing units implies that the housing units are made of durable construction materials that will safeguard occupants from adverse climatic conditions and will provide protection and privacy.”

Question 3: “What type of construction materials are the roofs made of?”

If two or more kinds of roofing materials are used, report the material used in most parts of the roof. Thus, for a house with different kinds of roofs, report the materials used in the main portion of the housing unit (usually containing the living room/sala and bedrooms).

Classify construction materials used in the roof of the house as follows:

1. Strong materials (galvanized iron, aluminum, tile, concrete, brick, stone, asbestos)
2. Light materials (cogon/nipa and anahaw)
3. Salvaged/makeshift materials (scrap GI sheets and planks or pieces of “lawanit,” dilapidated boxes, and others that are usually salvaged from burned or condemned structures).
4. Mixed but predominantly strong materials.
5. Mixed but predominantly light materials.
7. Not applicable – should be reported if the answer to Q1 is “5” (Other housing units such as boat, cave, and others).

Note: Do not report the roof as “made of strong materials” if the housing unit is constructed under a bridge. The construction material of the roof is to be reported.

² Question and instructions were adopted from page 90 of the 2012 Family Income and Expenditure Survey, National Statistics Office.
³ Questions, description and instructions were adopted from pages 87-88 of the 2012 Family Income and Expenditure Survey, National Statistics Office.
Question 4: “What type of construction materials are the outer walls made of?”

Use as a guide the instructions for Q3 (construction materials used on the roofs of the house) above in selecting the type of construction materials of the outer walls.

Categories for construction materials of the outer walls are as follows:

1. Strong materials (galvanized iron/aluminum, tile, concrete, brick, stone, wood, and asbestos).
2. Light materials (bamboo, sawali, cogon, nipa, anahaw).
4. Mixed but predominantly strong materials.
5. Mixed but predominantly light materials.
7. Not applicable – should be reported if the answer to Q1 is “5” (Other housing units such as boat, cave and others).

C. Household Characteristics

Before asking questions under this category, be sure to explain to the respondent what household and household membership mean, as explained below.

Household and Household Membership

“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 for the preparation and consumption of food.4

In most cases, a household is a social unit consisting of persons with kinship ties, like parents and their children. In some instances, several generations of family ties are represented in one household, while in others, even distant relatives are members of the household.”

“According to this definition, a person who lives alone is considered a household; also a person who rents bed space but makes arrangements for his/her own food is also a household. However, a group of persons who share or take their meals together but live in separate but adjacent living quarters for convenience is also considered one household.5

“A family (also called a nuclear family), on the other hand, is defined as a group of persons usually living together. It is composed of the head and other persons related to the head by blood, marriage, and adoption.”6 For the purpose of the CBMS, the “extended” family concept is followed. A person living alone is also considered one family.

“An extended family is composed of a nuclear family, as defined above, together with relatives like a son/daughter-in-law, grandchildren, a father, a mother, and other relatives. However, the presence of a boarder and domestic helper will not change the household type.”7

“Considered members of a household are as follows:

- Persons present at the time of census whose usual place of residence (or the place where they usually reside) is the household, regardless of the length or frequency of their stay in the household;
- Persons present at the time of the visit whose usual place of residence is outside the household but have stayed temporarily with the household for at least 30 days;
- Persons present at the time of visit whose usual place of residence is outside the household and have stayed with the household even for less than 30 days provided that they have been away from their usual place of residence for 30 days or more;
- Persons not present at the time of visit but are expected to return to their usual place of residence, which is the household, within 30 days from their date of departure.

The following persons who are not present at the time of the census are also considered members of the household:

---

5 Definition was adopted from page 9 of the Labor Force Survey (LFS) Enumerator’s Manual, 2008.
1. Overseas contract workers (OCWs);
2. Overseas workers, except for OCWs who are away for less than 5 years from the time of their departure and are expected to be back within 5 years from the date of their last departure;
3. Persons working in Philippine embassies, consulates, and other missions;
4. Students in other countries and tourists who are away for less than a year and are expected to return within 1 year from their time of departure. Included in this category are those who are training abroad, confined in hospitals, and missionaries.

There is no scheduled time of return for members of the household in (1) and (3).

Not considered members of a household are the following:

- Persons or who are inmates of institutions such as penal colonies/farms, detention camps, homes for the aged, orphanages, mental institutions, tuberculosis sanitariums, leprosaria, etc., and who are not expected to return within 30 days from their date of departure.
- Members of the Armed Forces of the Philippines, if they have been away from the household for more than 30 days from their date of departure.
- Filipinos whose usual place of residence is in a foreign country who are and will be in the Philippines for less than 1 year from their arrival.
- Citizens of other countries who are in the Philippines as tourists, students, merchants, or workers whose stay in the country does not exceed 1 year.
- Representatives of embassies, ministries, consulates, or other messengers and members of their families, regardless of how long they stay in the country.
- Citizens of other countries who are leaders or officials of international organizations like the United Nations (UN), International Labor Organization (ILO), or United States Agency for International Development (USAID) and members of their family, regardless of how long they stay in the country.9

QUESTION 5 – NUMBER OF HOUSEHOLD MEMBERS WHO ARE OVERSEAS WORKERS

Question: “How many household members are overseas workers?”

Ask the respondent the number of household members who are overseas workers. Enter the respondent’s answer in the box.

“An overseas worker is one who is currently out of the country due to overseas employment. He/she may or may not have a specific work contract or may be currently at home on vacation but has an existing overseas employment for which to return. Undocumented overseas workers or “TNT” (Tago Nang Tago) are considered overseas workers for as long as they are still considered household members or had been away for less than 5 years. However, immigrants are excluded from the census.”10

For this census, overseas workers include those who depart within the given 5-year period and described as follows:11

1. “Filipino overseas workers are those who are currently and temporarily out of the country to fulfill an overseas work contract for a specific length of time or who are currently at home on vacation but still have an existing contract to work abroad. They may be land-based or sea-based.

(a) Land-based workers are overseas workers who are hired either directly by an employer abroad or indirectly through the assistance of the Philippine Overseas Employment Administration (POEA) or through a private and licensed recruitment agency. They may have returned to the Philippines

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9 This section was adopted from pages 10-11 of the Labor Force Survey (LFS) Enumerator’s Manual 2008.
10 Definition was adopted from page 21 of the Enumerator’s Manual of the 2010 Census of Population and Housing, NSO.
for a vacation (annual or emergency leave) or have transferred to other employers or were rehired by their former employer.

b) Sea-based workers are overseas workers who have worked or are working in any kind of international fishing/passenger/cargo vessels, including overseas workers who have worked or are working for a shipping company abroad.

2. Other Filipino workers abroad with a valid working visa or work permits, including crew members of airplanes such as pilots, flight attendants, and others.

3. Filipinos whose place of employment is outside the Philippines but whose employer is the Philippine government. Examples are Filipinos who work or are working in Philippine embassies, missions, and consulates.

4. Filipinos who are sent abroad by the Philippine government or by private institutions for training, scholarship, or any other activity of similar purpose, even if they are known to be working.

5. Filipinos working in other countries who are hired as consultants/advisers of international organizations such as the United Nations, International Monetary Fund, and others.

6. Filipino immigrants and residents in other countries.

7. Filipinos abroad who are holders of other types of non-immigration visa such as tourist/visitor, student, medical people, and others.

8. Other Filipino workers who are not necessarily contractual. These include Filipinos who went out of the country through the back door and worked abroad during the reference period."

Persons who are 10 years old and above are also household members when they fall under these categories:

1. “OCWs who are related to the household head, by consanguinity or affinity, and who were regular members of the household prior to their departure and will remain members upon their return.

   Example:
   Spouse of the household head who is expected to return to the household; son-in-law of the household head who is working abroad and his wife and/or children, whom he will join upon his return, and who are living with the said household.

2. OCWs whose stay abroad is indefinite but who are related to the household head by consanguinity or affinity and have lived with this household prior to their departure.

3. OCWs who are related to the household head by consanguinity or affinity and who are not members of the household prior to their departure and became members upon their return.

   Example:
   An OCW, on his return to the Philippines, will marry the daughter of the household head. He will become a household member upon his return as the son-in-law.”

QUESTION 6 – NUMBER OF NUCLEAR FAMILIES IN THE HOUSEHOLD

Question: “How many nuclear families are there in the household?”

Ask the respondent how many nuclear families there are in the household. Note that “0” entries are not allowed.

“A family (also called a nuclear family), is defined as a group of persons usually living together and composed of the head and other persons related to the head by blood, marriage, and adoption."

Members of a nuclear family are the head, his/her spouse, and their children (codes 1, 2, and 3 of Q13, with the marital status of the children of the head as “single” [code 1 in Q17]).

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12 Section was adopted from page 4 of the Enumerators Manual of the 2008 Survey of Overseas Filipinos.


For purposes of the CBMS census, the following definitions are to be followed:

- Unmarried sisters and brothers who are living together are considered a nuclear family.
- A person living alone is also a nuclear family.
- If the head is a Muslim, his first wife and their children constitute one nuclear family; his second wife and their children, the second nuclear family; and so on.

**QUESTION 7 – PREGNANT MEMBERS OF THE HOUSEHOLD**

**Question:** “Is any member of the household pregnant?”

Ask if there are members of the household who are pregnant. Enter “1” for a YES answer and “2” for a NO answer.

**QUESTION 8 – SOLO PARENT MEMBERS OF THE HOUSEHOLD**

**Question:** “Is any member of the household a solo parent?”

Ask the respondent if there are household members who are solo parents. Enter “1” for a YES answer and “2” for a NO answer.

According to Republic Act (RA) No. 8972 or the Solo Parent’s Welfare Act of 2000, a parent can be considered a solo parent if he/she solely assumes the responsibility of taking care of the child/children because of any of the following reasons:

1. Death of spouse.
2. Imprisonment of spouse for at least 1 year.
3. Mental and physical incapacity of spouse
4. Legal or de facto separation from spouse for at least 1 year.
5. Annullment of marriage as decreed by the court or church.
6. Abandonment by spouse for at least 1 year.
7. Unmarried mother or father who preferred to keep, instead of letting others care for, the child.
8. Any other person who solely provides parental care and support to a child provided he/she is a duly licensed foster parent of DSWD or a duly appointed legal guardian by the court through adoption or legal guardianship.
9. Any family member who solely assumes the responsibility as head of the family as a result of death, abandonment, prolonged absence, or disappearance of the parent for at least 1 year.
10. Other reasons.

According to RA 8972, an OFW or his spouse cannot be considered a solo parent because they both provide support and care to their children. But if a parent is overseas and has no more communication with his/her family for more than 1 year, then the parent who is in the Philippines is considered a single parent for reason of abandonment by the spouse.

**QUESTION 9 – DISABLED MEMBERS OF THE HOUSEHOLD**

**Question:** “Is any member of the household disabled?”

Ask the respondent if there are household members who are disabled. Record “1” if YES and “2” if NO.

“Disability refers to any restriction or lack of ability (resulting from an impairment) to perform an activity in the manner or within the range considered normal for a human being. Impairments associated with disabilities may be physical, mental, or sensory motor, such as partial or total blindness, low vision, partial or total deafness, oral defect, having only one hand/no hands, one leg/no legs, mild or severe cerebral palsy, mental illness, mental retardation, and multiple impairments.

Comprehensive and accurate data on persons with disability are essential in formulating plans for the rehabilitation, education, and development of persons with disability. This information is also important in rationalizing the establishment of more government-subsidized institutions that would cater to the promotion of physical, emotional, and psychosocial well-being of persons with disability.”

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15 Adapted from pages 117-118 of the 2010 Census of Population and Housing, NSO.
D. Demography

COLUMN 10A – LINE NUMBER

Every questionnaire is provided with 10 lines or rows where you will write the names of all household members. Each line has a corresponding number referred to as the Line Number. The line number will help you identify each member of the household.

Question: “How many members are there in this household, including OFWs?”

Ask the respondent the names of each household member, including OFWs. In the first column, encircle the number that corresponds to the number of household members. This will guide you on the household size as the interview progresses.

The question “Are there more than 10 members in this household?” found at the bottom of page 2 is NOT MEANT TO BE ASKED of the respondent but simply a guide for the enumerator. Enter “1” for YES or “2” for NO in the box provided.

Pages 2–6 of the CBMS Form 1 can only accommodate information for a maximum of 10 persons. For more than 10 household members, get another CBMS Form 1 and continue listing the remaining household members on pages 2, 3, 4, 5 and 6 only.

Do not forget to change the pre-printed line number from “1” to “11,” “2” to “12,” and so on in the additional form. Then proceed to ask the questions for each of the household members listed.

QUESTION 2 – NAME OF EACH HOUSEHOLD MEMBER

By now, you are ready to list the names of the household members.

Questions: “Who is the household head?” “Who are the other members of the household?”

First, determine who is the household head and is listed as number one in Question 2. “The household head is an adult person, male or female, who is responsible for the organization and care of the household or who is regarded as such by the household members.”

In listing the names of household members, follow this order:

(a) “Household head.
(b) Spouse of the household head.
(c) Never-married children of head/spouse— from oldest to youngest, regardless of sex—and never-married children of head/spouse from previous marriage (if any)—from oldest to youngest, regardless of sex.
(d) Ever-married children of head/spouse and their families, from oldest to youngest (for instance, son first, followed by daughter-in-law, then grandchildren, or son-in-law first,

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Adopted from page 9 of the 2008 Labor Force Survey.
Prescribed order of listing household members was adopted from page 101 of the 2010 Census of Population and Housing.
followed by daughter, then grandchildren, as the case may be).

(e) Other relatives of the household head such as parents, grandparents, brothers, sisters, parents-in-law, and others (including all other relatives of the head’s spouse).

(f) Non-relatives of the head, such as boarders (including relatives who are mere boarders) and domestic helpers (including relatives who are employed or working as domestic helpers).

If the household head has more than one spouse living in the same household, list the name of the first spouse with their children, then the second spouse with their children, and followed by others with their children.”

In listing household members, write the surname first, then a comma, then the first or given name, and then the middle name. If the surname and the middle name of a member are the same as that of the one it immediately precedes, simply draw a horizontal line and a comma (______) in place of that surname and middle name in the line provided.

After listing all the household members in Q2, ask the respondent this question:

“Just to make sure that I have a complete listing, I have listed (cite the total number listed) people. Is this correct?”

If the answer is YES, draw a diagonal line in Q2, after the name of the last household member to indicate that nothing follows after it. Otherwise make the appropriate corrections.

**QUESTION 12 – NUCLEAR FAMILY**

**Question: “In which nuclear family (specify name) belongs?”**

Ask the respondent in Q12 in which family does each household member belong.

If the answer in Q6 is “1,” the correct entry for all household members in Q12 is “1.” This means that all household members belong to one family. If the answer in Q6 is “2” (2 families), the correct entry for the nuclear family should be “1” or “2.” If there are 3 families in the household, the correct entries in Q12 should be 1, 2, or 3 according to the list of members as instructed in Q11. See example below.
QUESTION 13 – RELATIONSHIP TO HOUSEHOLD HEAD

Question: “How is (specify name) related to the household head?”

Remember that the person whose name appears on the first line of the list is the household head. All other members should be related to him in some way. Possible answers and their designated codes are as follows:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Head</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Spouse</td>
<td>7</td>
</tr>
<tr>
<td>3</td>
<td>Son/daughter</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Son/daughter-in-law</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>Grandchildren</td>
<td></td>
</tr>
</tbody>
</table>

Note that if a married son, together with the members of his family, is a member of the household of his parents with whom he lives, he should not be reported as household head of his own family but as the head’s son, his wife as daughter-in-law, and his children as grandchildren. There is only one head for each household.

QUESTION 14 – SEX

Question: “Is (specify name) male or female?”

Record the sex of each person accurately, using the appropriate codes provided below the column (i.e., 1 – MALE, 2 – FEMALE). Do not base the sex of the household members with their given names. Some names can be used for both sexes. Do not hesitate to ask for the sex of the member if unsure about it.

QUESTION 15 – DATE OF BIRTH

Question: “In what month, day, and year was (specify name) born?”

Determine the date of birth of each household member by asking the respondent:

“What is the date of birth of (specify name)?”

Always ask for the date of birth even if the age of the person is already given. Ask for the month, day, and year of birth of each person. Code the month using the two-digit numerals as shown below and write the date of birth following the format MM/DD/YYYY. Take note of the corresponding number of calendar days for each month.

If the respondent does not know the exact date of birth of the household member, probe for the year of birth. Record the year of birth in the space provided in Q5.

If the respondent does not know the year of birth, probe for the age of that person as of last birthday and ascertain the year of birth from the given age. The age as of last birthday refers to the number of past birthdays from the time of date of birth to the time of the conduct of census. If the respondent estimates the age of a person in multiples of 5 and 0 as for example, around 70 or 85, try to ascertain as much as possible the nearest estimate.

Also, write down the age as of last birthday of each household member in the space provided. The age will serve as reference to subsequent questions. If a household member is less than 1 year old, write down “0” as his/her age.

<table>
<thead>
<tr>
<th>Month</th>
<th>Code</th>
<th># of Calendar Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>01</td>
<td>31</td>
</tr>
<tr>
<td>February</td>
<td>02</td>
<td>28</td>
</tr>
<tr>
<td>March</td>
<td>03</td>
<td>31</td>
</tr>
<tr>
<td>April</td>
<td>04</td>
<td>30</td>
</tr>
<tr>
<td>May</td>
<td>05</td>
<td>31</td>
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<tr>
<td>June</td>
<td>06</td>
<td>30</td>
</tr>
<tr>
<td>July</td>
<td>07</td>
<td>31</td>
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<tr>
<td>August</td>
<td>08</td>
<td>31</td>
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<td>September</td>
<td>09</td>
<td>30</td>
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<tr>
<td>October</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>November</td>
<td>11</td>
<td>30</td>
</tr>
<tr>
<td>December</td>
<td>12</td>
<td>31</td>
</tr>
</tbody>
</table>
**QUESTION 16 – BIRTH REGISTRATION**

**Question:** “Was the birth of (specify name) registered with the local civil registry office?”

An official civil registration signifies the occurrence of birth and is called birth registration. The proof is the birth certificate with a local civil registry number.

The birth certificate of a person is a proof of recognition of the individual's importance to the state and his/her status under the law. The right to be registered at birth is provided for in Article 7 of the United Nations Convention on the Rights of the Child of which the Philippines was among the 196 nation signatories.

Ask if each of the members’ birth is registered in any local civil registrar. Enter “1” for YES and “2” if the answer is NO.

**QUESTION 17 – CIVIL STATUS**

**Question:** “What is the marital (civil) status of (specify name)?”

“Civil status (or marital status) refers to the personal status of each individual in reference to the marriage laws or customs of the country.”

In Q7, enter only the designated code of the civil or marital status of each household member. The codes are provided at the bottom of the page. The appropriate codes are as follows:

1. **Single** – a person who has never been married.
2. **Legally married** – a person married in a religious or civil ceremony, either living together with spouse at the time of the visit or temporarily living apart because his/her spouse is employed elsewhere or is in the Armed Forces.
3. **Widow/widower** – a married person whose spouse died and who has not remarried up to the time of the visit.
4. **Divorced/separated** – a person who is permanently separated from his/her spouse, legally or through mutual consent. This is also applicable for a person whose marriage with another person has been annulled and can, therefore, remarry.
5. **Common law/live-in** – a person cohabiting or living consensually with another person as husband and wife without the benefit of a legal marriage.
6. **Unknown** – A person whose marital status is unknown to the respondent, or whose marital status is being concealed by the respondent/person to other members of the household.

**QUESTION 18 – ETHNICITY**

**Question:** “What is the ethnicity by blood of (specify name)? Is he/she a/an (specify name of predominant/common indigenous people)?”

“Ethnicity represents one’s affiliation to an ethnic group. An ethnic group is consanguine in nature, where the ties are reckoned by blood and traced through the family tree. Thus, ethnicity refers to the household member’s identity, by blood and not by choice or by adoption/confirmation for any ethnic group, primarily among the indigenous peoples (IPs).”

“Generally, ethnic grouping denotes genealogical and paternal lineage to any of the Philippine’s group of native population. However, for CBMS census purposes, ethnic grouping also includes maternal lineage. As such, if an individual's parents or any of them are a member of an IP group, then this individual is also an indigenous person.”

“It is important that an enumerator follows up this question by mentioning the common ethnic groups in that area. For instance, if one is doing the census in the municipality of Upi in the province of Maguindanao, which is predominantly inhabited by Maguindanaos, Iranons, and Tedurays, one should mention these ethnic groups by saying, “Is he/she a Maguindanao, Iranon, or Teduray?” If the census is conducted, for example, in Surigao City in the province of Surigao del Norte, most of inhabitants are Mamanwa, Cebuano, or Bisaya. Mention these ethnic groups as examples when asking for the ethnicity of the respondent and the other household members.”

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20 Questions, explanation, and examples were adopted from pages 113-117 of the 2010 Census of Population and Housing, NSO.
The complete alphabetical listing of ethnicity, their corresponding codes, and the most common ethnic groups are provided in the code book.

- **Case 1** – Mixed non-IP parents
  Father – Tagalog
  Mother – Ilocano

  In Case 1, children who are 13 years old and over will decide between Tagalog and Ilocano. If children (13 years old and over) are around, you should directly ask them. If not, ask the respondent on behalf of these children.

  Children below 13 years of age who could not yet decide on their ethnicity at the time of census should take the ethnicity of their mother.

- **Case 2** – Mixed IP parents
  Father – Kankanaey
  Mother – Ibaloi

  In Case 2, children who are 13 years old and over will decide between Kankanaey and Ibaloi. If children (13 years old and over) are around, you should directly ask them. If not, ask the respondent on behalf of these children.

  In no case, however, shall an IP group be ascribed as the ethnicity of any child whose parents are not consanguine members of that ethnic group. Children below 13 years of age who could not yet decide on their ethnicity at the time of census should take the ethnicity of their mother.

- **Case 3** – Mixed IP and non-IP parents
  Father – Dumagat (IP)
  Mother – Kapampangan (non-IP)

  In Case 3, wherein only one of the parents is an IP, the ethnicity of the children should follow that of the IP parent. In this case, all children, regardless of age, should automatically be considered as Dumagat.

- **Case 4** – Mixed IP and Muslim parents
  Father – Maranao (Muslim)
  Mother – Manobo (IP)

  Muslim tribes are paternalistic, by nature. In Case 4, for a family with Islam as its religion, the ethnicity of the children should follow the father’s ethnicity, that is, Maranao.

  For a family that adopted any religion other than Islam, the ethnicity of the children, regardless of age, should be that of the IP parent. In this case, the child’s ethnicity should be Manobo.

- **Case 5** – Mixed Muslim parents
  Father – Samal
  Mother – Badjao

  In Case 5, for a family with Islam as its religion, all children, regardless of age, should follow the ethnicity of their father, that is, Samal. There are instances, however, when a person belonging to a Muslim tribe has a religion other than Islam. In this case, children who are 13 years old and over should decide between Samal and Badjao, while children below 13 years of age who cannot decide on their ethnicity at the time of the census should take the ethnicity of their mother, that is, Badjao.

- **Case 6** – Mixed Muslim and non-IP parents
  Father – Tausug (Muslim)
  Mother – Bicolano (non-IP)

  In this example, all children, regardless of age, should be considered as Tausug. However, if it happens that the father is a Bicolano and the mother is a Tausug (Muslim), their children should be considered as Bicolanos, which is strictly adhering to the paternalistic concept.

  Answers such as Igorot, Cordilleran, Lumad, Bangsa Moro, and others are not IP or ethnic groups. These are generic or general/collective terms coined by others or by religious groups to refer to groups that, with constant use and span of time, such groups have somewhat adopted to identify themselves. If these answers are encountered, probe further by mentioning some of the predominant/common subgroups to finally identify the proper name of the ethnic group.
QUESTION 19 – OVERSEAS WORKERS

Question: “Is (specify name) an overseas worker?”

If the household member is 10 years old and above and an overseas worker based on the rules specified in section A, enter 1 for YES. Otherwise, enter 2 for NO. For overseas workers (with YES answers), proceed to Q25. For those who are not overseas workers (with NO answers), proceed to Q20.

If the answer is “2,” ask the place where each household member was residing 3 years ago. Specify name of the barangay, municipality or city, province, and country on the space provided. If the member of the household came from another country, specify the country in which he/she resided 3 years ago.

The question is not applicable for household members who are below 3 years old. In this case, mark this question with “------.”

If the respondent does not know the residence of the members of the household, directly ask the person, if present at the time of the visit, about his/her prior residence. However, if the person cannot recall the name of the barangay, town, and province where he/she came from before coming to the barangay after exhaustive probing, enter “unknown” in the space provided.

QUESTION 20 – RESIDENCY 3 YEARS AGO

Question: “Where was (specify name) residing 3 years ago?”

Determine the place of residence of the household 3 years ago. The appropriate codes are

1. Same address now, or
2. Other addresses (to be specified).
COLUMN 10B – LINE NUMBER

Since you are starting on a new page, the respective line numbers in column 10B will guide you in recalling the household members listed in column 11 of page 2. All you have to do is to follow the number on column 10A in page 2 corresponding to each member of the household.

Remember to encircle the number from the line number column that corresponds to the number of household members. Write down the first name only of the household members. The order of listing should be similar to the order of listing of names in column 11 of page 2.

E. Education and Literacy

QUESTIONS 21–25. These apply only to households with members who are 3 years old and above. If not applicable to the household member, mark with “---------,” then proceed to Q26.

This section aims to gather the determinants of being out of school. The government target for its education programs is the age group 6–24. Those who are 3–5 years old were included to capture early childhood educational learning. This will determine if the family members who are 3–5 years old are attending/have attended early education/learning system in order to assess their “school readiness.”

QUESTION 21 – SCHOOLING STATUS

Question: “Is (specify name) currently attending school?”

This question will determine if the particular household member attends school during the most recent school year or is continuing his/her education.

“School attendance means attendance in any educational institution, public or private, for formal academic education at the elementary, high school, college, or university level. Attendance in any of these schools leads to a higher grade and, ultimately, to an academic title/degree.

This section also includes attendance in open universities/distance learning and night classes. Include school attendance that is leading to a high school diploma in vocational high school, such as school of arts and trades or technical high schools, and rural or agricultural high schools. Include also attendance in post-secondary vocational/technical schools, which are within the regular system of education, such as universities and colleges like Samson Institute of Technology, Eulogio “Amang” Rodriguez Institute of Science and Technology (EARIST), and others.

For the purposes of the CBMS census, include attendance in madrasah and other learning systems that are accredited by the Department of Education (DepEd), such as Alternative Learning Systems. Correspondence courses given by a regular school, such as a university and the courses toward promotion in the regular school system, are also included.

However, there are cases where school attendance is not considered. They include the following:

1. School attendance in vocational schools outside the regular system of education, such as short courses in dressmaking, beauty culture, hair science, auto mechanic, motor vehicle driving, typing, stenography, bookkeeping, and others. Examples of these schools are A-1 Driving School, CWL Vocational Center, and others.
2. School attendance in review classes for bar, board, or other examinations for the practice of a profession or trade.
3. Training received by mail from correspondence schools like the International Correspondence School (ICS).”

Here, most recent school year refers to the current or most recent school year. If the census is conducted during summer or semestral break where no classes are held, the question should refer to the past school year before the summer or semestral break.

Concepts and definition were adopted from the Interviewer’s Manual of the 2013 Annual Poverty Indicator Survey.
Enter “1” if YES, and “2” if NO. For those members who are still studying (with YES answers), proceed to Q22. For those who stopped studying (with NO answers), proceed to Q24.

QUESTIONS 22 and 23. These apply only to those who currently attend or have attended school during the most recent school year. Ask these questions if the answer in Q21 is YES or “1.”

QUESTION 22 - GRADE/YEAR CURRENTLY ATTENDING

Question: “What grade or year is (specify name) currently attending?”

Identify if the household member is currently attending early education, kindergarten, preparatory or day care, elementary, secondary, post-secondary, college, or post-college schooling.

- “Early education” – includes nursery, kindergarten, and preparatory learning to instill school readiness in children who are 3–5 years old.
- **Elementary education** – the first level of formal education consisting of the primary (Grades I to IV) and the intermediate (Grades V to VI or VII) level of education.
- **High school education** – this stage follows the elementary education and corresponds to 4 years of study to lay the foundation for lifelong learning and individual development. It includes the learning of employable gainful skills.
- **Post-secondary education** – this stage follows the secondary education and covers non-degree programs that have varying duration lasting up to 3 years, concerned primarily with developing strong and appropriately trained middle-level skilled manpower. Examples are computer technology, drafting technicians, and midwifery, among others. A course is considered as a post-secondary course if it requires a high school diploma.
- **College education** – the stage of formal education after secondary education; it covers the programs on all courses of study leading to a bachelor’s degree.
- **Post-baccalaureate course** – this refers to any course for which an undergraduate degree is required. Master’s and doctoral degree students both fall under this category.

In the implementation of the K-12 program, elementary/primary education is still 6 years while high school is now 6 years with Grade VII to Grade X as junior high school and Grades XI and XII as senior high school. Program implementation in public schools is being done in phases, which started in SY 2012–2013. Grade 1 entrants in SY 2012–2013 are the first batch to fully undergo the program, and current 1st year junior high school students (or Grade 7) are the first to undergo the enhanced secondary education program. The first cohort of K-to-12 Grade 6 and Grade 12 are expected to graduate in 2018. Meanwhile, the first batch of learners who went through the full K-to-12 system will graduate in 2024.

An answer such as elementary, high school, or college is insufficient. Determine the specific grade or year the family member is currently attending. Write the appropriate codes of the grade/year that the person is currently attending in Column 22. A list of grade or year levels and their respective codes are listed below page 3 of the questionnaire.

Note: Codes 100, 200, 210, 300, and 400 are not applicable for column 22.

QUESTION 23 – SCHOOL ATTENDANCE IN PUBLIC/PRIVATE SCHOOLS

Question: “Where does (specify name) attend school?”

Determine if the school being attended by the household member is a public or a private institution. Public schools are government-owned, subsidized, and administered schools, while private schools

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22 Question, description and codes were adopted from pages 31-32 of Interviewer’s Manual of the 2013 Annual Poverty Indicator Survey, National Statistics Office.

23 For more information about the K to 12 Basic Education Program, please visit: http://www.gov.ph/k-12/#implementation
are institutions owned and administered by private individuals or corporations to provide basic education and training skills to the public. Enter the appropriate code: “1”– PUBLIC and “2” – PRIVATE.

**QUESTION 24 – REASON FOR NOT ATTENDING SCHOOL**

**Question:** “Why is (specify name) not attending school?”

This question will only be asked for family members who are 3–24 years old and who answered NO (“2”) in column 21.

“Enter in this column the corresponding codes to the main reason for not attending school. The codes are as follows:

1. Schools are very far. The location of the school is far from his/her residence.
2. No school within the barangay. Absence of school in the vicinity/area.
3. No regular transportation. There is no transport or regular transport from residence, and this makes it difficult for the schooling member to reach school. For example, the residence is located across a river, and there is no regular water transport that navigates within the area.
5. Illness/disability.
8. Employment/looking for work.
9. Lack of personal interest.
10. Cannot cope with school work. The family member of school age cannot cope up with the academic requirements to finish a grade/year level.

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24 Question, codes and description of the codes were adopted from page 33 of the Interviewer’s Manual of the 2013 Annual Poverty Indicator Survey, National Statistics Office.
11. Finished schooling. Applicable only to college/post-secondary graduates.
12. Problem with school record.
13. Problem with birth certificate.
14. Too young to go to school.
15. Others, specify.

**QUESTION 25 – EDUCATIONAL ATTAINMENT**

**Question:** “What is the highest educational attainment completed by (specify name)”? 25

**Question:** “If college graduate, what is his/her course?”

“Highest educational attainment refers to the highest grade or year level completed in school, college or university. The codes for highest educational attainment are found at the bottom of page 3 of the questionnaire.

For graduates of a post-secondary course or college degree, write on the space provided the specific course or degree obtained. The coding for these courses or degrees will be done separately.

Probe further for responses on whether the household member has actually graduated from Grade 6 or from 4th year high school. Also, for responses such as Grade 7 or 4th year high school, probe if the family member is attending a 7-year elementary curriculum or a 5-year high school curriculum, respectively, to determine the highest grade/year level completed.”

If the household member did not attend any formal schooling, enter “0.”

If the person is still studying, his/her highest grade or year level completed is the grade or year he attended and completed last school year. For example, if a person is currently in 2nd year high school, then the highest educational attainment is 1st year high school.

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**PRE-SCHOOL**

0 – No grade completed
1 – Day care
2 – Kindergarten / preparatory

**ELEMENTARY**

11 – Grade I
12 – Grade II
13 – Grade III
14 – Grade IV
15 – Grade V
16 – Grade VI

**JUNIOR HIGH SCHOOL (HS)**

17 – Grade 7
18 – Grade 8
19 – Grade 9/3rd year HS
20 – Grade 10/4th year HS

**SENIOR HIGH SCHOOL**

21 – Grade 11
22 – Grade 12

**POST-SECONDARY (PS)**

23 – 1st year post-secondary non-tertiary/technical vocational
24 – 2nd year post-secondary non-tertiary/technical vocational
25 – 3rd year post-secondary non-tertiary/technical vocational

**COLLEGE (COL)**

31 – 1st year college
32 – 2nd year college
33 – 3rd year college
34 – 4th year college or higher

**POST-GRADUATE (PG)**

41 – PG with units

**ALS**

51 – ALS Elementary
52 – ALS Secondary
53 – SPED Elementary
54 – SPED Secondary

**POST-GRADUATE (PG)**

100 – Bachelor graduate
200 – High school graduate
210 – Post-secondary graduate, specify course
300 – College graduate, specify course
400 – Master’s/doctorate, specify course

ALS = alternative learning system, SPED = special education.
QUESTION 26. This apply only to households with members who are 5 years old and above. If not applicable to the household member, mark the spaces provided with “-------”, then proceed to Q27.

QUESTION 26 – LITERACY

Question: “Can (specify name) read and write a simple message in any language or dialect?”

“Data on literacy provides an important indicator of the capability of the nation for economic, social, and cultural development. Such data guide planners in formulating policies for the development of the country’s educational system.

Simple literacy is the ability to read and write a simple message. A person is literate when he/she can both read and write a simple message in any language or dialect. A person who cannot read and write a simple message like “I CAN READ” is illiterate. Also consider a person illiterate if he is capable of reading and writing only his/her own name or numbers, as well as a person who can read but not write, or vice versa.

A person who knows how to read and write but at the time of the census can no longer read and/or write due to some physical defects or illnesses is considered literate. Example of this is an aged person who knows how to read and write but can no longer perform these activities due to poor eyesight.

Persons with disability who can read and write through any means such as Braille are considered literate.”

Record “1” if YES; otherwise, enter “2” for NO responses.

F. Political Participation

QUESTIONS 27 and 28. These apply only to households with members who are 15 years old and above. If not applicable to the household member, mark the spaces provided with “-------,” then proceed to Q29.

QUESTION 27 – REGISTERED VOTER

Question: “Is (specify name) a registered voter?”

Ask if each household member is a registered voter. Enter “1” for YES and “2” if the answer is NO. For those who are registered voters (with YES answers), proceed to Q28. For those who are not registered voters (with NO answers), proceed to Q29.

QUESTION 28 – ABLE TO VOTE IN THE LAST ELECTION

Question: “Did (specify name) vote in the last election?”

This question applies only to household members who are registered voters. Ask this question only if the answer in Q27 was YES (“1”).

Ask if the household member was able to vote in the most recent election. Enter “1” if member was able to cast vote and “2” if not. If the respondent does not know if the member voted during the last election, enter a “3.”

If Q28 is not applicable to the household member, mark the space provided with “-------,” and proceed to Q29.

If the household member is an overseas worker, proceed to the next household member. There is no need to ask data on employment and other characteristics of the household member found in pages 4–6.

COLUMN 10C – LINE NUMBER

As you start on this new page, the respective line numbers in column 10C will guide you in recalling the household member listed in column 11 of page 2. Just follow the number on both pages corresponding to each member of the household.

Do not forget to encircle the number (in the line number column) that corresponds to the number of
household members. Write down the first name only of the household members. The order of listing should be similar to the order of listing of names in page 2, column 11.

QUESTIONS 29–49. These apply only to household members who are 5 years old and above. If not applicable to the household member, mark the spaces provided with “------” and proceed to Q50.

QUESTIONS 34–49. These apply only to those household members who are 15 years old and above. If not applicable to the household member, mark the spaces provided with “------” and proceed to Q50.

G. Economic Activity

QUESTION 29 – WORK

Question: “Did (specify name) do any work for at least 1 hour during the past week?”

To get the employment status of each household member, ask if the member has work, a job, or business during the past week.

By definition, a person has a job/business if he/she reported to the place of work and performed duties or activities for at least 1 hour during the past week in order to receive payment or income (in cash or in kind) from his/her own land, business, or profession or even as an unpaid labor on family farm or enterprise.

For a member with two or more jobs during the past week, consider as the primary job the one where he/she worked for more hours. Other jobs will be reported in other economic activities.

Work is any activity that a person does for pay, profit, or even without pay on a family farm or enterprise. It could also be an activity done by a farm operator or by any member of the family on another's farm on an “exchange labor” arrangement.

Also considered as work are minor activities such as home gardening; planting crops and fruits, raising hogs and poultry, and fishing for home consumption; and manufacturing for home use, among others.

1. Work for pay – A person is considered working for pay if one works in any establishment, office, farm, private home, etc., for salary, wage, commission, tips, or other forms of compensation, in cash or in kind, or other forms of compensation such as free meals and/or free living quarters, support in school, and others. In other words, a person works for an employer.

2. Work for profit – A person works for profit or fees if one is self-employed in his/her own business, profession, or trade, such as a farmer tilling his/her own land, a sari-sari store operator, a dressmaker running one’s own shop, an independent practicing lawyer, a physician, an electrician, a plumber, and many others.

The following activities are considered as work for profit:

(a) Gardening in at least 100 square meters (m²) of solid patches (the plants are not scattered all around) whether the produce is mainly for sale or for family consumption.

(b) Gardening in less than 100 m² is also considered work for profit if the produce is solely for sale.

(c) All activities such as fishing and occasional gathering of forest or marine products that are mainly for sale.

(d) For non-farm households, cultivating at least 300 m² of land devoted to temporary, annual, or biennial crops or shrubs and tending an orchard of at least the same area even though not much care is needed by plants, unlike gardening.

(e) Raising of ornamental plants and flowers, seedlings, black pepper (paminta), or betel leaves for sale even if the area may be less than 100 m².

27 All the definitions, codes, and concepts about economic characteristics are based on Enumerator’s Manual of the Labor Force Survey of the National Statistics Office, 2008.
(f) Raising at any time, during the reference quarter, the following number of fowls or livestock although not done as a regular business:

Fowls at least 1 month old:
- 30 or more chickens or ducks
- 10 or more turkeys or geese
- 50 or more pigeons
- 100 or more quails (pugo)
- at least a proportional combination of the above, more or less

Livestock:
- 3 or more pigs at least 3 months old
- 3 or more goats
- 10 or more rabbits
- at least a proportional combination of the above, more or less
- 1 cattle, carabao, or horse

(g) A person also works for profit if one intends to raise poultry or livestock as a regular business, even though the number of poultry or livestock at the start of the business or at certain times may be less than the minimum prescribed above.

(h) Making a single article for sale.

For any of the activities mentioned above, if the produce is intended for home consumption, there must be harvest of crops or disposal of fowls or animals (either through own consumption, barter, giving away, or selling) for the activity to be considered as work.

3. **Work without pay on family farm or enterprise** – This refers to a family member who works without pay on the farm or enterprise operated by another family member in the same household, as in the following examples.

(a) A child who works without pay on father’s farm.

(b) A daughter who works without pay as a salesgirl in a store operated by her mother.

(c) A wife typing at home without pay for her husband who is an independent practicing lawyer.

(d) A nephew who works without pay in the clinic of his uncle with whom he lives.

(e) A son who works without pay in the furniture shop of his father.

4. **Work on an exchange labor arrangement** – This refers to a farm operator or a member of his family who works on the farm operated by another household on an exchange labor arrangements. This is usually practiced during rice planting and harvesting seasons.

For the purposes of a CBMS census, the following activities are not considered work:

1. Housekeeping in one’s own home.
2. Building, repairing, or painting own house.
3. Volunteer work.
5. Begging or gambling.

**QUESTION 30 – JOB OR BUSINESS**

**Question:** “Although (specify name) did not work, did he/she have a job or business during the past week?”

Enter “1” if YES and ask Q25, Q26, Q27, Q28, Q29, Q30, and Q31. Otherwise, enter “2” and mark with “--------” the space in Q31–Q39 before proceeding to Q40.

Some persons may not have worked at all during the past week and, therefore, would have a response of “2” (NO) in column 29 but may actually have jobs or businesses that they are temporarily not reporting to, as in the following cases:

- An employee on strike for at least 3 months.
- A person on vacation or sick leave.
- A person temporarily laid off due to non-economic reasons like machine breakdown.
- A person with a new job to begin within 2 weeks from the date of the interview.
- Regular and temporary teachers, excluding substitutes, during summer vacation who still receive pay and who expect to go back to their jobs in the next school year.
These persons are considered employed even though they are not actually at work. They should have an answer of “1” (YES) in column 30. If the answer is NO (“2”), skip to column 40.

If the answer in this column is NO and the age group is 5–14 years old, line out the succeeding columns and go to Q50. However, if the answer is YES and the age group is 5–14, ask columns 31–33 only. Line out the succeeding columns and go to Q50.

FOR PERSONS WITH WORK, OR JOB, OR BUSINESS

QUESTIONS 31–39. These apply only to members of the household who have jobs or businesses. Ask Q31–Q39 only if the answer in Q29 or Q30 is YES (“1”).

QUESTION 31 – NUMBER OF OCCUPATION, JOB, OR BUSINESS

Question: “How many work, jobs, or businesses does (specify name) have?”

Ask the respondent the total number of jobs, work, or business of the household member.

If answers to Q29 or Q30 are both “2,” put “—” and proceed to Q40.

QUESTION 32 – PRIMARY OCCUPATION, JOB, OR BUSINESS

Question: “What was (specify name)’s primary occupation, during the past week?”

Ask the respondent the primary occupation, job, or business of each working member of the household.

Occupation refers to the type of work, trade, or profession performed by the individual during the past week, such as palay farmer, typists, physician, beauticians, and others. If he/she is not at work, occupation refers to the kind of work one does or will be doing if merely waiting for a new job to begin within 2 weeks from the date of interview.

Primary occupation or job/business is any gainful activity of a person that is permanent and a full-time job, lasting for 1 year or longer or had lasted or expected to last for 1 year or longer, regardless of whether that person has a job/business at work or not during the reference period.

The following are considered when identifying the primary activity of a person:

1. If a person has only one job, regardless of permanency, full time or part time, this job is considered as his/her primary job.
2. If a person has two or more jobs, consider as primary job the one that is permanent, whether full time or part time.
   (a) If a person has two permanent jobs, consider the one where he worked more hours as one’s primary job. If these two permanent jobs have equal hours of work, consider as primary that one where one derives more income.
   (b) If a person has three or more permanent jobs, use the same rule as in (a) above.

Describe the specific job or occupation performed by the person in the establishments, office, farm, and others. Possible job descriptions include farmer, farm worker(paid or unpaid), fisherman, typist, stenographer, riveter, auto mechanic, lawyer, administrative officer, and others.

A person operating one’s own farm should be reported as farmer-owner while the person hired to manage or oversee a farm is a farm manager or farm overseer. Paid laborers or unpaid family workers assisting in the farm operation are considered farm workers.

Note that answers such as employee, engineer, laborer, mechanic, and others do not describe adequately the work performed. Hence, ask additional questions like:

1. What was his/her specific work as an employee?
2. What kind of engineer/mechanic was he/she?
3. What did he/she do as a laborer?
4. Was he/she a president of a corporation, general manager, or what?
If the respondent gives a long description of the actual duties or work of the person, write down the occupation that fits the description. If you cannot think of one designation, enter a brief description of the work in Q32 and put a remark if necessary.

Refer to Annex A for a listing of jobs or occupations that need special care in reporting.

QUESTION 33 – TYPE OF INDUSTRY/SECTOR

Question: “In what kind of industry did (specify name) work during the past week?”

This question asks specifically and adequately the nature of the business or industry of the place where the work was performed in connection with the occupation reported, like cocktail lounge, growing of palay (lowland, irrigated) catching fish, commercial bank, retail sale of food, private household, etc.

Politely ask the respondent to give you a description of the nature of work or the kind of business/es or industry/ies and record the response in Column 32.

An answer such as farm or store or retail store or wholesale store or mine or factory plant or shop or school or government or transportation company, etc. is too general and do not give adequate description of the business or industry.

If the answer is vague and not specific, clarify the answer from the respondent by asking such questions as:

1. What major crop is being planted on the farm?
2. What kind of retail store is this?
3. Does the shoe factory manufacture leather shoes, rubber shoes, or what?
4. Does the firm sell or repair radios?
5. Did she wash clothes at a laundry shop or at home?

Do not be satisfied with the name of the company or business since some of these names do not completely describe the business or activity. Probe and try to elicit from the respondent the information about the kind of product (if a manufacturing firm) or the kind of service that the company provides.

If the work is done by a big company that is engaged in several types of activities, report the nature of these activities of that company in which the person is working.

If work is for a government office or institution, the name of the office, bureau, public school, and others may be accepted. If the work is for the executive branch of a local government, indicate whether provincial, city, municipal, or barangay level.

QUESTION 34 – NATURE OF EMPLOYMENT

Question: “What is the nature of (specify name)’s employment?”

The nature of employment of a person refers to the status in job or business or the permanency, regularity, or seasonality with which a particular job or business is being conducted.

Determine the status of the person on his/her job or business as reported in Q24 and enter the appropriate code. Ask probing questions to ascertain more precisely the nature of employment, such as:

1. Is the job permanent?
2. How long does he/she expect his/her job as ___ to last?
3. Does he/she usually go fishing for the whole year or what?

Write remarks when necessary.

The possible responses with their corresponding codes are as follows:

1 - Permanent job/business and unpaid family work

A job or business is considered permanent when employment, for pay or profit or as unpaid family worker, had lasted or expected to last for one year or longer. In general, work is considered permanent if the person engaged in an activity works or expects to work for at least one year. For farm operators or farm workers, however, their job can be considered permanent even if they work or expect to work for only 10 calendar months in a year provided that during the remaining two months, their activities are in relation to
farming such as inspection of the fields, pasturing of work animals, taking care of the livestock and poultry or even simply cleaning equipment being used in the farm.

A person who worked under probationary period for 6 months must have a code of “1.” If he/she is expected to last for less than 1 year or less than 10 calendar months, the nature of employment is considered as short-term or seasonal.

2 – Short-term, seasonal, or casual job/business

When employment had lasted or is expected to last less than 1 year since it started, write “2.” This includes farm operators and fishermen and their unpaid family workers who usually work in less than 10 calendar months of the year.

3 – Worked on different jobs on a day-to-day, week-to-week, or month-to-month basis

This includes odd job workers/stevedores not on payroll or not connected with union/market and other cargo handlers receiving pay from individual customers.

QUESTION 35 – NORMAL WORKING HOURS PER DAY DURING THE PAST WEEK

Question: “What was the normal working hours per day during the past week of (specify name)?”

Enter in this column the normal working hours per day in the household member’s primary job for which he/she reported for work during the reference week. To determine the normal working hours per day, you may ask the following question:

_In a regular working day, how much time does (specify name) usually spend working in his/her job?_

If the person regularly works overtime, include also the number of hours he/she usually spends in a day doing overtime work.

If the person did not do any work at all during the past week but had a job or business during that week, normal working hours should be the regular working hours he would spend in that job/business had he/she reported for work.

If a person did not do any work in one’s primary job during the past week but rather worked in other job/s, the entry to be reported here should still be the normal working hours in his/her primary job.

QUESTION 36 – TOTAL NUMBER OF HOURS WORKED DURING THE PAST WEEK

Question: “What was the total number of hours worked during the past week of (specify name)?”

Ask the actual number of hours that the person worked during the past week in his/her primary job or business, if any.

Total hours worked at a particular job refer to the following:

1. Hours actually worked during normal periods of work.
2. Overtime.
3. Time spent at the place of work on activities such as preparing the workplace, doing repairs and maintenance, preparing and cleaning work tools, and preparing receipts, time sheets, and reports.
4. Waiting time spent at the place of work—on standby for customers, temporary lack of work to do, breakdown of machinery, accidents, or time spent at the place of work during which no work is done but for which payment is made under a guaranteed employment contract.
5. Time corresponding to short rest periods at the workplace, including tea and coffee breaks.

Total hours worked exclude

1. hours paid for but not worked, such as paid vacation leave, paid public holiday, or paid sick leave;
2. meal breaks; and
3. time spent on travel from home to workplace and vice versa.
Total hours worked should, in principle, be confined to hours spent on economic activities. In practice, however, this distinction may be difficult for certain categories of workers. For example, in family farms, agricultural activities are often intermingled with domestic chores, not only because agricultural activities and domestic chores are performed simultaneously but also because the two types of activities are close in nature.

Write the total number of hours worked in the space provided in Q28. If the member is not working or the recorded code in Question 24 is “2,” mark Question 28 with “—.”

QUESTION 37 – DESIRE FOR LONGER HOURS OF WORK

Question: “Did (specify name) want more hours of work during the past week?”

Ascertain if the household member who was at work or who had a job/business even though not at work desired to have more or longer hours of work in the same job or to have additional job with longer working hours, if such was available.

If the answer is YES (“1”), see to it that the desired hours of work should be more or less for all the days of the week and not just for a particular day(s). For persons who are working for the first time or who decided to resume working but whose work commenced only during the middle of the reference week, it is enough that they express their desire to work longer hours each day or more days during the week they worked.

QUESTION 38 – LOOKED FOR ADDITIONAL WORK

Question: “Did (specify name) look for additional work during the past week?”

Ask this question even if the answer in Question 37 is either YES (“1”) or NO (“2”). Record “1” if YES or “2” if NO.

The purpose of this question is to determine the number of those who are looking for additional work during the past week aside from their present jobs or occupations.

QUESTION 39 – CLASS OF WORKER

Question: “How do you classify (specify name)’s employment?”

Class of worker refers to the relationship of the worker to the establishment in which he/she works. The following are the classes of workers and their corresponding codes:

1. Works for a private household – a person who works in a private household for pay, in cash or in kind. Examples: domestic helper, household cook, gardener, family driver, and others.

2. Works for a private establishment – a person who works in a private establishment for pay, in cash or in kind. This class includes not only persons working for private industry but also those working for a religious group (e.g., priest, acolyte, missionary, nuns/sisters, and others), unions, and nonprofit organizations.

3. Works for a government/government corporation – a person who works for the government or a government corporation or any of its instrumentalities.

4. Self-employed without any employee – a person who works for profit or fees in own business, farm, profession, or trade without any paid employee. Examples: bookkeeper, certified public accountant, doctor, and others.

5. Employer in own farm or business – a person who works in his/her own business, farm, profession, or trade and had one or more regular paid employees, including paid family members.

6. Works with pay on own family-operated farm or business – a person who works in own family-operated farm or business and receives cash or a fixed share of the produce as payment for his/her service.
7. **Works without pay on own family-operated farm or business** – a member of the family who works without pay in a farm or a business that is operated by another member living in the same household. The room and board and any cash allowance given as incentives are not counted as compensation for these family workers.

**FOR PERSONS WITH NO JOB OR BUSINESS**

**QUESTIONS 40–47.** These apply only to members of the household with no job or business. Ask these questions only if the answer in Questions 29 and 30 are both NO (“2”).

**QUESTION 40 – LOOKED FOR WORK DURING THE PAST WEEK**

**Question:** “Did (specify name) look for work or try to establish a business during the past week?”

For every member who has no work during the past week, ask if he/she is looking for work during the past week. A person is said to have looked for work if he had taken specific steps to seek paid employment or self-employment.

The codes are “1” for YES and “2” for NO.

**QUESTION 41 – FIRST TIME TO LOOK FOR WORK**

**Question:** “Was this the first time that (specify name) looked for work or try to establish a business?”

This question determines whether or not a person is a “new entrant” to the labor force. A person is a new entrant if it is his/her first time to do any work.

Explain to the respondent the meaning of work; ask probing questions to ascertain the existence of a job or business or unpaid work on family farm or enterprise.

The codes are “1” for YES and “2” for NO.

**QUESTION 42 – JOB SEARCH METHOD**

**Question:** “What has (specify name) been doing to look for work?”

Looking for work includes doing any of the following:

1. Registering at a public employment agency (e.g., PESO).
2. Registering at a private employment agency.
3. Approached an employer directly (e.g., job fair).
4. Approached relatives or friends.
5. Placed or answered advertisements.
6. Searched and placed application online.
7. Others, such as
   - writing letters of application;
   - securing letters of recommendation;
   - taking a competitive examination given for a particular job;
   - working without pay in order to acquire training and experience and, ultimately, get employed in that establishment;
   - exerting efforts to start business, private practice of a profession, or trade; and
   - posting of resume on the internet.

If a person explored two or several of these methods simultaneously in one’s effort to seek employment, ascertain by asking which of those methods gave the person the best chance of success.

Enter the code that corresponds to the respondent’s answer and proceed to Question 36.

**QUESTION 43 – NO. OF WEEKS LOOKING FOR WORK**

**Question:** “How many weeks has (specify name) been looking for work?”

Enter the number of weeks the member has been looking for work.
QUESTIONS 44–45. These apply only to household members who have no work and did not look for work.

Ask these questions only if the answer in Question 40 is a NO (“2”).

QUESTION 44 – REASONS FOR NOT LOOKING FOR WORK

Question: “Why did (specify name) not look for work?”

This question determines why a person did not look for work. The possible reasons are listed below. Use the corresponding codes to record why one did not go looking for work. If there are other reasons not listed below, specify these reasons and use “9”.

1. **Believes no work available** – A person believes that there was lack of opening in the locality to suit his/her skills so that looking for work is deemed futile.

2. **Awaiting results of previous job application** – A person is expecting to be considered for interview in the establishment where he/she had applied. The person may have filed the application before the reference period and is waiting for a reply.

3. **Temporary illnesses/disability** – A person was suffering from temporary illness or disability.

4. **Bad weather** – A person could not go looking for a job because of seasonal or bad weather conditions like flood, heavy rains, typhoons, sea-level rise, and others.

5. **Waiting to be rehired/job recall** – A person was temporarily laid off from his/her job due to economic reasons like retrenchment, lack of raw materials, transfer of management, and others and is expecting to be rehired by former employer.

6. **Too young/too old or retired/permanently disabled** – A person feels too young or too old to work or that he/she had worked long enough and would want to rest; also if the person is suffering from a permanent disability.

7. **Housekeeping, including looking after children, and others** – This applies to persons doing household chores in their own homes most of the time during the reference period.

8. **Schooling** – A person could not look for a job now as he/she is still attending school or is expected to attend school within the next 2 weeks.

9. **Others, specify** – If there are other reasons not specified above, write them down.

Enter the code that corresponds to the answer of the respondent. If the answer is “9,” always specify the reason.

QUESTION 45 – LAST TIME THAT THE PERSON LOOKED FOR WORK

Question: “When was the last time (specify name) looked for work?”

Ask the question as provided. Determine the timeframe that the household member with no work did not go out looking for work. The possible answers and the codes are:

1. week to less than 1 month
2. month to less than 6 months
3. over 6 months

QUESTION 46 – CURRENTLY AVAILABLE FOR WORK

Question: “Had opportunity for work existed during the past week or within two weeks, would (specify name) have been available?”

This question will determine who among the household members are currently available for work during the past week. Current availability for work is one of the criteria of unemployment as defined or specified by the international statistical standard. The criterion should be interpreted as current availability and readiness to work given a suitable work opportunity.

Some people may not be able to take up work immediately because they need some time to make arrangements, as in the case of women who need to arrange day care for their child while they are away
working. For this reason, the term “current” should be interpreted to mean availability for work during the past week or in the next 2 weeks.

The codes are “1” for YES and “2” for NO.

**QUESTION 47 – WILLINGNESS TO DO WORK**

Question: “Was (specify name) willing to take up work during the past week or within the next two weeks?”

Some people without a job may not have been actively looking for a job but may, nevertheless, want to work if a suitable job were offered to them. This question will determine the household members who are willing to work during the past week and would be willing to take up work in the next 2 weeks.

The codes are "1" for YES and "2" for NO.

**QUESTION 48 – SALARIES/WAGES**

Question: “In the past 12 months, how much is the total salary/wages received by (specify name)?”

This section will obtain information on the income of household members from salaries and wages during the past 12 months. It includes all forms of compensation—whether in cash or in kind—received as regular or seasonal workers in agricultural or non-agricultural industries.

Cash salaries and wages refer to the gross basic salary or wage earned during the past 12 months, excluding the salaries of the OCW household member and the household helper (maid or boy). Check Question 20 and ascertain that the salary of an OCW member is not included in this section. Instead, record the OCW remittances under Question 87 in section N.3. Meanwhile, the salary of the household helper should also not be reported in this section.

This includes deductions made for retirement, insurance premiums, social security, union dues, PAG-IBIG fund, Philhealth, salary loans, and other deductions reflected in the payroll. If the respondent cannot give the exact salary/wage of the family member simply ask for the estimated salary and the number of days or months the member worked during the reference period. However, before accepting the estimates, be sure to consider the job of the person. Probe further if the amount was underestimated or overestimated.

Do not include other cash allowances like cost of living allowance (COLA) and Personal Relief Allowance (PERA) in the report for basic salaries and wages. However, if the COA has already been integrated as part of the basic salary/wage, then the amount should be included in the gross salary/wage.

On the other hand, salary and wage in kind includes those compensations received by an employee in the form of goods such as free medicine, rice, meat, fish, clothing, free housing, free bus service, etc as remuneration for his services/work. Report the imputed value of the goods received. An example is a cavan of rice given once a month to a caretaker of a grain warehouse. In such a case, report the cost of one cavan of rice at the time of receipt multiplied by the number of months employed in the past 12 months. Try to impute the peso value of these items with the help of the respondent. Impute the value based on the retail prices of goods/commodities prevailing in the locality at the time of receipts.

From the listed names in column 11 of page 2, determine from question 29 and question 30 in page 4 if the household member has work during the past week (for “1” responses). Enter the salaries and wages in cash in the “(A) IN CASH” column and the salaries and wages in kind in the “(B) IN KIND” column. Do this for all the household members in the list.

**QUESTION 49 – MEMBER OF SSS/GSIS**

Question: “Is (specify name) a member of SSS or GSIS?”

The Government Service Insurance System (GSIS) is a social insurance institution created under Commonwealth Act Number 186, which was passed on November 14, 1936. To secure the future of all employees of the Philippine government, it provides and administers a pension fund that has the following social security benefits: compulsory life insurance, optional life insurance, retirement benefits, and disability benefits for work-related accidents and death benefits.28

The Social Security System (SSS) is also a social insurance institution that was founded on June 18, 1954, under RA 1161. It aims to provide benefits to workers who are sick, who lost a job, who retired, who have disabilities, and who died. The following are qualified to be a member of SSS:29

1. A private employee, with or without a permanent job, whose age is not beyond 60 years old.
2. A household helper (maid or boy) with a salary of not less than ₱1,000 in a month.
3. A Filipino seafarer who signed a contract as an employee wherein the manning agency and the foreign ship owner are the employers.
4. An employee of another country, an international organization, or a foreign-operated company that is based in the country and that entered into an agreement with SSS for its Filipino employees.
5. A parent, spouse, or a child who is under 21 years old, of an owner of a business.

This question is only applicable for those 15 years old and above. If the household member is below 18 years old, write “-----” in the space provided.

The appropriate codes for this question are the following:
1. Yes, SSS
2. Yes, GSIS
3. Yes, both
4. No

H. Heath and Other Characteristics of Household Members

**QUESTION 50 – PREGNANT MEMBERS OF THE HOUSEHOLD**

Question: *Is (specify name) pregnant?*

Ask this question if the answer to Question 7 is “1” (YES) and “2” (Female) in Question 14. Proceed to ask if the member is currently pregnant. The codes are “1” for YES and “2” for NO.

**QUESTION 51 – SOLO PARENTS IN THE HOUSEHOLD**

Question: *“Is (specify name) a solo parent taking care of a child or children?”*

Ask this question if the answer to Question 8 is “1” (YES). Proceed to ask if the member is a solo parent.

**QUESTION 52 – PHYSICAL OR MENTAL DISABILITY**

Question: *“Does (specify name) have any physical or mental disability?”*

Ask if there is a household member with disability. Record “1” if YES and “2” if NO.

**QUESTION 53 – TYPE OF DISABILITY**

Question: *“What type of disability does ___ have?”*

Ask what kind of disability ails the household member. Some possible answers and the corresponding codes (adopted from page 118 of the 2010 Census of Population and Housing, NSO) are as follows:

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1. Total blindness
2. Partial blindness
3. Low vision
4. Totally deaf
5. Partially deaf
6. Oral defect
7. One hand
8. No hands
9. One leg
10. No legs
11. Mild (regular) cerebral palsy
12. Severe cerebral palsy
13. Retarded
14. Mentally ill
15. Mental retardation
16. Multiple impairment
17. Others (to be specified)

**QUESTION 54 – PWD ID**

**Question: “Does (specify name) have an ID for PWDs?”**

If the household member has a disability, ask the respondent if he/she has an ID for PWDs. This type of ID is provided by the local government to persons with disability according to Republic Act 9442 or the “Magna Carta for Persons with Disability as Amended, and For Other Purposes”

Record “1” if YES and “2” if NO.

**QUESTION 55 – SENIOR CITIZEN ID**

**Question: “Does (specify name) have a Senior Citizen’s ID?”**

If the household has members who are 60 years old and above, ask if they have a Senior Citizen’s ID. The Senior Citizen’s ID is provided by the provincial and municipal/city governments to individuals who are 60 years old and above according to Republic Act 7432 or the Senior Citizen’s Act.

**I. CRIME**

**QUESTION 56 – MEMBERS WHO ARE CRIME VICTIMS**

**Question: “Has (specify name) been a victim of crime in the past 12 months?”**

This section will determine if there is any incidence of crime committed against any of the household members during the past 12 months.

Record “1” if YES and “2” if NO.

**QUESTION 57 – TYPES OF CRIME VICTIMS**

**Question 57a: “What crime/s was/were (specify name) a victim of?”**

Crimes can be categorized as (i) crimes against persons and (ii) crimes against property. Crimes against persons include rape, physical injury, and others. Crimes against property include robbery, theft, and others. The appropriate codes for this questions are based from the index crime statistics monitored by the Criminal Investigation and Detection Group of the Philippine National Police, as follows:

1. **Theft** – A person is considered a victim of theft if his/her personal property is taken from him/her without consent but without violence or intimidation of persons or force upon things.

2. **Robbery** – A person is considered a victim of robbery when his/her property is seized from him/her through violence or intimidation.

3. **Rape** – A person is considered a victim of rape if he/she partakes involuntarily in sexual acts through violence, force, threat of injury, other duress, or where he/she is unable to decline due to the effects of drugs and/or alcohol. If the victim is under 12 years old, he/she is a victim of statutory rape.

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30 The list of index crimes was adopted from the CIDG website: http://www.cidg.pnp.gov.ph/crime%20data%20statistics/Statistic%202011/index%20crime%20(2monthly)/March%202011-%20Index%20Crime.pdf
4. **Physical injury** – A person is considered a victim if he/she is wounded, beaten, or assaulted by another person.

5. **Carnapping** – is the taking, with intent to gain, of a motor vehicle belonging to another without the latter’s consent, or by means of violence against or intimidation of persons, or by using force upon things.\(^{31}\)

6. **Cattle rustling** – is the taking away by any means, method, or scheme, without the consent of the owner/raiser, of animals whether or not for profit or gain or whether committed with or without violence against or in intimidation of any person or force upon things. It includes the killing of a large cattle or taking its meat or hide without the consent of the owner/raiser.\(^{32}\)

7. **Others** (to be specified).

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**Question 57b: “Where did the crime happen?”**

It is critical to know where the crime happened as this is an indicator of the peace and order situation in the locality. The codes for this question are the following:

1. Within the barangay
2. Outside the barangay but within the municipality/city
3. Outside the municipality/city but within the province
4. Outside the province

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**K. Water and Sanitation**

**QUESTION 59 – MAIN SOURCE OF DRINKING WATER\(^{33}\)**

**Question: “What is your household’s main source of water supply?”**

This section will provide information on the main source of drinking water for the household members, as well as the availability of piped water for each housing unit in the area. The provision of a piped water installation for every housing unit is one of the primary objectives of a sound housing policy and public health policy.

Usually, residents of the same community share the same source of water supply. If a particular family reports a source that is different from most of the others that you have interviewed in the same area, do some probing to ascertain if the source is really different.

The different sources of water are as follows:

1. **Own use faucet, community water system** – The household gets its water supply from a faucet inside the house/yard that is directly connected to a water pipeline from the local water system.

   Note that a community water system using a deep well as the source of water should be reported under this category.

2. **Shared faucet, community water system** – The household gets its water supply from the faucet of another household, establishment, or office, which is connected to the community water system.

3. **Own use tubed/piped deep well** – Water is taken from a tubed/piped well that is at least 100 feet (5 pieces of 20-feet pipes) or 30 meters deep and for private use of the household or households in the same building or compound.

4. **Shared tubed/piped deep well** – Water supply

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\(^{33}\) Codes and definition are based on the Interviewer’s Manual of the 2012 Family Income and Expenditure Survey, National Statistics Office.
is taken from a tubed/piped deep well, which is at least 100 feet or 30 meters deep, and shared with another household, establishment, or office or from a deep well that was constructed for public use.

5. **Tubed/piped shallow well** – Water is taken from a tubed/piped well that is less than 100 feet deep and or 30 meters deep.

6. **Dug well** – The household gets its water supply from a well, which may be provided with a protective device against contamination or pollution. An ordinary dug well (dug and with water depository) that is provided with a pump and cover also belongs to this type.

7. **Protected spring** – A spring protected from contaminations by a “spring box,” which is typically constructed of brick, masonry, or concrete and is built around the spring so that water flows directly out of the box through a pipe without being exposed to outside pollution.

8. **Unprotected spring** – A spring that is subject to runoff and/or bird droppings or animal/other external contaminations. Unprotected springs typically do not have a “spring box.”

9. **Lake, river, rain, and others** – The household gets its water supply from natural bodies of water, or water accumulated from rainfall.

10. **Peddler** – The household gets its water from peddlers. These are the usual sources of water supply for households in low-pressure areas with no community water system.

11. **Bottled water** – The household gets its water supply of mineral/distilled water in bottles or gallons from water refilling stations.

12. **Others** – This includes other sources not falling under categories 1 to 11 above.

If there are more than one source, report the one used mostly for household needs, such as drinking, washing clothes, and others. If the family or household uses water from the community water system and, at the same time, uses bottled water for drinking, the water from the community water system will prevail.

**QUESTION 60.** This is applicable only to households whose main source of drinking water are codes 2, 3, 4, 5, 6, 7, 8, 9, or 12 in Question 59. If the answer in Question 59 is 1, 10, or 11, go to Question 61.

**QUESTION 60 – DISTANCE OF WATER SOURCE FROM HOUSE**

**Question:** “How far is this water source from your house?”

This question aims to find out how accessible, in terms of distance, the source of drinking water is to the household.

Enter the distance in meters in the box provided. If the question is not appropriate especially for households that buy from peddlers (“10”) or buy bottled water (“11”), enter “------” on the box provided.

**QUESTION 61 – TYPE OF TOILET FACILITY USED**

**Question:** “What type of toilet facility does the household use?”

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

Some definitions:

- **Water-sealed** – is the type of toilet where after water is flushed or poured into the bowl, a small amount of water is left in the bowl, which seals the bottom of the bowl from the pipe leading to the depository.

- **Sewer/septic tank** – a tank in which the soiled matter or sewage is accumulated to be

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disintegrated by bacteria. This is commonly called “poso negro.”

Other depository – if the depository is other than a sewer/septic tank, such as canals, rivers, and others.

The different types of toilet facilities with their corresponding codes are as follows:

1. Water-sealed, sewer/septic tank, used exclusively by the household
2. Water-sealed, sewer/septic tank, shared with other households
3. Water-sealed, other depository, used exclusively by the household
4. Water-sealed, other depository, shared with other households
5. Close pit – is a toilet facility without a water-sealed bowl; the depository is constructed usually of large circular tubes made of concrete or clay with a top cover and small opening. It may or may not have a box for sitting or squatting over the opening; for example: antipolo-type and others.
6. Open pit – is the same as closed pit but without the covering.
7. Others (pail system and others) – includes a toilet facility wherein fecal matter is accumulated in a pail to be picked up for disposal from time to time or any other kind of toilet not belonging to the preceding type.
8. None – for households that do not have any toilet facility.

See Figure 1 for illustrations of these types of toilet facilities.

If there are two or more toilet facilities, consider the one that is more sanitary.
L. Housing

QUESTION 62 – TENURE STATUS OF A HOUSING UNIT AND LOT OCCUPIED

Question: “What is the tenure status of the housing unit and lot occupied by your household?”

Ask the question as worded. Check the appropriate code to indicate the tenure status of the housing unit and lot occupied by the household. Record the present tenure of the housing unit at the time of the visit.

The tenure status of the housing unit and occupied lot are classified as follows:35

1. **Owner, owner-like possession of house and lot** – if the household is the owner and has legal possession of the housing unit and lot or the household claims to own it. Housing units and lots that are being amortized or on a mortgage plan are included under this classification.

2. **Rents the house/room including lot** – if the occupant actually rents, either in cash or in kind.

3. **Owns the house, rents the lot** – if the household owns the house but rents the lot.

4. **Owns the house, rent-free lot is with consent of owner** – if the household owns the house but occupies the lot with the permission of the owner and without paying any rent in cash or in kind.

5. **Owns the house, rent-free lot is without consent of owner** – if the household owns the house but occupies the lot without the consent or knowledge of the owner. Examples are informal settlers who built houses occupying public and private lands.

6. **Rent-free house and lot with consent of owner** – if the household occupies the house and lot with the permission of the owner and without paying any rent in cash or in kind to the owner. These include households of farm tenants/leases who occupy rent-free houses belonging to the owner of the lands they farm

and employees given free housing as part of the fringe benefits (but must vacate the housing unit upon separation from work).

7. **Rent-free house and lot without consent of owner** – if the household occupies the house and lot without the consent or knowledge of the owner. Examples are informal settlers who occupy public and private lands.

8. **Living in a public space with rent** – if the household is living in public spaces like road island, under the bridge, park, and sidewalk but is paying a rent.

9. **Living in a public space without rent** – if the household is living in public spaces like road island, under the bridge, park, and sidewalk without paying any rent.

10. **Other tenurial status (to be specified)** – refers to other tenure status not mentioned above.

**Owner-like possession of the house and lot** means that the household may have an outstanding loan on the property such as mortgage or other real estate loans. It is also possible that the household owns or is still paying installments for the house but the lot is leased on a long-term basis.

Enter the appropriate code or write down the response if it is not specified in the list of choices provided above.

QUESTION 63. This applies only to households that own or occupy the house and lot without rent.

QUESTION 63 – IMPUTED RENT OF OWNED AND/OR RENT-FREE OCCUPIED HOUSE AND LOT

Question 63: “By your own estimate, how much is the imputed rent per month for the house and/or lot?”

Question 63 applies only to households that own or occupy rent-free house and lot. Ask this question if the answer in Question 62 are codes 1, 3, 4, 5, 6, 7, or 9.

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35 Codes are based on page 50 of the 2012 Family Income and Expenditure Survey of the National Statistics Office.
If the house and lot is owned or being rented for free, ask the imputed rent of the house and lot for 1 month. **Imputed rent** refers to the amount the owner would charge monthly to rent the housing unit (unfurnished) and/or lot, excluding the costs for utilities.

Do not confuse imputed rent with amortization payments. Note that imputed rent refers to the value of the house and/or lot based on its utility while amortization payments refer to periodic payments made by the family on real property they acquired on installment basis.

If the answer to Question 62 is “3,” ask the respondent the monthly imputed rent of the house only.

**QUESTION 64 – ACCESS TO ELECTRICITY**

**Question:** “Is there any electricity in the dwelling place?”

A response of “1” (YES) means that the household uses electricity that is provided either by national or community electric companies or cooperatives or powered through the use of a generator, solar power, or battery or other sources of electricity. A response of “2” means NO.

Place the appropriate code in the box provided.

**QUESTION 65 – SOURCE OF ELECTRICITY**

**Question:** “What is the source of electricity in the house/building?”

If the answer to Question 66 is “1” (YES), ask the respondent what is the source of electricity in the dwelling place. Some of the possible answers with their corresponding codes are

1. Radio/radio cassette
2. Television
3. CD/VCD/DVD player
4. Component/stereo set
5. Karaoke/videoke
6. Refrigerator/freezer
7. Electric fan
8. Electric iron
9. LPG gas stove/range
10. Washing machine
11. Microwave oven
12. Computer/laptop/netbook
13. Internet connection
14. Cellphone
15. Landline telephone
16. Air conditioner
17. Sewing machine
18. Car, jeep, etc.
19. Tricycle, motorcycle, etc.
20. Land (agricultural)
21. Land (residential)
22. Land (commercial)
23. Sala/sofa set
24. Dining set
25. Others (to be specified)

Record the number of each family convenience or appliance in the space provided.

**QUESTION 66 – OWNERSHIP OF HOUSEHOLD AMENITIES**

**Question:** “How many of each of the following items does the household own?”

This question aims to determine what family conveniences or appliances are owned by the household, whether for personal or business use. Do not rely on what you see at the time of visit, as some appliances may be inside the bedrooms. **Do not include appliances that are out of order or are being rented.**

1. Radio/radio cassette
2. Television
3. CD/VCD/DVD player
4. Component/stereo set
5. Karaoke/videoke
6. Refrigerator/freezer
7. Electric fan
8. Electric iron
9. LPG gas stove/range
10. Washing machine
11. Microwave oven
12. Computer/laptop/netbook
13. Internet connection
14. Cellphone
15. Landline telephone
16. Air conditioner
17. Sewing machine
18. Car, jeep, etc.
19. Tricycle, motorcycle, etc.
20. Land (agricultural)
21. Land (residential)
22. Land (commercial)
23. Sala/sofa set
24. Dining set
25. Others (to be specified)

For each of these listed sources, enter “1” for **YES** or “2” for **NO**.

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**36 Question was adopted from page 47 of the Interviewer’s Manual of the 2013 Annual Poverty Indicators Survey, National Statistics Office.**
QUESTION 67 – NUMBER OF ASSETS ACQUIRED IN THE PAST 3 YEARS

Question: “How many were acquired during the past 3 years?”

After household amenities, this question aims to determine the number of these assets that were acquired during the past 3 years. Record the number in the space provided. Note that the number to be recorded in Question 67 should not exceed the number recorded in Question 66.

QUESTION 68 – INSURANCE

Question: “Do you have insurance for the following?”

1. House
2. Motorized vehicle
3. Appliances

For each of the items listed above, write “1” if the answer of the respondent is YES and “2” for NO. Enter the appropriate code in the space provided.

If the household has no motorized vehicle, as reflected in Question 66, put “-----” in Questions 68 and 69 and go to Question 70.

QUESTION 69 – INSURANCE PROVIDER

Question: “Who is the insurance provider?”

If the household has insurance for any of the items in Question 68, ask for the name of the insurance provider. Write the code in the space provided. The following are the corresponding codes:

1. Government insurance
2. Private insurance company
3. Bank
4. Others (to be specified)

M. Waste Management

QUESTION 70 – SYSTEM OF GARBAGE DISPOSAL

Question: “What is the system of garbage disposal adopted by the household?”

Ask for the system of garbage disposal that is used by the household. The possible answers and codes are as follows:

1 – Garbage collection
2 – Burning
3 – Composting
4 – Recycling
5 – Waste segregation
6 – Compost pit with cover
7 – Compost pit without cover
8 – Throwing of garbage in river, vacant lot, and others
9 – Others (to be specified)

For each code category, ask the respondent if the household practices that particular system. Enter “1” for YES or “2” for NO answers.

QUESTIONS 71–72. These apply only to households whose system of garbage disposal is garbage collection. Ask these questions if the answer to question 70.1 is YES (“1”).

QUESTION 71 – COLLECTION OF GARBAGE

Question: “Who collects the garbage?”

Collection of garbage is done by any of the following:

1 – Municipal garbage collector
2 – Barangay garbage collector
3 – Private garbage collector
4 – Others (to be specified)

Enter the appropriate code in the box provided.
QUESTION 72 – FREQUENCY OF GARBAGE COLLECTION

Question: “How often is the garbage collected?”

Determine the frequency of garbage collection in the household. The following are the possible answers and their corresponding codes:

1 – Daily
2 – Thrice a week
3 – Twice a week
4 – Once a week
5 – Others (to be specified)

N. Sources of Income

N.1 Entrepreneurial Activity

Question: “During the past 12 months, did you or any member of your household operate any of the following entrepreneurial activities?”

“What was the total net value of income from these activities during the past 12 months? (in P)"

An entrepreneurial activity or a family-operated activity is any economic activity, business or enterprise, whether agricultural or non-agricultural enterprises, engaged in by any household member as an operator or self-employed.

Family-operated activities include those operated as single proprietorship or loose partnership (without formal organization). Thus, partnerships, corporations, associations, and others that are formally organized and registered with the Securities and Exchange Commission (SEC) are excluded.

A lawyer, dentist, physician, accountant, midwife, or any person in private practice of his/her profession with or without a regular helper is considered operating an enterprise as a business. A fisherman, farmer, carpenter, watch repairman, etc., working on his own account is also operating as an enterprise.

The In Cash (A) refers to money earned from the sale of harvest, products, or any services from economic activities.

The In Kind (B) are incomes from:

➢ crops or products that are not sold—it can be for home consumption or given to others as gifts,
➢ items received as payment for services, and
➢ items received from barter.

The corresponding values should be estimated with the help of the respondent.

General Instructions:

1. There are 11 subsections under this section. Each subsection has a screening question to determine whether there is any household member engaged as operator in the entrepreneurial activity. Ask this screening question and if the reply is YES (“1”) then proceed to ask the income derived from that activity. If the reply is NO (“2”), enter “-----” in the net income (In Cash and In Kind) space for the section and proceed to the next section.

2. In computing the net income, ask for the total value or gross sales/receipts derived from the entrepreneurial activity. Then ask for the total cost of production. Estimate the net value of income by this formula:

Net value of income = gross receipts – total cost of production

It is possible that the net income can have a negative value. This would be the case when the household spent more in the production of the goods than the gross receipts they gained. This implies that the household incurred losses in its business. If the net income is really negative, ask the respondent the reason for this, and write down the explanation on page 8 of the questionnaire for future reference.

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3. If two or more household members were engaged as operators (self-employed or employer) in the same entrepreneurial activity during the reference period, account for their activities as one in the corresponding subsection of the questionnaire.

**QUESTION 73 – CROP FARMING AND GARDENING**

**Question:** “During the past 12 months, did you or any member of your household engage in crop farming and gardening such as growing of palay, corn, roots and tubers, vegetables, fruits, nuts, ornamental plants, and others?”

For the purpose of the CBMS census, the following are considered as operating a crop farm or garden:

1. Gardening in at least 100 m² of solid patches (the plants not scattered all around) whether the produce is mainly for sale or for family consumption. Consider also gardening in less than 100 m² as work for profit if the produced is solely for sale.
2. Non-farm households cultivating at least 300 m² of land devoted to temporary, annual, or biennial crops or shrubs or tending an orchard of at least the same area even though not much care is needed by plants, unlike gardening.
3. Growing ornamental plants and flowers, seedlings, black pepper (paminta), or betel leaf for sale, even if the area may be less than 100 m².

If the answer to this screening question is **YES**, record “1” and proceed to ask questions for 73A and 73B. Otherwise, write “2” in the second column, enter “--------” for 73A and 73B and go to question 74.

Report all crops harvested from the farm operated by the household under this subsection. This includes the production/harvest of leases of fruit trees, such as lanzones and mango, if there were harvests made during the reference period.

Record in the “**In Cash**” column the net value based on the actual sales of the crop. However, if the crop has not been disposed yet or will be used for household consumption, report in the “**In Kind**” column the net value of harvest based on the prevailing market price.

**QUESTION 74 – LIVESTOCK AND POULTRY**

**Question:** “During the past 12 months, did you or any member of your household engage in livestock and poultry raising such as raising carabaos, cattle, hogs, horses, chicken, ducks, etc., and the production of fresh milk, eggs, and others?”

An operator under this activity should have at least raised, at any time during the reference period, whether for business or for home consumption, any of the following:

- **Fowls at least 1 month old**
  - 30 or more chickens or ducks
  - 10 or more turkeys or geese
  - 50 or more pigeons
  - 100 or more quails
  - or a proportional combination of the above, more or less

- **Animals**
  - 3 or more pigs at least 3 months old
  - 3 or more goats
  - 10 or more rabbits
  - 1 cattle, carabao, or horse
  - or a proportional combination of the above

A person is considered working for profit if he/she intends to engage in poultry or animal raising as a regular business, even though the number of poultry animals at the start of the business or at a certain time may be less than the minimum prescribed above.

Ask the question as worded. If the reply is **YES**, record “1” and proceed to ask the questions for (74A) and 74B. Otherwise, write “2” in the second column, enter “--------” for 74A and 74B, and go to Question 75.

**QUESTION 75 – FISHING**

**Question:** “During the past 12 months, did you or any member of your household engage in activities such as capturing fish; gathering fry, shells, seaweed, etc.; and culturing fish, oyster, mussel, and others?”
A household member is considered engaged in fishing if the member captures, gathers, or harvests any variety of fish and other aquatic animals or products.

The fish and aquatic products included in this subsection are as follows:

- Fish and other products - includes all types of fishes caught in seawater, fresh water, or brackish water such as milkfish, biya, galunggong, ayungin, talakitok, etc. Include here all fishes caught that were made into “daing” or “bagoong” or “buro” or “sinaing.”
- Fry gathered - includes milkfish fry and sugpo fry gathered in seawater, fresh water or brackish water.
- Shells and other products gathered - includes clams, crabs, shrimps, squid, agar-agar, sponge, sea or fresh water shells, snails, water hyacinth gathering, seaweeds and other fresh water and sea products.
- Fish harvested - refers to fish gathered or harvested from fishponds and fishpens.
- Oyster and mussels harvested - this refers to oysters and mussels harvested in farms specifically to raise them (example, tahong farm, and oyster farm).
- Other products harvested - refers to “lumot” gathered from fishponds; also included are seashells gathered in seashores like puka shells, pearl shells, starfish, sea cucumber, sea corals and other marine products.

Ask the question as worded. If the reply is YES, record “1” and proceed to ask the questions for 75A and 75B. Otherwise, write “2” in second column, then enter “--------” for 75A and 75B and go to Question 76.

QUESTION 76 – FORESTRY AND HUNTING

Question: “During the past 12 months, did you or any member of your household engage in forestry activities such as tree planting (Falcata, Gmelina, rubber trees, etc.), firewood gathering, small-scale logging, charcoal making, gathering of forestry products (cogon, nipa, rattan, bamboo, resin, gum, etc.), or hunting wild animals/birds and others?”

Determine if a household member is an operator in any of the following activities:

1. tree planting such as as ipil-ipil, mahogany, etc. to reforest an area or for firewood purposes;
2. firewood gathering for sale;
3. small-scale logging but excluding concessionaires;
4. charcoal making for sale as an ancillary activity of forestry and hunting activities; and
5. gathering of forest products such as rattan, cogon, nipa shingles, bamboo, resin gum, and others for sale.

If the response is YES, enter “1.” Proceed to ask net income from selling the forest products gathered or wild animal/birds hunted for 76A and 76B. Otherwise, write “2” in the second column, then enter “--------” for 76A and 76B and go to Question 77.

Included in this inquiry are wild animals and birds caught and sold alive or as processed products. Examples of wild animals are wild boar, wild deer, and crocodiles. Examples of wild birds are red maya, parrots, wild pugo, and others.

QUESTION 77 – WHOLESALE AND RETAIL TRADE

Question: “During the past 12 months, did you or any member of your household engage in wholesale or retail activity including market vending, sidewalk vending, peddling, and other related activities?”

This activity includes selling in bulk or in retail such as in sari-sari stores, in sidewalks, or from house-to-house rolling stores. A person is said to be an operator of this activity if one sells mainly for profit. Excluded here are farmers who go to market and sell their crops and livestock every now and then.

If the reply is YES, enter “1” and proceed to ask the net income 77A and 77B. Otherwise, enter “2”, then enter “--------” for 77A and 77B and go to Question 78.
To help you estimate the net value of income from the sale of goods by the household, ask the following probing questions:

“How many months did you sell such product?”
“What is the average gross sale per month?”
“How much expense did you incur in selling such goods?”

To derive the total gross sale, multiply the number of months in operation by the average gross sale per month. The number of months should not exceed 12 months. Compute the net value of sale or income by subtracting the expense incurred from the total gross sale.

**QUESTION 78 – MANUFACTURING**

**Question:** “During the past 12 months, did you or any member of your household engage in manufacturing activities such as mat weaving, tailoring, dressmaking, bagoong making, fish drying, and other related activities?”

Manufacturing is the process of transforming raw or semi-finished materials into new form or finished products whether the work is performed by hand or by power-driven machine, whether it is done in a factory or in a worker’s home, and the products are sold at wholesale or retail. Exceptions are making banana cue, popcorn, fishballs, and the like, which should be classified under Wholesale and Retail Activity.

Do not include under this section those manufacturing activities that are integral parts of other activities like copra making, panocha making, and dried fish making, which should be reported under the “Crop Farming and Gardening,” and “Fishing” subsections, respectively.

If selling the manufactured products is an ancillary activity in manufacturing, do not enter any in the “Wholesale and Retail” section. However, if there is a separate entity managed by another household member that takes care of marketing the manufactured goods, then separate entries should be made in subsection 78.

Ask the question as worded. Keep in mind that the manufactured goods are mainly for sale. If the response is YES, enter “1” and proceed to ask the net value of income for 78A and 78B. Otherwise, write “2” in the second column then enter “--------” for 78A and 78B, and go to Question 79.

To help you estimate the net value of income from the sale of goods manufactured by the household, ask the following probing questions:

“How many months did you sell such product?”
“What is the average gross sale per month?”
“How much expense did you incur in selling such goods?”

To derive the total gross sale, multiply the number of months in operation by the average gross sale per month. The number of months should not exceed 12 months. Compute the net value of sale or income by subtracting the expense incurred from the total gross sale.

**QUESTION 79 – COMMUNITY, SOCIAL, RECREATIONAL, AND PERSONAL SERVICES**

**Question:** “During the past 12 months, did you or any member of your household operate any activity providing community, social, recreational, and personal services such as medical and dental practice, practice of trade, operation of school, restaurant and hotel, and others?”

Ask the question as worded. If the response is YES, enter “1” and proceed to ask the net income for 79A and 79B. Otherwise, write “2” in the second column, enter “--------” for 79A and 79B, then go to Question 80.

Since the coverage of this section is wide, try to inquire exhaustively if any member of the household is engaged in these services for a fee. The practice of one’s profession or trade is also included under this section like those for dentists, doctors, beauticians, and others.

This section includes the operation of family enterprises in the following:

1. Restaurants, bars, cafes, and other eating and drinking places;
2. Boarding houses and lodging places;
3. Repair shops (motor vehicles, electrical, footwear, watch and jewelry, etc.);
4. Recreational establishments like bowling alleys and billiard halls, and resorts;
5. Laundry shops or home laundry, barber shop, beauty shops, shoe shine and others;
6. Education services in all levels; and
7. Medical, dental, and laboratory services.

Remember to exclude business establishments that are registered with the Securities and Exchange Commission (SEC). You can discern this if the name of the establishment has “INC” (it means “incorporated”) affixed to the business name of the enterprise (signboard). If not, ask the respondent if the business is registered with the SEC.

To help you estimate the net value of income from the operation of these services, ask the following probing questions:

“How many months did you or the household member practice or operate such service?”
“What is the average gross receipt per month?”
“How much expense did you incur in the operation of such service?”

To derive the total gross receipt, multiply the number of months in operation by the average gross receipt per month. The number of months should not exceed 12 months. Compute the net value of receipt or income by subtracting the expense incurred from the total gross sale.

**QUESTION 80 – TRANSPORTATION, STORAGE, AND COMMUNICATION SERVICES**

Question: “During the past 12 months, did you or any member of your household operate any activity providing transportation, storage, and communication service such as operation of jeepneys or taxis, storage and warehousing activities, and travel agencies, messenger service, etc.?”

Report the following activities under this subsection:

1. Operation of buses, jeeps, freight trucks, service vehicles, callesas, tricycles, and motor boats;
2. Small transport enterprises like carts, boats, etc., ferrying, persons across rivers, and others;
3. Family cars and jeeps, which might have been used to transport persons or a freight for fee;
4. Tour and travel agencies;
5. Storage and warehousing, including cold storage and grain warehouses; and
6. Messengerial services.

Ask the question as worded. If the response is YES, enter “1” and proceed to ask the net income for 80A and 80B. Otherwise, write “2” in the second column, then enter “--------” for 80A and 80B, and go to Question 81.

To help you estimate the net value of income from the operation of these services, ask the following probing questions:

“How many months did you or the household member practice or operate such service?”
“What is the average gross receipt per month?”
“How much expense did you incur in the operation of such service?”

To estimate the expenses of an operator, say a taxi operator, he/she may have records of gasoline/diesel and oil expenses, including spare parts and washing cost. Ask for his/her average monthly expenses for recurring items and make an estimate for the reference period.

To derive the total gross receipt, multiply the number of months in operation by the average gross receipt per month. The number of months should not exceed 12 months. Compute the net receipt by subtracting the expense incurred from the total gross sale.
QUESTION 81 – MINING AND QUARRYING

Question: “During the past 12 months, did you or any member of your household engage in mining and quarrying activities such as mineral extraction like salt making, gold mining, black sand mining, gravel and sand stone quarrying, and related activities?”

If the answer to this screening question is YES, enter “1” and proceed to ask the net income for 81A and 81B. Otherwise, write “2” in the second column, enter “-----------” for 81A and 81B, and go to Question 82.

Included under this subsection are activities like gold mining and panning, other precious metals mining, base metal mining, non-metallic mining, salt making, and quarrying (stone, clay, marble, sand, limestone, etc.).

QUESTION 82 – CONSTRUCTION

Question: “During the past 12 months, did you or any member of your household contract services for the construction or repair of a house, building, or any structure?”

Construction here is defined as those services contracted by any member of the household for the construction or repair of a house, building, or any structure. “Small-time” contractors are included here while big contractors, which have juridical personalities (corporations or partnerships), are excluded.

Ask the question as worded. Find out if anybody among the household members was engaged during the reference period in any construction work, addition of structure, or repairs. If the reply is YES, enter “1” and proceed to get the net value of income for 82A and 82B. Otherwise, write “2” in the second column, enter “-----------” for 82A and 82B, and go to Question 83.

QUESTION 83 – ACTIVITIES NOT ELSEWHERE CLASSIFIED

Question: “During the past 12 months, did you or any member of your household engage in other entrepreneurial activities not elsewhere classified including electricity, gas and water, financing, insurance, real estate, and business services?”

This subsection will cover all other entrepreneurial activities in the non-agricultural sector, which do not fall under any of the subsections 73 to 82, including those agricultural services like renting out of farm machinery and equipment.

Ask for the specific trade or business engaged in by the household member. The activity may be any of the following:

1. electricity, gas, and water;
2. financing and insurance, including money lending;
3. real estate business;
4. legal services (includes lawyer services);
5. accounting, auditing, and bookkeeping services;
6. advertising agencies.
7. rental of agricultural land which do not cover landlord-tenant relationship

Ask the question as worded. Find out if anybody among the household members was engaged during the reference period in other entrepreneurial activities. If the reply is YES, enter “1” and proceed to 83A and 83B. Otherwise, write “2” in the second column, enter “-----------” for 83A and 83B, and go to Question 84.

QUESTION 84 – TOTAL NET INCOME FROM ENTREPRENEURIAL ACTIVITY

A: Add the net incomes from 73A to 83A
B: Add the net incomes from 73B to 83B

This section summarizes the net income from entrepreneurial activities. To get the total net income in cash from these sources, add the income In Cash
from 73A to 83A. Record the total in 99A. Do the same to compute the In Kind income by adding the In Kind incomes recorded from 73B to 83B and then record the total in 84B.

N.2 Salaries and Wages
From Employed Members

QUESTION 100 – SALARIES AND WAGES

Question: “During the past 12 months, how much is the gross salaries and wages earned by the employed members of your household?”

Refer to the individual salaries and wages recorded in Question 48. Add all the salaries and wages In Cash and enter the total in box 85A. Add all the salaries and wages In Kind and enter the value in box 85B.

N.3 Other Sources of Income

Question: “During the past 12 months, how much did you or any member of your household receive from the following?”

This section will gather household incomes from sources other than work. Record the incomes—whether In Cash or In Kind—of the household members derived from each of the sources enumerated in this section. If the household does not receive any income from this particular source, enter “0” in the income column.

QUESTION 86 – INCOME SHARE FROM OTHER HOUSEHOLDS

Fill up this section if the household received any share of livestock raised by other households, including rental of agricultural lands paid in the form of livestock and poultry, or its share of livestock or poultry products.

Include the share of the household from the proceeds of the sale of pigs, cows, and others that the household owned but were raised by other households, and disposed of during the reference period, although there was no landlord–tenant relationship between these households.

Record the value consumed and given away as gifts under income In Kind (86B). There would be cases where produce/harvest is more than enough for the household that they sell the excess to others. The income from the sale should be reported under income In Cash (86A).

QUESTION 87 – REMITTANCES FROM OVERSEAS FILIPINO WORKERS

This section covers all salaries and wages and other forms of income remitted by relatives who are outside the territory of the Philippines. This is often referred to as remittance. The amount should be specified in terms of pesos.

Please refer to Question 20. If there is a member who is an OFW, there should be an amount specified in this section.

Sources of cash receipts from OFWs include:

(a) Cash received out of salaries/wages and other sources of income of a household member who is a contract and non-contract worker abroad. Ensure that you record the total remittance sent to the household and not the gross income of the member.

(b) Cash receipts sent by a household member with a residency status abroad other than that of a contract worker (immigrant, tourist, with student visa).

QUESTION 88 – CASH RECEIPTS, GIFT, SUPPORT, RELIEF, AND OTHER INCOME FROM ABROAD

This item will specifically cover all other cash receipts from all sources outside the Philippine territory other than those from OFWs. They may come from family members, non-relatives, foreign government, and charitable institutions.

Entries should be in pesos (₱). Examples of cash receipts from abroad are as follows:

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QUESTION 89 – CASH RECEIPTS, SUPPORT, ASSISTANCE, AND RELIEF FROM DOMESTIC SOURCE

Inquire if there are cash receipts, support, assistance, and relief received by household members from other families living in the country and from the Philippine government. Include those received from a family member not enumerated as a member of the household because he/she is not expected to return within 30 days from date of departure.

When you come across a needy or a poorly situated family, ask nicely/politely if they received any cash assistance or relief from relatives living in a separate household. Inquire about cash receipts from charitable institutions such as the Red Cross, Department of Social Welfare and Development, and others.

QUESTION 90 – RENTALS FROM NON-AGRICULTURAL LANDS, BUILDINGS, SPACES, AND OTHER PROPERTIES

Net income derived as rentals from non-agricultural lands, buildings, spaces, and other properties shall be entered under this item. Take note that this item refers to lands, buildings, spaces, and others that are rented out to other households. This will cover only rental from non-agricultural lands, buildings, spaces, and other properties from domestic sources. Those from abroad are accounted under subsection 88.

In urban areas, especially in commercial and educational centers, be sure to inquire on rentals received from residential and commercial lots, and buildings owned by the family. Rental of other properties will include renting out of chairs, wearing apparel, and jewelry, as long as these are not family enterprises.

However, this item excludes rentals from agricultural land used by the household for agricultural production. Income from this activity will be included in subsection 86.

QUESTION 91 – INTEREST

An interest in Cash may be the interest received by the household from bank deposits, or for money loaned to others. It is possible that the household earned interest in Kind if there are loans granted to others also in kind. For example, if a landowner loaned 4 sacks of rice to another household who later paid 5 sacks of rice after harvest, the value of 1 sack will be recorded as interest in this item. For household members with dollar deposits, estimate the peso equivalent of the interest earned. Use current exchange rate.

QUESTION 92 – PENSION AND RETIREMENT, WORKMEN’S COMPENSATION, AND SOCIAL SECURITY BENEFITS

Ask specifically about pension and retirement benefits or monthly annuities of retired government employees, retired, or disabled members of the Armed Forces of the Philippines or those retired employees of private firms. Be sure to record the total benefits received during the reference period.

Include here the total amount received under the Workmen’s Compensation Act for an accident, disability, or death of a family member who worked with the government or a private firm.

QUESTION 93 – DIVIDENDS FROM INVESTMENT

Inquire from the respondent, especially the affluent households, on dividends or share of profits from investments in large private corporations and in money markets. When you come across a household
of a government employee, ask specifically about GSIS dividends. Include also the Philippine Long Distance Telephone Company (PLDT) dividends.

QUESTION 94 – OTHER SOURCES OF INCOME NOT ELSEWHERE CLASSIFIED

Specify the source(s) of income not from work that cannot be identified in any of the items in subsections 86–93, and record the value received In Cash or In Kind. Examples are royalties, lump sum for injuries (not covered by workmen’s compensation), legal damages received, proceeds from sale of rights to real property, and salaries and wages from employment of household members less than 10 years old. However, see to it that the source entered in this item is not already included in 85.

The royalties are part of income from sales of books, practice of skills, use of a patent invention, or use of the lot or land paid to the author, inventor, or its owner.

Also included here are money won from gambling like lotto, sweepstakes, jueteng, and others.

QUESTION 95 – TOTAL INCOME FROM OTHER SOURCES

A. Add the income from 86A to 94A

B. Add the income from 86B to 94B

This section summarizes the income derived from other sources of income. To get the total income In Cash from these sources, add the following items:

- 86A – income share from other households;
- 87A – remittances from household members who are overseas (OFW);
- 88A – other assistance from abroad;
- 89A – cash receipts and assistance from domestic sources;
- 90A – rentals in cash from non-agricultural lands and other properties;
- 91A – cash interest;
- 92A – pensions and retirement cash benefits;
- 93A – cash dividends; and
- 94A – other sources of income in cash.

95A = 86A + 87A + 88A + 89A + 90A + 91A + 92A + 93A + 94A

Likewise, to get the total income In Kind from these sources, add the following items:

- (86B) – in kind received from other households;
- (87B) – in kind receipts and remittances from household members who are overseas (OFW);
- (88B) – in kind assistance from abroad;
- (89B) – in kind receipts and assistance from domestic sources;
- (90B) – in kind rentals from non-agricultural lands and other properties;
- (91B) – interests (in kind);
- (92B) – in kind pension and retirement benefits;
- 93B – in kind dividends; and
- 94B – other sources of income in kind.

95B = 86B + 87B + 88B + 89B + 90B + 91B + 92B + 93B + 94B

QUESTION 96 – TOTAL IMPUTED RENT FROM OWNED OR RENT-FREE HOUSE AND/OR LOT

Total imputed rent of the house and/or lot from Question 63 x 12 months

Get the total monthly imputed rent of the house and lot from Question 63. To compute the annual imputed rent, multiply the monthly imputed rent to 12 months. Enter the value in 96B.

QUESTION 97 – TOTAL INCOME (IN CASH AND IN KIND)

To get the total income, simply add the In Cash incomes as reported in the following sections:

- 84A – total income in cash from entrepreneurial activity
85A – total income in cash from salaries and wages
95A – total income in cash from other sources of income

\[ 97A = 84A + 85A + 95A \]

Similarly, to get the total income, add the In Kind incomes as reported in the following sections:

- 84B – total income in kind from entrepreneurial activity
- 85B – total income in kind from salaries and wages
- 95B – total income in cash from other sources of income
- 96B – total imputed rent from owned or rent-free dwelling unit

\[ 97B = 84B + 85B + 95B + 96B \]

QUESTION 98 – TOTAL HOUSEHOLD INCOME

To get the total household income, add the total income In Cash (97A) and total income In Kind (97B). Write the total income in 98.

\[ 98 = 97A + 97B \]

O. Agriculture

QUESTIONS 99, 100, 101, 102, 103, and 104. These apply only to households engaged in crop farming. Ask these questions if the answer to Question 73 is YES (“1”). If the answer is NO (“2”), mark “-------” the space provided for the answers.

QUESTION 99 – TENURE STATUS IN AGRICULTURAL LAND

Question: “What is the tenure status of the agricultural land being tilled by the household?”

Tenurial status refers to the land right under which a parcel is held or operated.

A holding is any piece or pieces of land wholly or partly for any agricultural activity (for example growing of crops and tending of livestock and poultry and other agricultural activity) and operated as one technical unit by one person alone or with others regardless of title, legal form, size or location.

A holding may be operated under a single form of tenure or under more than one form, in which case each form of tenure must be reported by parcel. A parcel may have any of the following tenure statuses:

1. **Fully owned** – the land is operated with a title of ownership in the name of the holder and consequently the right to determine the nature and extent of the use of the land. This category includes lands whose absolute ownership is vested in the holder through sale and inheritance. A parcel, which is a part of the holding, is also considered fully owned if the holder has an absolute deed to the sale of the land. Likewise, lands of the tillers with Emancipation Patent are considered fully owned.

   **Emancipation patent** is the title of the land issued to a tenant upon paying completely his/her amortization of the land and upon compliance with all other government requirements. It represents the full emancipation of the tiller from the bondage of tenancy and hence, is vested the absolute ownership of the land.

2. **Owner-like possession** – the land is under conditions that enable a person to operate it as if he/she is the owner although he/she does not possess a title of ownership. A land held under heirship if the title of ownership has not been transferred to the heirs. Also included in this category are inherited lands without title of ownership and those held under tax declaration.

   This category also includes areas without legal title of ownership, which is operated uncontestedly and uninterruptedly by the holder for a period of 30 years or more, even without the permission of the owner, and lands being purchased on installment basis under a long-term contract.

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3. **Tenanted** – the land is cultivated by a person but belongs to or is possessed by another, with the latter’s consent for purposes of production, sharing the produce with the landholder under the share tenancy system, or paying to the landholder a certain amount or ascertainable in produce or in money or both, under a leasehold tenancy system.

4. **Leased/rented** – the land is cultivated by a lessee, which belongs to or is legally possessed by another, the lessor. The rental payment is in the form of a fixed amount of money, produce, or both.

5. **Rent-free** – the land is operated without title of ownership and without paying rent but with the consent or permission of the landowner.

6. **Held under a Certificate of Land Transfer (CLT)/Certificate of Land Ownership Award (CLOA)** – the land is still being paid by the holder under the government land reform program of Operation Land Transfer (OLT). OLT is a systematic transfer of ownership of tenanted rice and corn lands from the landowners to the tenant-tillers while CLOA are land titles issued to farmers for their farm lot as covered by Republic Act 6657 otherwise known as the Comprehensive Agrarian Reform Law. It must be noted that this category covers only those that are currently paying their amortization.

7. **Held under a Certificate of Ancestral Domain Title (CADT)/Certificate of Ancestral Land Title (CALT)** – the land is possessed by the indigenous cultural communities/indigenous peoples (ICCs/IPs) in accordance with Republic Act 8371 of the Indigenous Peoples Rights Act (IPRA) of 1997. CADT refers to a title formally recognizing the rights of possession and ownership of ICCs/IPs over their ancestral domains identified and delineated in accordance with RA 8371. CALT, on the other hand, is a title formally recognizing the rights of ICCs/IPs over their ancestral lands.

8. **Held under a Community-Based Forest Management Agreement (CBFMA)/Stewardship** – the forest land is cultivated by a person under the CBFMA or the Stewardship Agreement. CBFMA is a production-sharing agreement between the Department of Environment and Natural Resources (DENR) and the participating people’s organization for a period of 25 years renewable for another 25 years and shall provide tenurial security and incentives to develop, utilize, and manage specific portions of forest lands. The Certificate of Stewardship Contract, on the other hand, is a contract issued to individual occupants in the Integrated Social Forestry (ISF) areas before the implementation of the CBFM program in 1996 pursuant to the Letter of Instruction 1260, for a period of 25 years renewable for another 25 years.

9. **Others (to be specified)** – those held under other forms such as on mortgage or parcels used without the consent of the owner.

Note: If the household is tilling more than one parcel, record different a tenure status for each parcel, separated by comma in the box.

**QUESTION 100 – AREA OF AGRICULTURAL LAND**

**Question:** “What is the area of the agricultural land?”

Ask for the area (in hectares) of the agricultural land tilled by the household.

For each tenurial status of a parcel recorded in Question 99, list the corresponding code for the area of the agricultural land tilled by the household.

**QUESTION 101 – TYPE OF CROPS OR FRUIT-BEARING TREES HARVESTED**

**Question:** “During the past 12 months, what temporary and permanent crops did your household harvest?”

Specify the name/s of the temporary and permanent crops or fruit-bearing trees that the household harvest.
QUESTION 102 – VOLUME OF CROPS HARVESTED

Question: “During the past 12 months, how much did you harvest?”

Get the volume of crops harvested per crop during the past 12 months. The measurement should be in kilograms. If the measurement is not in kilograms, estimate them in terms of kilograms with the help of the respondent.

QUESTION 103 – AGRICULTURAL IMPLEMENTS/EQUIPMENT

Question: “How many of each of the following agricultural implements/equipment does the household use?”

Equipment and facilities refer to farm equipment and facilities used for agricultural activities. Do not include equipment and facilities that are unusable or beyond repair. Determine the number of the following farm equipment and facilities.

Equipment and facilities are classified as follows:

1. Beast of burden – farm animals used in farming activities.
2. Plow – a farming equipment used to cut, lift, and turn over soil in preparing land for planting.
3. Harrow – a cultivating equipment set with spikes, spring teeth, or discs and used primarily for pulverizing and smoothing the soil.
4. Mower – a device used to cut/mow grass.
5. Thresher – a machine to separate grain from stalk.
6. Insecticide/pesticide sprayer – a device, such as an atomizer, used in applying insecticides/pesticides to crops.
7. Farm tractor – a self-propelled, four-wheeled vehicle with two axles designed to carry, pull, or propel agricultural implement and machines.
8. Hand tractor – a self-propelled walking-type agricultural machinery with a single axle designed to pull and propel trailed or mounted agricultural implements and machinery.
10. Planter/transplanter/dryer – a mechanical device used for transplanting rice seedling grown by the dapag method. It is capable of transplanting 4–8 rows of rice per stroke.
11. Mechanical dryer – an equipment used for drying rice through forced convection of heat, air from a furnace, or heat surface.
   (a) Flat bed dryer – batch-type dryer
   (b) Recirculating dryer – continuous-type dryer
12. Multipurpose drying pavement – a concrete-lined platform that is used for drying palay.
13. Rice mill/corn mill/feed mill – an engine or meter-powered equipment used to reduce the size/grain size of rice/corn at an acceptable size for human consumption.
14. Harvester, any crop – an engine-powered machinery used to harvest rice through stripping or cutting 4–6 rows in one passion. Harvested palay are gathered at one side of the machinery.
15. Warehouse/granary – a farm structure or building used for the storage of farm products and/or other farm equipment.
16. Farmshed – a farm structure or building that serves as the farmer’s resting place and/or temporary shed for his farm tools and equipment.
17. Irrigation pump – a power-driven machine that pumps water from the source of supply. This includes tubewell systems, where water is lifted from the subsoil water reservoir, and other systems that lift water by means of pumps direct from rivers and streams.
18. Others, specify – other equipment not mentioned above.

Ask the respondent for the number that corresponds to what they use and enter the number in the space provided. Put “0” in the space provided if
the household does not use the specified agricultural equipment/facility.

**QUESTION 104 – OWNERSHIP OF AGRICULTURAL EQUIPMENT**

**Question:** “How many agricultural equipment/facilities does the household own?”

From the list of agricultural equipment/facilities, ask the respondent for the number of pieces of equipment that is owned by the household. Record the number in the space provided. Note that the number to be recorded in Question 104 should not exceed the number recorded in Question 103.

**P. Livestock Raising**

**QUESTIONS 105 and 106. These apply only to households that are engaged in livestock raising. Ask these questions if the answer to Question 74 is YES (“1”).**

**QUESTIONS 105 – LIVESTOCK RAISED THAT PROVIDED A PRODUCT**

**Question:** “For the past 12 months, what types of livestock or other animals were raised and provided the following products?”

“The raising of livestock and poultry is the rearing or farming of animals mainly for agricultural purposes. The animals are usually kept or reared in captivity for meat or for harvest or animal products such as eggs, and milk. In general, raising these animals may involve feeding and putting them in a shelter or letting them pasture in an open field depending on the availability of feedstocks or water. Animals raised include those present in the holding, as well as those being grazed in communal grazing land or in transit at the time of the enumeration.

Livestock are domesticated animals with four legs kept or reared in captivity mainly for agricultural purposes. This includes carabao, cattle, sheep, goats, horses and swine.

Poultry is a collective term for all domesticated avian kept or reared in captivity mainly for agricultural purposes. This includes chicken, ducks, quail, geese, turkey, pigeon and ostrich.

Ask what livestock or poultry were raised by the household that provided products or income. Record the responses in the space provided. The possible codes are as follows:

1 – Hog/sow
2 – Goat
3 – Carabao
4 – Cow
5 – Chicken
6 – Duck
7 – Others, specify

Enter the code for the livestock or poultry based on the type of product that it provided. For example, if the household is raising a hog/sow and it gave a meat product, then write “1” under the line 2. Meat. If the household does not raise the livestock and hence, no product is produced, then mark the space provided with “----”.

**QUESTION 106 – VOLUME OF PRODUCTION SOLD AND CONSUMED**

**Question:** “What is the volume of production from livestock or poultry that is sold and consumed by your household?”

If the livestock or poultry provided a product, ask for the volume of production sold and consumed in each of those listed under Question 105 in the past 12 months. If live animals were produced, enter the number of heads. If meat was produced, get the weight of the meat in kilograms. If milk was produced, enter the volume in liters. If eggs were produced, enter the number of eggs.

**Q. Fishing**

Fishing refers to the catching and gathering of fish, crustaceans, mollusks, and other marine organisms and products, including other aquatic plants. It covers the catching, collecting, and gathering activities directed at removing or collecting live, wild aquatic organisms such as fish and mollusks (e.g., clams, snails, octopus,

40 Based from the Enumerator’s Manual of 2012 Census of Agriculture and Fisheries of the National Statistics Office.
and squid), crustaceans (e.g., crabs, lobsters, shrimps, and crayfish), and plants from the sea or inland water for human consumption and other purposes—by hand or through various fishing gear such as nets, lines, and stationary traps.

QUESTIONS 107–115. These apply only to households that are engaged in fishing. Ask these questions if the answer to question 75 is YES (“1”).

QUESTION 107 – FISHING ACTIVITY

Question: “Which fishing activity is the household engaged in?”

Ask what fishing activity is the household engaged in. The possible codes are

1 – Catching/gathering of fish, crabs, shrimps, and others
2 – Culturing of fish, seaweeds, and others.

QUESTIONS 108–112. These apply only to households that are engaged in catching/gathering fish, crabs, shrimps, and others. Ask these questions if the answer to Question 107.1 is YES (“1”).

QUESTION 108 – LOCATION OF FISHING OPERATION

Question: “Where did the household/member/s perform fishing operation in the past 12 months?”

The following are two types of water environments where a fishing activity can be performed.

“Marine waters” refer to bodies of water such as oceans, bays, gulfs, and channels with seawater salinity. These consist of pure saltwater such as the Manila Bay, Visayan Sea, and Batangas Coast. “Inland waters” refer to bodies of water such as lakes, rivers, reservoirs, dams, paddy/rice fields, estuaries, marshes, and ponds usually consisting of freshwater or brackish-water environments. Examples are the Laguna de Bay, Taal Lake, Liguasan Marsh, and Agusan Marsh.”42 The codes are

1 – Marine
2 – Inland
3 – Both

QUESTION 109 – USE OF BOAT/VEssel

Question: “How many of each of the following boats/vessels does the household use in its fishing activities?”

“A fishing boat/vessel” refers to any boat, ship, or other watercraft equipped to be used for capturing fishery species in the performance of any activity related to fishing. This includes a raft.”43 For this question, the corresponding codes are

1 – Boat with engine and outrigger,
2 – Boat with engine but without outrigger,
3 – Boat without engine but with outrigger,
4 – Boat without engine and outrigger, and
5 – Raft.

From the above list, ask the respondents which number they use. Enter the appropriate number in the space provided. Put “0” in the space provided if the household does not use the specified type of boat/vessel.

QUESTION 110 – OWNERSHIP OF BOAT/VEssel

Question: “How many boats/vessels does the household own?”

As a follow up to Question 109, ask the respondent how many boats/vessels are owned by the household. Record the response in the space provided. The number to be recorded in Question 110 should not exceed the number recorded in Question 109.

41 Based from the Enumerator’s Manual of the 2012 Census of Agriculture and Fisheries of the National Statistics Office.
42 Based from the Enumerator’s Manual of the 2012 Census of Agriculture and Fisheries of the National Statistics Office.
43 Based from the Enumerator’s Manual of the 2012 Census of Agriculture and Fisheries of the National Statistics Office.
QUESTION 111 – KIND OF GEARS/ACCESSORIES/DEVICES

Question: “What kinds of gears/accessories/devices were used?”

List all the gears/accessories/devices that are being used by the household in its fishing activities.

QUESTION 112 – NUMBER OF GEARS/ACCESSORIES/DEVICES OWNED

Question: “How many gears/accessories/devices do the household own?”

For each kind of gears/accessories/devices, ask the respondent how many is owned by the household. Enter the response in the space provided.

QUESTIONS 113–115. These apply only to households that are engaged in the culture of fish, seaweeds, and others. Ask these questions if the answer to Question 107.2 is YES (“1”).

QUESTION 113 – TYPE OF AQUAFARM

Question: “What type of aquafarm did the household member/s operate?”

“Aquafarm” refers to a farming facility used in the culture or propagation of aquatic species like fish, crustaceans, mollusks, and aquatic plants. It includes fishponds, fish pens, fish cages, fish tanks or “pangitlugan,” seaweed farms, oyster farms, mussel farms, mussel farm, and other farms for culturing of pearl, cockles, and abalone.

Types of Aquafarms

1. **Fishpond** refers to a body of water (artificial or natural) where fish and other aquatic products are cultured, raised, or cultivated under controlled conditions. This is a land-based type of aquafarm.

   Examples of species usually cultured in fishponds are milkfish (bangus), tilapia, catfish (hito), carp, siganid (samaral), sea bass (apahap), prawn (sugpo), shrimp (hipon), and crab (alimango).

2. **Fish pen** refers to a fish enclosure made of closely woven bamboo screens, nylon screens, or nets or other materials attached to poles staked at the bottom up to the surface of the lake, river, or other shallow bodies of water for the purpose of growing and/or culturing fish to various sizes in fresh, brackish, and marine waters. A fish pen varies in shape. Its enclosure covers the entire water depth from the water surface down to the bottom.

   Note that a fish corral (baklad), which is used for trapping fish in tidal waters or along the natural paths of fish, is not considered fish pen. Both have similar features and materials used. The only difference is that a fish enclosure where fish from outside the enclosure cannot enter while a fish corral is constructed with openings to serve as fish trap.

   Examples of species cultured in fish pens are milkfish (bangus), carp, tilapia, and sea bass (apahap).

3. **Fish cage** refers to a stationary or floating fish enclosure made of synthetic net wire/bamboo screen or other materials set in the form of inverted mosquito net (hapa type) with or without cover with all sides either tied to poles staked to the bottom of the water or with anchored floats for aquaculture purposes.

   A fish cage is suitable in the culture of fish species that burrow into the lake bottom because it limits the fish inside the confines of the cage. Examples of species cultured in fish cages are milkfish (bangus), carp, tilapia, grouper (lapu-lapu), siganid (samaral), and sea bass (apahap).

4. **Seaweed farm** refers to a farm for cultivating seaweeds in suitable water areas by any method with appropriate intensive care for production in commercial quantities. The culture of seaweeds may be carried out by tying them to stones, straw lines, nets, and other instruments that are set in a manner that is elevated from the sea bottom to protect them from predators in the sea.

   Examples of varieties of seaweeds that can be cultured are eucheuma (guso), gracilaria
(gulaman dagat), and caulerpa (lato). Gathering of seaweeds is not classified under aquaculture but in the gathering of aquatic products under fishing operation.

5. Oyster farm refers to a farm for cultivating oysters in suitable water areas by any method with appropriate intensive care for production purposes.

6. Mussel farm refers to a farm for cultivating mussels in suitable water areas by any method with appropriate intensive care for production purposes.

7. Fish tank is a land-based structure made of wood, glass, metal, or cement, usually rectangular or cylindrical in shape designed to grow and culture fish for breeding and seed fish production. It may be constructed below or above the ground level and capable of holding and interchanging water.

8. Hatchery or “pangitlugan” is an aquafarm where brood stock eggs are hatched and reared into fry in a body of water (artificial or natural) contained in tanks or ponds under controlled condition in fresh or saltwater environment.

9. Others (to be specified) includes aquafarms that cannot be classified in the aforementioned types of aquafarms. Examples are farms for cultivating pearl, cockles, and abalone.”

For all types that were listed above, ask if the household operated any of these. Enter “1” for YES or “2” for NO.

QUESTION 114 – FISHES OR AQUATIC ANIMALS CULTURED OR CAUGHT BY THE HOUSEHOLD

Question: “What fishes or aquatic animals were cultured or caught by your household for the past 12 months?”

Ask what types of fishes or aquatic animals were cultured or caught by the household during the reference period. Enter the names of the fishes in the space provided.

QUESTION 115 – VOLUME OF FISH HARVESTED

Question: “How much was the volume of fish harvested/caught in the past 12 months?”

For each type of fish listed below, get the volume of fish harvested in the past 12 months. With the help of the respondent, estimate the volume in kilograms.

R. Climate Change

Climate change refers to the variation in the earth’s global or regional climates over time scales ranging from decades to millions of years. Changes may be driven by internal processes, external forces or, most recently, by human activities.

QUESTION 116 – NUMBER OF YEARS THE HOUSEHOLD HAD BEEN LIVING IN THE BARANGAY

Question: “How many years has the household been living in the barangay?”

Ask the respondent how many years the household has been living in the barangay. The applicable codes are as follows:

1. 3 years and above
2. Not more than 3 years

QUESTIONS 117–147. These apply only to households living in the barangay for 3 years and above (if the answer in Q116 is “1”)

Agriculture

QUESTION 117 – NUMBER OF YEARS THE HOUSEHOLD IS ENGAGED IN CROP FARMING

45 Definition was adopted from the Asian Development Bank. For more information, please visit: http://www.adb.org/Climate-Change/faqs.asp#3
Question: “How many years has the household been engaged in crop farming?”

Ask from the respondent the length of time the household had been engaged in crop farming. The applicable codes are as follows:

1. 3 years and above
2. Less than 3 years

QUESTIONS 118–123. These apply only to households that have members involved in crop farming and gardening and living in the community for at least 3 years.

QUESTION 118 – CHANGES IN HARVEST

Question: “Compared with 3 years ago, did your harvest experience any changes?”

This question aims to determine the changes in the household’s harvest as compared to 3 years ago. The applicable codes are as follows:

1. Decreased
2. Increased
3. Remained the same

If the answer is Decreased (“1”), proceed to Q119. If the answer is either Increased (“2”) or Remained the same (“3”), mark the box provided in Q119, Q120, and Q121 with “-------” and proceed to Q122.

QUESTION 119 – REASON FOR THE DECREASE IN HARVEST

Question: “What is the primary reason for the decrease in harvest?”

This question probes into the reasons for the observed decrease in the household’s harvest, as compared to 3 years ago. The reasons are coded as follows:

1. Increase in the cost of farm inputs such as seeds, fertilizer, pesticides, etc.
2. Affected by drought.
3. Affected by typhoon.
4. Affected by flood.
5. Affected by pests.
6. Decrease in the supply of water from irrigation.
7. Changes in the primary occupation of member.
8. Others (to be specified).

QUESTION 120 – CHANGES IN CROPS PLANTED

Question: “During the past 3 years, did you do any of the following in the last planting season?”

Ask if the household changed the variety or the crops they planted during the past 3 years. Ask if any of the household members did the following:

1. Changed the variety of the same crop
2. Changed the major crop

Write “1” for YES and go to Q121. If NO, write “2” and mark with “-------” the space provided for Q121, and go to Q122.

QUESTION 121 – REASONS FOR CHANGING THE CROPS PLANTED

Question: “Why did you have to change the crops planted?”

If the answer in Q120.1 or Q120.2 is “1” or YES, ask why. For the corresponding codes, refer to the reasons given below:

1. The former crop is more expensive.
   This means that the crop that the farmer used to plant has incurred more cost, hence the shift to other crops and/or variety.
2. More resistant to pests and diseases.
   The farmer has found a new variety of crop that is more resistant to pests and diseases.
3. The present crop does not require much water.
   The farmer has discovered a new variety that can grow even with a little water thus making it more tolerable to drought.
4. The present crop can earn more profit.
By shifting to this new crop and/or variety, the farmer earned more profit.

5. Availability of crops.
The seed for this new crop is the one available in the market.

6. Others (to be specified).

QUESTIONS 122 and 123. These apply to all households who are living in the community for at least 3 years (if the answer in Q116 is “1”) and are involved in crop farming for 3 years or more (if the answer in Q117 is “1”).

QUESTION 122 – INSURANCE

Question: “Do you have any insurance for the following?”

1. Crops
2. Agricultural equipment/facilities

Ask the respondent if the household has any insurance for crops and agricultural equipment/facilities. Write “1” if the answer is YES and “2” for NO. Enter the appropriate code in the space provided.

QUESTION 123 – INSURANCE PROVIDER

Question: “Who is the insurance provider?”

If there is any insurance for any of the two items in Q122, ask for the name of the insurance provider. Write the code in the space provided. The corresponding codes are

1. Philippine Crop Insurance Corporation
2. Private insurance company
3. Bank
4. Others (to be specified)

Livestock and Poultry

QUESTIONS 124 and 128. These apply to all households who are involved in livestock and poultry raising (if the answer in Q74 is “1”) and living in the community for at least 3 years (if the answer in Q116 is “1”).

QUESTION 124 – NUMBER OF YEARS A HOUSEHOLD IS ENGAGED IN LIVESTOCK AND POULTRY

Question: “How many years has the household been engaged in livestock and poultry raising?”

Ask how long the household had been engaged in livestock and poultry. The applicable codes are the following:

1. 3 years and above
2. Less than 3 years

QUESTIONS 125–128. These apply only to households with members involved in livestock and poultry raising and living in the community for at least 3 years.

QUESTION 130 – CHANGES IN LIVESTOCK AND POULTRY

Question: “Compared with 3 years ago, did the number of your livestock and poultry change?”

This question will determine if there had been any changes in the number of livestock and poultry of the household as compared to the situation 3 years ago. The codes are the following:

1. Decreased
2. Increased
3. Remained the same

If the reply is Decreased (“1”), proceed to Q126. If the answer is either Increased (“2”) or Remained the same (“3”), mark the box in Q131 with “---” and proceed to Q127.

QUESTION 126 – REASONS FOR THE DECREASE IN LIVESTOCK AND POULTRY

Question: “What is the primary reason for the decrease in number of livestock and poultry?”

This question will determine the primary reason/s for the changes in the number of livestock and poultry as compared to 3 years ago. Ask Q126 if the answer...
in Q125 is Decrease (“1”). The possible reasons are coded as follows:

1 – Increase in cost of farm inputs (feeds, chicks, and others).
2 – Stricken with diseases (swine flu, bird flu, foot-and-mouth disease).
3 – Decrease in landholding.
4 – Affected by typhoon.
5 – Affected by flood.
6 – Affected by extreme hot weather condition.
7 – Others (to be specified)

QUESTION 127 – LIVESTOCK AND POULTRY INSURANCE

Question: “Do you have livestock and poultry insurance?”

Ask if the household has an insurance for livestock and poultry. Write “1” if the answer of the respondent is YES and “2” for NO. Enter the appropriate code in the space provided.

QUESTION 128 – INSURANCE PROVIDER FOR LIVESTOCK AND POULTRY

Question: “Who is the insurance provider?”

If the household’s livestock and poultry are insured, ask for the name of the insurance provider. Write the appropriate code in the space provided. Listed below are the corresponding codes:

1 – Philippine Crop Insurance Corporation
2 – Private insurance company
3 – Bank
4 – Others (to be specified)

QUESTION 129 – NUMBER OF YEARS THE HOUSEHOLD IS ENGAGED IN FISHING

Question: “How many years has the household been engaged in fishing?”

Ask from the respondent the length of time the household had been engaged in fishing. Applicable codes are the following:

1. 3 years and above
2. Less than 3 years

QUESTION 130 – CHANGES IN FISH CATCH

Question: “Compared with 3 years ago, did the volume of your fish catch change?”

This question will provide information on whether the volume of fish catch of the household has changed during the 3-year period. The codes are the following:

1 – Decreased
2 – Increased
3 – Remained the same

If the reply is Decreased (“1”), proceed to Q131. If the answer is either Increased (“2”) or Remained the same (“3”), mark the box in Q131 with “------” and proceed to Q132.

QUESTION 131 – REASON FOR THE DECREASE IN FISH CATCH

Question: “What is the primary reason for the decrease in fish catch?”

This question will help determine the major reason/s why the household’s volume of fish catch has declined during the 3-year period. Ask Q131 if the answer in Q130 is Decreased (“1”). The reasons are coded as follows:

1 – Decrease in fishing area due to government restrictions.
2 – Decrease in fishing area due to competition.

Fishery

QUESTIONS 129–130. These apply to all households that are involved in fishing (if the answer in Q75 is “1”) and living in the community for at least 3 years (if the answer in Q116 is “1”).
3 – Fewer fishes.
4 – Occurrence of coral bleaching.
5 – Fishkill.
6 – Occurrence of oil spill and other kinds of pollution.
7 – Less frequent fishing because of the increase in fuel prices and other expenses.
8 – Frequent occurrence of typhoons.
9 – Others (to be specified)

QUESTION 132 – FISHERIES INSURANCE

Question: “Do you have fisheries insurance?”

Ask if the household has fisheries insurance. Write “1” if the answer is YES and “2” for NO. Enter the appropriate code in the space provided.

QUESTION 133 – INSURANCE PROVIDER FOR FISHERIES

Question: “Who is the insurance provider?”

If the household has fisheries insurance, ask for the name of the insurance provider. Write the corresponding code in the space provided. The following are the codes:

1 – Philippine Crop Insurance Corporation
2 – Private insurance company
3 – Bank
4 – Others (to be specified)

Temperature

QUESTION 134 – INCREASE IN TEMPERATURE

Question: “Compared with 3 years ago, is the temperature hotter now in your area?”

This question will determine if the temperature in this area is hotter now as compared with 3 years ago. Enter “1” if the answer is YES and “2” for NO.

Electricity

QUESTION 135 – FREQUENT POWER SHORTAGE

Question: “Compared to the situation 3 years ago, are brownouts more frequent now in your area?”

Ask if the area is experiencing more frequent brownouts now than 3 years ago. Record “1” if the answer is YES and “2” if the answer is NO.

Sea Level

QUESTION 136 – CHANGES IN SEA LEVEL

Question: “Compared with 3 years ago, did the sea level increase/decrease in your area?”

Sea level is the average height of the ocean. In the Philippines, 70 percent of all barangays and municipalities are located along or near the country’s lengthy coastline. Communities in the coastline will be particularly exposed to increasing risk of flooding due to sea-level rise.46

This question aims to find out if respondents have noticed changes in the sea level as compared to 3 years ago. This question is applicable to all households, whether they are living in the coastal communities or not. Write the responses in the box provided. The codes for this question are the following:

1 – Decrease
2 – Increase
3 – Remain the same
4 – Don’t know
5 – Not applicable

Water

QUESTION 137 – CHANGES IN THE WATER SUPPLY

Question: “Compared with 3 years ago, did the water supply change in your area?”

This question will provide information on whether changes had been noticed in the water supply of households as compared with the situation 3 years ago. The water supply being referred to is the flow of water (regardless of the source) used for drinking, washing, cleaning, and all other activities that require water. If there are more than two sources of water, consider only the most frequently used. For example, mineral water (“14”) is for drinking while the water being used for cleaning and all other purposes comes from the faucet inside the house (“1”). The following are the codes:

1 – Decrease  
2 – Increase  
3 – Remain the same

QUESTION 138 – REASON FOR THE DECREASE IN WATER SUPPLY

Question: “What is the primary reason for the decrease in water supply?”

This question will determine the major reason/s for the decrease in the water supply of the household. Ask this question if the answer in Q137 is Decrease (“1”). The reasons are coded as follows:

1 – Drought  
2 – Broken faucet/pump  
3 – Lower water level in the dam  
4 – Less frequent delivery of tanker truck/peddler  
5 – Increase in number of consumers  
6 – Others (to be specified)

Flooding

QUESTION 139 – OCCURRENCE OF FLOODING

Question: “Compared with 3 years ago, do floods occur more often in your area now?”

Responses to this question will provide data on the frequency of the occurrence of flooding in the area. The corresponding codes are as follows:

1 – Yes  
2 – No  
3 – Did not experience flooding

Enter “1” for YES or “2” for NO and proceed to Q140 and Q141. If the reply is “3,” which means no flooding occurred, mark the box provided for Q140 and Q141 with “------” and proceed to Q142.

QUESTIONS 140 and 141. These apply only to households that experienced flooding during the past 3 years or during the past 12 months. Ask Q140 and Q141 if the answer in Q139 is YES (“1”).

QUESTION 140 – NUMBER OF DAYS BEFORE THE FLOOD SUBSIDES DURING THE PAST 3 YEARS

Question: “Three years ago, how long did it usually take for the flood to subside?”

Ask the respondent to estimate the number of hours before the flood usually subsides whenever flooding occurred. Write the number of hours in the space provided. If it took days before the flood subsided, estimate the number of hours by multiplying the given number of days by 24 hours. If the question is not applicable, write “------” in the space provided.

QUESTION 141 – NUMBER OF DAYS BEFORE THE FLOOD SUBSIDES DURING THE PAST 12 MONTHS

Question: “During the past 12 months, how long did it usually take for the flood to subside?”

This time ask the respondent to estimate the number of hours before the flood subsides during the past 12 months. Double check the answer in Q139 if the respondent answered “1” in item 2. Flood. Write the number of hours in the space provided. If it took days
Drought

QUESTION 142 – DROUGHT

Question: “Compared with 3 years ago, does drought occur more often now in your area?”

Drought is a deficiency of precipitation over an extended period of time, resulting in a water shortage for some activity, group, or environmental sector.47

Ask the respondents if they are experiencing droughts in their area as compared to the situation 3 years ago. The following are the possible answers and their corresponding codes:

1 – Yes
2 – No
3 – Did not experience drought

Enter “1” if the answer is YES or “2” for NO, then go to Q143. If the answer is Did not experience drought, record “3” in the box provided and mark the box for Q143 with “------.”

QUESTION 143. This applies only to households that have experienced drought during the past 3 years and for the past 12 months. Ask this question only if the response for Q142 is YES (“1”) or NO (“2”).

QUESTION 143 – LENGTH OF THE OCCURRENCE OF DROUGHT

Question: “In the past 3 years, how long did the last drought occur?”

This question will determine the length of the drought that occurred in the household’s area. The possible lengths are in ranges and are coded as follows:

1 – less than 1 month
2 – 1 month to less than 2 months
3 – 2 months to less than 3 months
4 – 3 months to less than 4 months
5 – 4 months to less than 5 months
6 – More than 5 months

Evacuation

QUESTION 144 – MOVE OUT/LEAVE DWELLING PLACE

Question: “During the past 3 years, did you move out/from your previous dwelling unit?”

This question will determine if there are respondents who were displaced because of any calamity experienced in the past 3 years. Enter “1,” if YES, or “2” for NO in the box provided.

QUESTION 145 – REASON FOR MOVING OUT/EVACUATION

Question: “What was your primary reason for moving out of your previous dwelling unit?”

This question will determine the primary reason for moving out or for evacuating from the dwelling unit. The appropriate codes are

1. Calamity
2. Armed conflict
3. Infrastructure development project
4. Others (to be specified)

QUESTION 146 – TEMPORARILY EVACUATED

Question: “During the past 3 years, did you temporarily evacuate your house because of any calamity?”

This question will determine if households in the area experienced temporary evacuation due to calamities. Input “1” for YES in the box provided and proceed to Q146. For NO, record “2” then mark the box provided for Q146 with “------” and proceed to Q148.

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47 Based from the website of the National Drought Mitigation Center, Nebraska, USA: http://www.drought.unl.edu/whatis/what.htm
QUESTION 147. This applies only to households that have experienced evacuating during the past 3 years. Ask Q147 if the answer in Q146 is YES ("1").

QUESTION 147 – EVACUATION CENTER

Question: “Where did you stay when you were temporarily evacuated?”

Ask the respondents what place served as their evacuation center when calamities affected them. The possible answers and their corresponding codes are as follows:

1 – School
2 – Church
3 – Covered court/gym
3 – Relative’s house
4 – Neighbor or friend’s house
5 – Others (to be specified)

Calamities

QUESTION 148 – CALAMITIES

Question: “During the past 12 months, which of the following calamities affected your household?”

A natural disaster is a situation that is usually catastrophic in nature and where a number of people are plunged into helplessness and suffering. Examples of these are earthquakes, typhoons, volcanic eruptions, flashfloods, and others that might cause great threat to life and property. When disasters occur, affected households are usually displaced or relocated to safe shelters.

Man-made disasters are situations and circumstances that did not occur naturally and were done intentionally or accidentally by an individual/s. Examples are fire, squatter demolition, and other similar situations. These occurrences also pose great threat to human lives and properties.

To be displaced by these disasters means that the household has been temporarily deprived of shelter and is in need of food, clothing, medical care, and other basic necessities to sustain a living. Increasing the capacities of household for preparedness and decreasing their vulnerability to the threat of hazards will ensure their non-displacement even during disasters.

Ask the respondents which of the following natural and man-made disasters have affected them:

1 – Typhoon
2 – Flood
3 – Drought
4 – Earthquake
5 – Volcanic eruption
6 – Landslide
7 – Tsunami
8 – Fire
9 – Forest fire
10 – Armed conflict
11 – Others (to be specified)

Enter “1” for YES if the household was severely affected by any disaster and proceed to Q149. Enter “2” for NO then mark the space provided for Q149–Q151 with “------.”

QUESTIONS 149–151. These apply only to households that were affected by calamities during the past 12 months. Ask this if the answer in Q148 is YES ("1").

QUESTION 149 – FREQUENCY OF THE OCCURRENCE OF CALAMITIES

Question: “How many times did the (specify calamity) happen?”

Ask the respondent for the frequency of a calamity or calamities that occurred in their area for the past 12 months and proceed to Q150.
QUESTION 150 – ASSISTANCE FOR CALAMITIES

Question: “Did you receive any kind of assistance?”

This question will determine if the household received any form of assistance for calamities that they experienced during the past 12 months. Record “1” if the answer is YES then proceed to Q151. Or write “2” for NO answers then mark the space provided for Q151 with “------” and proceed to Q152.

QUESTION 151 – SOURCE OF ASSISTANCE

Question: “Where did the assistance come from?”

This question will determine the source of assistance that households received when they experienced calamities in their area. Enter the appropriate code in the space provided based on the following:

1 – Government
2 – Nongovernment organization
3 – Relatives
4 – Others (to be specified)

Disaster Preparedness

QUESTION 152 – DISASTER PREPAREDNESS KIT

Question: “Do you have a disaster preparedness kit?”

This question will determine if the household has a disaster preparedness kit in the dwelling place. A disaster preparedness kit is an easy-to-carry container that contains items such as water, food, first-aid items, clothing, and others that are most likely needed during an evacuation due to a calamity.48

Enter “1” for YES and move on by asking Q153. Otherwise, enter “2” for NO then mark the box provided for Q153 and Q154 with “------” then proceed to the next section.

QUESTION 153 – CONTENTS OF A DISASTER PREPAREDNESS KIT

Question: “Do you have the following in your disaster preparedness kit?”

For every item listed below, ask the respondents if they have this in their disaster preparedness kit. These contents were recommended by the National Disaster Coordinating Council (NDCC):

1 – Water
2 – Food (canned goods, biscuit, bread)
3 – Matches/lighter
4 – Flashlight/emergency light
5 – Radio/transistor (battery-operated)
6 – Candle
7 – Medical kit
8 – Whistle
9 – Clothes
10 – Blanket
11 – Battery (cell phone, flashlight, radio, etc.)
12 – Important documents (land title, birth certificate, etc.)
13 – Others (to be specified)

Record “1” if the answer is YES and proceed to Q154. Or enter “2” for NO and mark the space provided for Q154 with “------.”

QUESTION 154 – DAYS THE CONTENTS OF THE KIT WILL LAST

Question: “How many days will the kit’s contents last?”

The Office of the Civil Defense recommended that every family should keep a disaster preparedness kit good for 72 hours or the so-called golden hours. This is the maximum period for disaster victims to wait for rescuers to come to their aid.49

For each item that is in the disaster preparedness kit, ask the respondent to estimate how many days he/she thinks the contents will last. Write the number in the space provided.

48 Based from the Disaster Preparedness Kit by Rod Purnell. For more information, please visit: http://www.eisrjc.com/journals/peerc/peerc9.pdf

49 Based from an article featured in the website of the Philippine Daily Inquirer: http://globalnation.inquirer.net/cebudailynews/news/view/20100707-279661/72-hour-kit-good-for-emergency
S. Hunger

QUESTION 155 – HUNGER

Question: “In the last 3 months, did it happen even once that your household experience hunger and did not have anything to eat?”

This question aims to determine if the household experienced hunger even just once during the last 3 months. Write “1” if the answer is YES and proceed to Q156 and Q157. Write “2” for a NO answer and skip Q156 and Q157.

QUESTIONS 156 and 157 – FREQUENCY OF HUNGER

Question: “During the past 3 months, how many days did your household experience hunger and did not have anything eat?”

QUESTIONS 156 and 157. These apply only to households that experienced hunger and did not have anything to eat. Ask these questions if the answer in Q155 is YES (“1”).

Compute for the “past 3 months” based on the day of visit. For example, if the day of visit is on November 5, 2010, then designate October as month 1, September as month 2, and August as month 3. Write the names of the months in Q156. For each month, ask the respondent for the number of days the household experienced food shortages. Write the responses in the box provided in Q157.

T. Household Members Who Died

QUESTION 158 – PREVIOUS HOUSEHOLD MEMBERS WHO DIED

Question: “Were there any household members who died in the past 12 months?”

Ask if any household member died in the past 12 months. Put “1” in the box provided if the answer is YES and go to Q159.

NOTE: Questions about death in the household are among the most difficult to query. Some respondents may be reluctant to talk about this subject and may become sad or upset that you are asking such questions. Be sympathetic and tactful in such situations. Explain gently that you know that the subject is painful but the information is very important.

Enter “2” in the box if the answer is NO. After that, put “------” in the box provided for Q159–Q162, and proceed to Q163.

QUESTIONS 159–162. These apply only to households that have members who died in the past 12 months. Ask these questions if the answer to Q158 is YES (“1”).

QUESTION 159 – NAME OF PERSONS WHO DIED

Question: “What is the name of the person who died?”

Ask the full name(s) (last name, first name) of household member(s) who died in the past 12 months. In the box provided, write the names in this format: (last name, first name).

QUESTION 160 – SEX OF PERSONS WHO DIED

Question: “What is the sex of (specify name)?”

Ask the sex of the person who died. Enter “1” for MALE and “2” for FEMALE. Do this for each of the names listed. Write the appropriate code in the boxes provided.

QUESTION 161 – AGE OF PERSONS WHO DIED

Question: “What was the age of (specify name) at the time of death?”

For those members who died, ask for the age at the time of death. Write the age in the boxes provided.

If the age at the time of death is less than 1 year, write the age as “0.”
QUESTION 162 – CAUSE OF DEATH

Question: “What was the cause of (specify name)’s death?”

Ask the main cause of death of each household member who died. There are 16 codes for this question that include the leading causes of mortality in the Philippines in 2001–2005 and disaster-related accidents. Some of the possible responses with their corresponding codes are as follows:

1. **Diseases of the heart** – are illnesses affecting the heart, characterized by chest pains lasting for more than 1 minute upon exertion, difficulty of breathing while walking rapidly or climbing the stairs, and shortness of breath when lying flat on bed. Example: heart attack.

2. **Diseases of the vascular system** – is the collective term denoting a large group of diseases affecting the heart and blood vessels. Example: stroke.

3. **Pneumonia** – refers to an infection of the respiratory tract characterized by coughing for 2 weeks or more, fever for 1 month or more, coughing with blood, chest or back pains for 1 month, and progressive loss of weight.

4. **Tuberculosis, all forms** – is a chronic contagious disease caused by a germ (bacilli) called Mycobacterium tuberculosis bacilli.

5. **Cancer (malignant neoplasm)** – refers to a large group of diseases characterized by uncontrolled growth and spread of abnormal cells.

6. **Diarrhea** – a disease characterized by frequent passage of loose, watery, and unformed stools.

7. **Measles** – is a highly communicable disease clinically manifested by generalized blotchy rashes lasting for 3 days or more and by fever, cough, runny nose, and red eyes.

8. **Complications during pregnancy or childbirth (with certain conditions originating at the perinatal period)** – refers to death of women due to complications during or after pregnancy or childbirth.

9. **Accident** – includes vehicular accidents and all other accidents.

10. **Diabetes mellitus** – is a chronic disease that occurs when the pancreas does not produce enough insulin or when the body cannot effectively use the insulin it produces. Hyperglycemia, or raised blood sugar, is a common effect of uncontrolled diabetes and over time leads to serious damage to many of the body’s systems, especially the nerves and blood vessels.

11. **Disease of the lungs (chronic lower respiratory diseases)** – includes the different lung diseases like emphysema, chronic bronchitis, and others.

12. **Disease of the kidney (nephritis, nephritic syndrome, and nephritis)** – includes the different kidney diseases such as renal disease, nephritis, and others.

13. **Drowning from flood**

14. **Landslide victim**

15. **Electrocuted during typhoon**

16. **Murder/homicide**

17. **Other causes** – covers all other causes of death. Specify the cause of death.

Write the code of the respondent’s answer on the space provided.

U. Programs

QUESTION 163 – PROGRAMS

Question: “Did you or any member of your household receive or avail of any of the following programs?”

1. Yes
2. No

The following programs are listed in the questionnaire:

1. **Sustainable Livelihood Program (SLP)** – is a community-based, capacity-building program aimed at improving the socioeconomic status of its participants. Participants are chosen based on a list known as the National Household Targeting System for Poverty Reduction (NHTS-PR), which identifies the poor, including their geographic location. Priority is given to the conditional cash...
transfer or the **Pantawid Pamilyang Pilipino Program (4Ps)** beneficiaries of the agency, also based on the NHTS-PR list. It operates on a two-track system in which participants are given the option to take either the microenterprise development track or the employment facilitation track after participating in social preparation and capacity-building workshops. Participants are then provided with the corresponding assistance based on their chosen tracks. Further trainings are conducted during the implementation process of the program, as well as monitoring and evaluation.52

2. **Food-for-school program** – an emergency food augmentation by the Department of Education (DepEd). This program provides a kilo of National Food Authority rice to children attending elementary school in exchange for their attendance and participation in school activities for values formation and productivity skills training for their parents.

3. **Food-for-work program** – is a strategy where disaster victims will work in community rehabilitation and reconstruction projects in exchange for food.53

4. **Cash-for-work program** – is a strategy where disaster victims will work in community rehabilitation and reconstruction projects in exchange for cash.

5. **Social pension for the indigent senior citizens** – is a government program that provides cash assistance to indigent elderly. The government’s Social Pension Program (Social Pension) implemented by the Department of Social Welfare and Development provides a monthly stipend of ₱500 to indigent senior citizens as mandated by Republic Act 9994 or the Expanded Senior Citizens Act of 2010.54

6. **Pantawid Pamilyang Pilipino Program (4Ps)** – this conditional cash transfer program is a poverty reduction and social development strategy of the national government, which gives conditional cash grants to poor families to improve their health, nutrition, and education most specifically for families with children who are 0–14 years old. Under this program, the family beneficiary with a maximum of three children will receive a monthly allowance of ₱1,400; ₱500 monthly allowance for nutrition and health expenses; and ₱3,000 for one school year or ₱300 per month for the educational expenses per school-aged child.55

7. **Agrarian Reform Community Development Program (ARCDP)** – this program aims to improve the quality of life of agrarian reform beneficiary (ARB) households in at least 140 agrarian reform communities (ARCs) nationwide by providing basic infrastructure and development support services towards increasing agricultural productivity and household income. It also promotes the expanded role and capacities of local institutions, particularly local government units, in managing and sustaining local rural development initiatives and programs implemented by the Department of Agrarian Reform (DAR) as part of DAR’s strategy to support Land Tenure Improvement and Program Beneficiaries Development. The program is directed at ARCs, which are clusters of land-reformed barangays in a municipality where farmers and farm workers are awaiting full implementation of agrarian reform.56

8. **Training for Work Scholarship Program (TWSP)** – is a program of the Technical Education and Skills Development Authority (TESDA) that grants scholarships for the training costs for courses in the business processes outsourcing (BPO) industry: call center, medical and legal transcription, animation, software development, and other industries with critical skills requirements. The TWSP aims to provide skill and competencies to job seekers through appropriate training programs that are directly connected to existing jobs for immediate employment. It also empowers private education and training institutions to offer relevant training.

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For more information, please visit: [http://livelihood.dswd.gov.ph/about-the-program/](http://livelihood.dswd.gov.ph/about-the-program/)


For more information, please visit: [http://www.dswd.gov.ph/2012/10/social-pension-gives-hope-to-indigent-seniors/#sthash.OS64ISyM.dpuf](http://www.dswd.gov.ph/2012/10/social-pension-gives-hope-to-indigent-seniors/#sthash.OS64ISyM.dpuf)

Based from the website of the Department of Social Welfare and Development.

programs that meet job requirements. This was formerly known as the PGMATWSP.\textsuperscript{57}

9. **Community-Based Employment Program (CBEP)** – is a social protection strategy that aids in the introduction or reintroduction to the workforce of people who have previously been unable to work (due to disabilities, for example) or have been unsuccessful in finding work. It aims to provide temporary or immediate jobs to skilled, semi-skilled, and low-skilled workers in the communities where the program is located.\textsuperscript{58}

10. **Philhealth – OFW\textsuperscript{59}** — is a regular membership category in PhilHealth. The OWP covers all land-based overseas Filipino workers whose jobs are covered by appropriate job contracts with overseas-based employers.

11. **Philhealth – Employed** — is for all employees in the government sector (regardless of their status of appointment) and in the private sector under which household helpers and sea-based overseas Filipino workers belong.

12. **Philhealth – Individually paying** — is open to self-practicing professionals, freelance writers and photographers, artists, employees of religious and civic organizations, and Philippine-based international organizations.

13. **Philhealth – Sponsored** — This program provides health insurance coverage to less-privileged families through a partnership where health insurance premiums for a year’s coverage are paid in behalf of deserving members. The annual premiums of enrolled families are jointly shouldered by the national government through PhilHealth and sponsors such as local governments, private individuals with philanthropic hearts, and private corporations whose thrusts include poverty alleviation as an agenda in their corporate social responsibility (CSR) programs. Members of Congress can also join the program as sponsors through their Priority Dewvelopment Assistance Fund (PDAF).

14. **Philhealth – Lifetime** — After reaching the age of retirement and have paid at least 120 months premium to the program (including those made during the former Medicare Program), PhilHealth members are granted lifetime coverage. As lifetime members, they are also entitled to the full benefits together with their qualified dependents.

15. **Other health insurance** — these health maintenance organizations (HMOs) provide health care coverage to employees of the company. It is usually included in the benefit of employees. Examples are Medicare, Maxicare, Intellicare, and others.

16. **Health assistance** — is any program provided by the government or private entity that provides any form of health assistance to communities, households, or individuals. Examples of these are free eye checkup, dental services, etc.

Do not include here the Philhealth Programs and other Health Insurances included in \#10 to \#14. Examples of these are free eye consultation, dental services, etc.

17. **Supplemental feeding** — this refers to any program that provides supplemental feeding and/or vitamin supplements. Some of these programs specifically targets children who are moderately malnourished.

18. **Education/scholarship program** — is any program that provides educational assistance or scholarship to elementary, secondary, vocational, or tertiary schooling. An example of this is the “Iskolar para sa Mahirap na Pamilya” program of the government, which provides college scholarship to students from indigent families.

Another example is the Special Program for Employment of Students (SPES), which helps the poor but deserving students to finish college by giving them the chance to work during summer and holidays like Christmas.

19. **Skills or livelihood training program** — refers to any program that provides basic training to any livelihood skills in order for beneficiaries to acquire new skills or enhance their skills for more employment opportunities.

20. **Credit program** — refers to programs that provide loans or credits to beneficiaries for long-term or

\textsuperscript{57} Based on the Interviewer’s Manual of the 2012 Family Income and Expenditure Survey, National Statistics Office.

\textsuperscript{58} Based on the Interviewer’s Manual of the 2012 Family Income and Expenditure Survey, National Statistics Office.

\textsuperscript{59} Items 9-13 are based from the website of Philippine Health Insurance Corporation. http://www.philhealth.gov.ph/members/index.htm
short-term needs like minor home improvement, livelihood or business, medical, educational, purchase of assets, and other needs. Examples of these are salary loans or calamity loans offered by the Social Security System.

21. **Housing program** – refers to any housing program that provides assistance to households or individuals to acquire their own house and lot by providing housing loan, low-cost housing, or low interest rates for mortgage payments. Examples of these are the housing assistance program of the government under the PAG-IBIG, SSS, or GSIS.

22. **Other types of program (to be specified)** – refers to other types of programs that do not fall under the programs mentioned above. Write down these programs as specified by the respondent.

Ask the respondent if he/she received any of the programs listed above. If the reply is **YES** ("1") proceed to Q164, Q165, Q166, and Q167. If the answer is **NO** ("2"), mark with “-------” the space provided for Q164–Q167.

**QUESTIONS 164–167. These apply only to households that have availed of the listed programs. Ask Q164–Q167 if the answer in Q163 is YES ("1").**

**QUESTION 164. This applies only to programs 15–22.**

**QUESTION 164 – NAME OF THE PROGRAM**

**Question:** “What is the name of the program?”

Ask the respondent the full name of the program. Do not accept an acronym as an answer. Write the whole name of the program in the space provided. For programs 15 to 22, the respondent can identify more than one program that they received in the past 12 months.

**QUESTIONS 164–167. These apply only to households that have availed of the listed programs. Ask Q164–Q167 if the answer in Q163 is YES ("1").**

**QUESTION 165 – NUMBER OF MEMBERS WHO ARE BENEFICIARIES OF THE PROGRAM**

**Question:** “How many members of the household are covered by or are members of this program?”

Ask the respondent how many members of the households are covered by each program.

**CLARIFICATION:**

For programs 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, ask how many household members are members of these programs.

For programs 2, 3, 4, 15, 16, 17, 18, 19, 20, 21, and 22, ask how many household members availed or were beneficiaries of these programs.

**QUESTION 166 – MEMBERS WHO ARE BENEFICIARIES OF THE PROGRAM**

**Question:** “What is the name of the household member who is a beneficiary of the program?”

Ask for the name of the member who has received the program. Write the first name. Ensure that the name listed can also be found in the listed household members on page 2 of the questionnaire.

**CLARIFICATION:**

For programs 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, ask who among the household members are members of these programs.

For programs 2, 3, 4, 15, 16, 17, 18, 19, 20, 21, and 22, ask who among the household members availed or were beneficiaries of these programs.

**QUESTION 167 – IMPLEMENTOR OF THE PROGRAM**

**Question:** “Who implemented this program?”

Ask the respondent who implemented the program. The listed codes are the following:

1. National
2. Province
3. City/municipality
4. Barangay
5. Congress/district
6. Private organizations/NGOs
7. Don’t know
8. Others (to be specified)

VII. Time Finished
If the questionnaire is already accomplished, go back to the cover page and write the time the interview ended.

VIII. Name and Signature of the Interviewer
Write the full name of the enumerator in the space provided. Put the first name and last name. As a sign that the questionnaire has been filled out completely and accurately, the enumerator must also sign on top of his/her full name.

IX. Name and Signature of the Field Editor/Coordinator
The field editor/coordinator should write his/her name and must sign the space provided in the questionnaire as an indication that he/she accepted and checked for the relevance, completeness, and accuracy of the information recorded in the questionnaire.

GLOSSARY

Barangay – The smallest political subdivision of the country.
Callback – A revisit to the household to obtain desired information.
Enumeration – Interview of persons to obtain information and then record the information gathered on questionnaires and other census forms.
Household ID Number – The unique number assigned to every household. This Household ID number designated to a specific household must be similar to the one stated in the barangay spot map as well as to the one affixed in the Household Profile Questionnaire.
Housing unit – A structurally separate and independent place of abode which, by the way it has been constructed, converted, or arranged, is intended for habitation by one or more households.
Respondent – Any responsible member of the household who provides answers to questions and gives information for the household.
Questionnaire – A form that contains questions to be read to a respondent and where respondent’s answers are recorded.
Annex A: Jobs/Occupations that Need Special Care in Reporting

<table>
<thead>
<tr>
<th>UNACCEPTABLE ENTRIES</th>
<th>ACCEPTABLE ENTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agent</td>
<td>Insurance agent, real estate agent, and others. Note that a PNP agent should be reported as &quot;enlisted man,&quot; PNP lieutenant, etc. Report a police agent as &quot;detective.&quot;</td>
</tr>
<tr>
<td>Apprentice</td>
<td>An entry should include both occupation and the word &quot;apprentice.&quot; The correct entry should be apprentice plumber, apprentice printer, and so on.</td>
</tr>
<tr>
<td>Assemblers</td>
<td>Specify the type of machinery or products being assembled, e.g., mechanical machinery assembler, wood and related materials product assembler, etc.</td>
</tr>
<tr>
<td>Attendant</td>
<td>Bar attendant, hospital attendant, etc.</td>
</tr>
<tr>
<td>Businessman</td>
<td>Wholesale merchant, retailer, manager, etc.</td>
</tr>
<tr>
<td>Clerk</td>
<td>Accounting clerk, filing clerk, records clerk, etc.</td>
</tr>
<tr>
<td>Collector</td>
<td>Bill collector, garbage collector, market collector, toll collector, etc.</td>
</tr>
<tr>
<td>Contractor</td>
<td>A contractor is engaged principally in obtaining building and/or other contracts and supervising the work. He/she should be reported as &quot;building contractor,&quot; &quot;road contractor,&quot; and others.</td>
</tr>
<tr>
<td>Craftsmen or skilled worker</td>
<td>Specify type of skill such as miner, quarry worker, bricklayer, stone mason, concrete finisher, carpenter, roofer, plumber, pipe-fitter, spray painter, metal molder, sheet metal worker, metal grinder, metal polisher, motor vehicle mechanic and fitter, radio and TV servicer, telephone installer, electrical line installer, glass engraver, printing engraver, basket weaver, wood treater, cabinet maker, and others.</td>
</tr>
<tr>
<td>Driver</td>
<td>Tricycle driver, taxi driver, jeepney driver, heavy equipment driver, calesa driver, light van driver, bus driver, tram driver, heavy truck driver, heavy van driver, and others.</td>
</tr>
<tr>
<td>Employee</td>
<td>Specify whether the employee is a statistician, receptionist, typist, and others.</td>
</tr>
<tr>
<td>Engineer</td>
<td>Civil engineer, mining engineer, marine engineer, etc.</td>
</tr>
<tr>
<td>Factory worker</td>
<td>Weaver, knitter, sewer, tinsmith, etc.</td>
</tr>
<tr>
<td>Farmer</td>
<td>Rice farmer, corn farmer, sugarcane farmer, coconut farmer, etc.</td>
</tr>
<tr>
<td>Farm worker</td>
<td>Skilled rice farm worker, skilled corn farm worker, etc.; farmhand, farm laborer, etc.</td>
</tr>
<tr>
<td>Fireman</td>
<td>Locomotive fireman, city fireman (for city fire department), fire fighter (as in airfields), etc.</td>
</tr>
<tr>
<td>Fisherman</td>
<td>Fisherman in deep-sea fishing, fishpen, fishpond, coastal, inland, etc.; fishpond operator, prawn grower, prawn farm machinery operator, etc.</td>
</tr>
<tr>
<td>Foreman</td>
<td>Foreman-carpenter, foreman-electrician, etc.</td>
</tr>
<tr>
<td>Government official</td>
<td>Specify position such as mayor, congressman, senator, cabinet secretary, assistant cabinet secretary, commissioner, justice, councilor, barangay chairman, barangay councilman, and others.</td>
</tr>
<tr>
<td>Helper</td>
<td>Store helper, bakery helper, etc.</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Inspector</td>
<td>Meat inspector, market inspector, etc.</td>
</tr>
<tr>
<td>Manager</td>
<td>Board director, specialized company manager such as production and operations manager, finance and administration manager; personnel and industrial relations manager, sales and marketing manager, advertising and public relations manager, supply and distribution manager, computing services manager, research and development manager, small firm manager, etc.</td>
</tr>
<tr>
<td>Mechanic</td>
<td>Auto mechanic, airplane mechanic, radio mechanic, and others. Do not confuse mechanic with machinist who is a skilled craftsman and who constructs and repairs all kinds of metal parts, tools, and machines through the use of blueprints, machine and hand tools, and precision measuring instruments.</td>
</tr>
<tr>
<td>Midwife</td>
<td>Differentiate the licensed midwife from the practical midwife, hilot, etc.</td>
</tr>
<tr>
<td>Nurse</td>
<td>Registered nurse, practical nurse, nurse’s aide, etc.</td>
</tr>
<tr>
<td>Operator</td>
<td>Bulldozer operator, elevator operator, telephone operator, mining plant operator, mineral ore and stone treating plant operator, well driller and borer, ore smelting operator, metal melter, caster and rolling-mill operator, metal drawer and extruder, glass and ceramics kiln operator, papermaking plant operator, chemical processing plant operator, power-generating plant operator, steam turbine operator, machine tool operator, chemical products machine operator, rubber and plastics products machine operator, wood products machine operator, printing machine operator, binding machine operator, paper and paperboard products machine operator, spinning and winding machine operator, weaving and knitting machine operator, sewing and embroidering machine operator, textile bleaching, dyeing and cleaning machine operator, meat and fish processing machine operator, spice milling machine operator, fruit, vegetable and nut processing machine operator, sugar processing and refining machine operator, tea, coffee, cocoa and chocolate preparing and producing machine operator, tobacco products processing machine operator, brewer and wind and other beverage machine operator, etc.</td>
</tr>
<tr>
<td>Police</td>
<td>Police officer, detective, patrolman, traffic police, etc. Note that in municipalities with a small police force, an entry of policeman may be satisfactory.</td>
</tr>
<tr>
<td>Secretary</td>
<td>The title “secretary” should be used for persons doing secretarial work in an office. The secretary who is an elected or appointed officer of a corporation, firm or other organization, should be reported as “executive secretary.”</td>
</tr>
<tr>
<td>Skilled laborer</td>
<td>Carpenter, driver, electrician, watch repairer, goldsmith, blacksmith, etc.</td>
</tr>
<tr>
<td>Supervisor</td>
<td>Principal, superintendent, sales supervisor, teacher-supervisor, transport supervisor, housekeeping supervisor, farm overseer, etc.</td>
</tr>
<tr>
<td>Teacher</td>
<td>Elementary school teacher, high school teacher, professor, instructor, substitute teacher or teaching assistant (elementary, high school or college), private tutor, university instructor, vocational-technical skill instructor, specialized trainer such as sales trainer, management trainer, instructor-trainer, etc.</td>
</tr>
<tr>
<td>Technician</td>
<td>Civil engineering, technician, quantity surveyor, surveyor’s technician, mining technician, electrical engineering technician, electronics engineering technician, telecommunications technician, mechanical engineering technician, aeronautical engineering technician, automotive engineering technician, chemical engineering technician, metallurgical technician, mining engineering technicians, production engineering technician, draftsmen, etc. Note that an engineering graduate or a licensed engineer is an engineer by qualification but may be hired as a technician and performing technician jobs. Report him as a technician, specifying his/her field.</td>
</tr>
<tr>
<td>Unskilled laborer</td>
<td>Whenever possible, specify the unskilled laborer as street sweeper, janitor, stevedore, and others.</td>
</tr>
</tbody>
</table>
Barangay Profile Questionnaire
Year _____

NOTE: The respondent for this questionnaire should be the Chairperson or the Secretary of the Barangay

Name of Respondent: ____________________________
Position: ______________________________________
Date: ________________
Time Started: ________________
Time Ended: ________________
Name of Enumerator: ____________________________
Signature of Enumerator: ________________________

I. Physical and Demographic Characteristics

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>Province:</td>
<td></td>
</tr>
<tr>
<td>(2)</td>
<td>City/Municipality:</td>
<td></td>
</tr>
<tr>
<td>(3)</td>
<td>Barangay:</td>
<td></td>
</tr>
<tr>
<td>(4)</td>
<td>Classification: 1 Rural 2 Urban</td>
<td></td>
</tr>
<tr>
<td>(5)</td>
<td>Number of Puroks/ Sitios:</td>
<td></td>
</tr>
<tr>
<td>(6)</td>
<td>Land Area:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Total Area (in square kilometer [km])</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td></td>
</tr>
<tr>
<td>Commercial</td>
<td></td>
</tr>
<tr>
<td>Industrial</td>
<td></td>
</tr>
<tr>
<td>Agricultural</td>
<td></td>
</tr>
<tr>
<td>Mineral</td>
<td></td>
</tr>
<tr>
<td>Timberland</td>
<td></td>
</tr>
<tr>
<td>Special Classes</td>
<td></td>
</tr>
<tr>
<td>Total Land Area</td>
<td></td>
</tr>
</tbody>
</table>

(7) General Description and Characteristics of the Barangay: 1 Yes 2 No

(8) Boundaries:
East ____________________________  West ____________________________
North ____________________________  South ____________________________

(9) Major Sources of Livelihood: ____________________________________________
### Demographic Reference:

#### (10) Population:
- **Male:** [ ]
- **Female:** [ ]
- **Total:** [ ]

**Reference period:** 

**Source of data:** 

#### (11) Number of Households/Families:
- **Households:** [ ]
- **Families:** [ ]

**Reference period:** 

**Source of data:** 

#### (12) Registered Voters:
- **Male:** [ ]
- **Female:** [ ]
- **Total:** [ ]

**Reference period:** 

**Source of data:** 

#### (13) Number of Barangay Personnel:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Tanod</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Health Worker</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Nutrition Scholar</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Purok Leaders</td>
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<td></td>
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<tr>
<td>e. Librarian</td>
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<td></td>
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<tr>
<td>f. Day Care Worker</td>
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<tr>
<td>g. Utility Worker</td>
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</tr>
<tr>
<td>h. Others, specify _________ (e.g. Midwife)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference period:** 

**Source of data:** 

#### (14) Nutritional Status of Children 0–5 Years Old:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above normal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td></td>
<td></td>
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<tr>
<td>Below normal (moderate)</td>
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<td></td>
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<tr>
<td>Below normal (severe)</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Reference period:** 

**Source of data:**
## II. Service Institutions and Infrastructure

<table>
<thead>
<tr>
<th>Facility</th>
<th>(15)</th>
<th>(16A)</th>
<th>(16B)</th>
<th>(16C) Levels offered (e.g., Grade 1–4)</th>
<th>(17)</th>
<th>(18)</th>
<th>(19)</th>
<th>(20)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Facility</strong></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a. Barangay Health Center</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>b. Hospitals</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>c. Maternity Clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>d. Child Clinic</td>
<td></td>
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<td></td>
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<tr>
<td>e. Maternity and Child Clinic</td>
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<td></td>
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<tr>
<td>f. Private Medical Clinic</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>g. Botika ng Barangay</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Botika ng Bayan</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Private Drugstores</td>
<td></td>
<td></td>
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<tr>
<td>j. Others, specify ________</td>
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</tr>
<tr>
<td><strong>Educational Facility</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Day Care Centers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Preschool</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>c. Elementary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Secondary</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Vocational</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. College/University</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>g. Others, specify ________</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**CBMS Form 2 Page 3**
### Facility and Input Dealer

<table>
<thead>
<tr>
<th>Facility and Input Dealer</th>
<th>(15)</th>
<th>IF YES IN (15)</th>
<th>(16A)</th>
<th>(16B)</th>
<th>IF NO IN (15)</th>
<th>(19)</th>
<th>(20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the facility present in the barangay?</td>
<td>1 Yes (GO TO 16)</td>
<td>How many facilities are present in the barangay? List the name/s of facilities in the space provided.</td>
<td></td>
<td></td>
<td>2 No (GO TO 20)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Multipurpose Hall</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Police Station</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Women’s/Crisis Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Post Office</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>f. Market</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>g. Others, specify ________</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Rice Mill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Corn Mill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Feed Mill</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Agricultural Produce Market (bagsakan/bulungan)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>e. Others, specify ________</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Fertilizer Dealer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Pesticide Dealer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Seeds Dealer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Feeds Dealer</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>e. Others, specify ________</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a. Bank</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Market</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Others, specify ________</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Geopoint

<table>
<thead>
<tr>
<th>Facility</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
</table>

### Public Transport

What types of public transportation are present in the barangay?

1. 1 Bus
2. 2 Taxi
3. 3 Van/FX
4. 4 Jeepney
5. 5 Tricycle
6. 6 Pedicab
7. 7 Boat
8. Others, specify

<table>
<thead>
<tr>
<th>Public Transport</th>
<th>1-Yes</th>
<th>2-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Bus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Taxi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Van/FX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Jeepney</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Tricycle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Pedicab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Boat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Others, specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Road Network

<table>
<thead>
<tr>
<th>(22)</th>
<th>IF YES IN (22)</th>
<th>(23)</th>
<th>IF YES IN (22)</th>
<th>(24)</th>
<th>IF YES IN (22)</th>
<th>(25)</th>
<th>IF YES IN (22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are any of the following roads/streets present in the barangay?</td>
<td>1-Yes (GO TO 23)</td>
<td>What is the length of the road/street? (IN KM)</td>
<td>What is the present condition of the road/street? (SEE CODES BELOW)</td>
<td>Who is maintaining the road/street? (SEE CODES BELOW)</td>
<td>2-No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Concrete (IF NO, GO TO 26)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Asphalt (IF NO, GO TO 27)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Gravel (IF NO, GO TO 28)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Natural/Earth surface (IF NO, GO TO 28)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Present condition of the road/street

<table>
<thead>
<tr>
<th>(24) Present condition of the road/street</th>
<th>(25) Maintained by</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Good</td>
<td>1. Private</td>
</tr>
<tr>
<td>2. Fair</td>
<td>2. National Government</td>
</tr>
<tr>
<td>3. Poor</td>
<td>3. Province</td>
</tr>
<tr>
<td>4. Municipality/City</td>
<td>4. Municipality/City</td>
</tr>
<tr>
<td>5. Barangay</td>
<td>5. Barangay</td>
</tr>
<tr>
<td>6. Others, specify</td>
<td>6. Others, specify</td>
</tr>
</tbody>
</table>

#### Distance from the barangay to the nearest concrete or asphalt road/street

- **(26)** If there are no concrete roads or streets in the barangay, what is the distance from the barangay to the nearest concrete road or street?  
  - **(27)** If there are no asphalt roads or streets in the barangay, what is the distance from the barangay to the nearest asphalt road or street?  

### Water Supply

<table>
<thead>
<tr>
<th>(28) Is the barangay being served by a water station/company?</th>
<th>IF YES IN (28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Yes (GO TO 29)</td>
<td>(29)</td>
</tr>
<tr>
<td>2-No</td>
<td>What is the name of the water company?</td>
</tr>
<tr>
<td>a. Level II water system</td>
<td>1</td>
</tr>
<tr>
<td>b. Level III water system</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Water facilities present in the barangay

<table>
<thead>
<tr>
<th>(33) Are any of the following water facilities present in the barangay?</th>
<th>IF YES IN (33)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Yes (GO TO 34)</td>
<td>(34)</td>
</tr>
<tr>
<td>2-No</td>
<td>How many units/stations? (Total)</td>
</tr>
<tr>
<td>a. Deep Well (Level I)</td>
<td>1</td>
</tr>
<tr>
<td>b. Artesian Well (Level I)</td>
<td>1</td>
</tr>
<tr>
<td>c. Shallow Well (Level I)</td>
<td>1</td>
</tr>
<tr>
<td>d. Commercial Water Refill Stations</td>
<td>1</td>
</tr>
<tr>
<td>e. Others, specify</td>
<td>1</td>
</tr>
</tbody>
</table>

### Garbage/Waste Disposal System

<table>
<thead>
<tr>
<th>(39) Are any of the following community garbage disposal facilities present in the barangay?</th>
<th>IF YES IN (39)</th>
<th>IF NO IN (39)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Yes (GO TO 40)</td>
<td>(40)</td>
<td>(41)</td>
</tr>
<tr>
<td>2 - No</td>
<td>How many units? (Total)</td>
<td>Name</td>
</tr>
<tr>
<td>a. Open Dump Site</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>b. Sanitary Landfill</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>c. Compost Pits</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>d. Material Recovery Facility (MRF)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>e. Others, specify</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
### Electricity Service

<table>
<thead>
<tr>
<th>(45) What is the source of electricity in the barangay?</th>
<th>1 - Yes (GO TO 46)</th>
<th>2 - No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Electric Company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Generator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Solar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Battery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Others, specify</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IF YES IN (45)**

<table>
<thead>
<tr>
<th>(46)</th>
<th>(47)</th>
<th>(48)</th>
<th>(49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the name of the company or association that is providing or maintaining the electricity supply?</td>
<td>How many households are being served by the source of electricity?</td>
<td>Is there an electric substation present in the barangay? 1 Yes (GO TO 49) 2 No (GO TO 51)</td>
<td>Geopoint Latitude Longitude</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IF NO IN (45.1)**

<table>
<thead>
<tr>
<th>(50)</th>
<th>What is the distance from the barangay to the nearest electrical station/company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>(in kilometers)</td>
<td></td>
</tr>
</tbody>
</table>

### Credit Institutions

<table>
<thead>
<tr>
<th>(51)</th>
<th>Are there credit institutions operating in the barangay?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yes (GO TO 52)</td>
<td></td>
</tr>
<tr>
<td>2 No (GO TO 54)</td>
<td></td>
</tr>
</tbody>
</table>

**IF YES IN (51)**

<table>
<thead>
<tr>
<th>(52)</th>
<th>(53)</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the names of the credit institutions?</td>
<td>Contact person and details (Office Address, Telephone, E-mail)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Registered Business Firms (based on latest records of the barangay)

<table>
<thead>
<tr>
<th>(54)</th>
<th>How many business firms/establishments are registered in the barangay?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference period: _____</td>
<td></td>
</tr>
</tbody>
</table>

### III. Significant Events in the Barangay During the Past 3 Years

<table>
<thead>
<tr>
<th>(55)</th>
<th>During the past 3 years, how many times did the event occur? Write the number in the box provided.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Typhoon</td>
<td>7 Tsunami</td>
</tr>
<tr>
<td>2 Flooding</td>
<td>8 Fire in Houses/Properties</td>
</tr>
<tr>
<td>3 Drought</td>
<td>9 Forest Fire</td>
</tr>
<tr>
<td>4 Earthquake</td>
<td>10 Epidemic</td>
</tr>
<tr>
<td>5 Volcanic Eruption</td>
<td>11 Pest Infestation</td>
</tr>
<tr>
<td>6 Landslide</td>
<td>12 Livestock/Poultry Diseases</td>
</tr>
</tbody>
</table>

### IV. Disaster Risk Reduction and Preparedness

<table>
<thead>
<tr>
<th>(56)</th>
<th>Does the barangay have a written disaster risk reduction plan?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Yes 2-No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(57)</th>
<th>Does the barangay have a disaster/emergency response team?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Yes 2-No</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(58)</th>
<th>Does the barangay have any of the following disaster/emergency response equipment? 1-Yes 2-No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Rubber Boats</td>
<td>5 Flashlights</td>
</tr>
<tr>
<td>2 Handheld Radios</td>
<td>6 Medicines/First Aid Supplies</td>
</tr>
<tr>
<td>3 Rain Gear (e.g., raincoats and boots)</td>
<td>7 Life Vests</td>
</tr>
<tr>
<td>4 Emergency/Service Vehicle</td>
<td>8 Megaphone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(59)</th>
<th>Does the barangay have designated evacuation centers?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Yes (GO TO 60)</td>
<td></td>
</tr>
<tr>
<td>2 No (GO TO 62)</td>
<td></td>
</tr>
</tbody>
</table>

**IF YES IN (59)**

<table>
<thead>
<tr>
<th>(60)</th>
<th>(61)</th>
</tr>
</thead>
<tbody>
<tr>
<td>List the names of the evacuation centers</td>
<td>Geopoint Latitude Longitude</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Barangay ID __________
V. Peace and Order

(62) Does the barangay have reported cases on the following crimes during the past 12 months?

<table>
<thead>
<tr>
<th>Crimes against Persons</th>
<th>1 - Yes</th>
<th>2 - No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Murder/Homicide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Physical Injury</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Rape</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Crimes against Property</th>
<th>1 - Yes</th>
<th>2 - No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Theft</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Robbery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Crimes</th>
<th>1 - Yes</th>
<th>2 - No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Prohibited Drug Use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Human Trafficking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Illegal Recruitment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Prostitution</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Spousal/Partner Abuse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Sexual Harassment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Other types of crimes, specify</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(63) How many were the victims in the reported cases?

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total</th>
<th>0–17 years old</th>
<th>18 years old &amp; above</th>
<th>Total</th>
<th>0–17 years old</th>
<th>18 years old &amp; above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VI. Programs, Projects, and Activities (based on the barangay’s Annual Investment Program during the past year)

(64) What programs, projects, and activities (PPAs) were implemented in the barangay during the past year?

<table>
<thead>
<tr>
<th>Program, Project, or Activity</th>
<th>1 - Yes</th>
<th>2 - No</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>g.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(65) Provide a brief description of the PPA.

(66) How much was allotted for the PPA?

(67) How many benefited from the PPA during the past year? (Indicate unit)

VI. Budget, Revenue, and Expenditure

(68) How much was the barangay’s budget, revenue, and expenditure during the past 3 years?

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>Revenue</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

VIII. Spotmap

(69) When was the spotmap prepared? (MM/DD/YY) ______________________

(70) Does the spotmap contain the locations of the following?: 1 - Yes  2 - No  3 - Not Applicable

- Creeks, Rivers, Waterfalls
- Schools
- Barangay Boundaries
- Barangay Hall
- Multipurpose Hall
- Purok Boundaries
- Barangay Health Center
- Hospitals, Clinics
- Church, Chapel
- Public Market

Note: For mobile data capture system, answer only the items 70.1 to 70.4, and indicate 3-Not Applicable for items 70.5 to 70.10
The Barangay Profile Questionnaire (BPQ) is used to gather supplementary information for the Household Profile Questionnaire (HPQ).

The questionnaire has seven pages, including the cover page. The first two pages contain questions pertaining to the physical and demographic characteristics of the barangay. The second part of the questionnaire relates to the availability and/or accessibility of service institutions and other facilities in the barangay; the third section records significant events in the barangay for the past 3 years; the fourth collects information on disaster risk reduction and preparedness; the fifth has questions on the different types of crimes reported to the barangay; the sixth pertains to the programs, projects, and activities implemented in the barangay during the past year; and the seventh collects information on the barangay’s budget, revenue, and expenditure during the last 3 years. The last part of the questionnaire is the preparation of spot map.

### Completing the Barangay Profile Questionnaire

#### Identification

First, the enumerator should fill in the respondent’s name, the respondent’s position in the barangay, the date the questionnaire was accomplished, and the start time of the interview, indicating “a.m.” if the survey started in the morning or “p.m.” if in the afternoon.

The respondent for this questionnaire should be the **chairman** or **secretary** of the barangay (Figure 1).

**FIGURE 1**

<table>
<thead>
<tr>
<th>Name of Respondent:</th>
<th>Juan dela Cruz</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position:</td>
<td>Barangay Chairman</td>
</tr>
<tr>
<td>Date:</td>
<td>February 1, 2007</td>
</tr>
<tr>
<td>Time Started:</td>
<td>9:30 AM</td>
</tr>
<tr>
<td>Name of Enumerator:</td>
<td>Joanne de los Reyes</td>
</tr>
</tbody>
</table>

#### Physical and Demographic Characteristics

On the space provided, write the answers to each question: province name (Question 1), municipality and/or city (Question 2), and barangay name (Question 3) with the corresponding Philippine Standard Geographic Codes (PSGCs), the barangay classification—**rural** (code 1) or **urban** (code 2) (Question 4)—and the number of puroks and/or sitios (Question 5). The municipal and/or city focal persons will provide the codes and urbanity. Figure 2 shows a sample filled-out section.

**FIGURE 2**
Give the total land area (in square kilometers) of the barangay (Question 6) and the barangay land area according to land use: residential, commercial, industrial, agricultural, mineral, timberland, or special classes.

Describe the barangay and its features (Question 7): its topographic profile such as coastal, agricultural, hilly, mountainous, and others, writing 1 for YES and 2 for NO to indicate the presence of these features in the barangay. Identify the boundaries in the north, south, east, and west of the barangay (Question 8). Specify the major economic activity of the people in the barangay (Question 9). Figure 3 shows a sample completed section.

Indicate the total number of male and female barangay residents (Question 10): total population is the sum of all male and female barangay residents. Give the total number of households in the barangay (Question 11): if the number of households is not available, give instead the total number of families living in the barangay (Figure 4). If both data are available, give both data in the questionnaire. Indicate the source of the data.

Write the total number of registered male and female voters in the barangay (Question 12). Add these numbers to get the total number of registered voters in the barangay (Figure 5). Indicate the reference period and source of data.

Enter the number of staff serving in the barangay: barangay tanod, health worker, nutrition scholar, Lupon member, service point officer, librarian, day care worker, Alay Kalinisan worker, and others (Question 13). Indicate the reference period and source of data (Figure 6).

Enter the nutritional status of children aged 0 to 5 years old in the barangay (Question 14). This information can be obtained from the records kept by the barangay nutrition scholar or the barangay health worker. Indicate the reference period and source of data (Figure 7).

**DEFINITION OF TERMS**

A household is a group of persons, generally but not necessarily bound by ties of kinship, who sleep in the same house and have common arrangements for the preparation and consumption of food. A person who lives alone is considered a household.

A family refers to a group of persons usually living together and composed of the head and other persons related to the head by blood, marriage, and adoption.

Source: NSCB
Proximity of Barangay Location to Basic Services and Service Institutions

Indicate, with a 1 for Yes and 2 for No in Column 15, if basic facilities such as those relating to health, services, education, and agriculture as well as input dealers are present in the barangay. For each available facility in the barangay, list the number of facilities (Column 16a), the names of the facilities (Column 16b), access to safe drinking water (Column 17), and access to sanitary toilets (Column 18). Give the location coordinates of each facility, commonly expressed in latitude (northing) and longitude (easting), which can be obtained using a global positioning system (GPS) device. Record the longitude and latitude in decimal degrees format under Column 19. If a GPS is not available in the barangay, in Column 20, give the distance of the barangay (in kilometers) to the nearest facility with the barangay hall as the reference point.

Health Facility

Indicate the existence of health facilities in the barangay, such as barangay health centers; a hospital; a maternity clinic, a child clinic; or both, a private medical clinic; or drugstores. Indicate whether the health facility (if any) has sources for safe drinking water and access to sanitary toilets within its premises. Give the location coordinates of each facility in latitude (northing) and longitude (easting). If the facility is not present in the barangay, in Column 20, give the distance of the barangay to the nearest facility (in kilometers) with the barangay hall as the reference point. See Figure 8.
Educational Facility

The presence of an educational facility should be accurately recorded. An educational facility may be any of the following: preschool, day care center, elementary, secondary, college and/or university, and vocational schools. For elementary and secondary schools, indicate the grade/year levels offered by each school in the barangay (if any) in Column 16c. Indicate whether these facilities have sources of water (Column 17) and sanitary toilets (Column 18) within their premises. Give the location coordinates for each facility in latitude (northing) and longitude (easting) in Column 19. If the facility is not present in the barangay, in Column 20, give the distance of the barangay to the nearest facility (in kilometers) with the barangay hall as the reference point. See Figure 9.

<table>
<thead>
<tr>
<th>Educational Facility</th>
<th>(15)</th>
<th>(16A)</th>
<th>(16B)</th>
<th>(16C) Levels offered [i.e. Grade 1-4]</th>
<th>(17)</th>
<th>(18)</th>
<th>(19)</th>
<th>(20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Day Care Centers</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Brgy 3 Day Care Center</td>
<td>1</td>
<td>1</td>
<td>15.5680</td>
<td>120.0</td>
</tr>
<tr>
<td>b. Pre-school</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Elementary</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Grio Elem 1-6</td>
<td>1</td>
<td>1</td>
<td>13.5680</td>
<td>120.8</td>
</tr>
<tr>
<td>d. Secondary</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Vocational</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. College/University</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>g. Others, specify</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Service Facility

Service facilities are features that provide services such as a multipurpose hall, a police station, a women's crisis center, banks, a post office, or a market, among others. If a service facility is present in the barangay, indicate whether these facilities have sanitary toilets or a source for safe drinking water within its premises. Using a GPS device, note the latitude and longitude coordinates of each facility (in decimal degrees format) in Column 19. Otherwise, in Column 20, give the distance of the barangay to the nearest facility (in kilometers) with the barangay hall as the reference point. See Figure 10.

<table>
<thead>
<tr>
<th>Facility and Input Dealer</th>
<th>(15)</th>
<th>(16A)</th>
<th>(16B)</th>
<th>(16C) Levels offered</th>
<th>(17)</th>
<th>(18)</th>
<th>(19)</th>
<th>(20)</th>
<th>(21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Multi-Purpose Hall</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>Brgy 3 Multi Purpose</td>
<td>1</td>
<td>1</td>
<td>16.5680</td>
<td>120.5</td>
<td>---</td>
</tr>
<tr>
<td>b. Police Station</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Women’s/Crisis Center</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Bank</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Post Office</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Market</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Others, specify</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Agricultural Facility

Indicate the presence or availability of basic agricultural facilities in the barangay such as a rice mill, corn mill, feed mill, an agricultural produce market, and other similar facilities.

If the facility is present in the barangay, give the location coordinates of each facility in latitude (north) and longitude (east) in Column 19. Otherwise, determine the distance of the nearest agricultural facility from the barangay (Column 20). See Figure 11.

Input Dealers

Indicate whether there are dealers in the barangay for agricultural inputs such as fertilizers, pesticides, seeds, and feeds.

Using a GPS device, record the latitude and longitude coordinates of the facility (if any) in decimal degrees format. If there is no agricultural input dealer in the barangay, under Column 20, give the distance in kilometers from the barangay to the nearest input dealer.

Definition of Terms

1. **Rice Mill**
   A building or facility equipped with machinery used to remove the outer husks of grains of rice
2. **Corn Mill**
   A building or facility equipped with machinery for grinding corn
3. **Feed Mill**
   A building or facility equipped with machinery for producing processed food for animal consumption
4. **Agricultural produce market (bagsakan/bulungan)**
   A market (or a central drop-off point) where farmers can bring their produce for sale. It is also food depot and distribution system offering safe and quality agri-fishery products at low prices to the consumers. These markets operate every day or on certain days of the week.
5. **Agricultural input dealer**
   Any establishment that sells any type of agricultural input such as fertilizer, pesticide, seeds, and feeds. This includes small transient retailers to agricultural input wholesalers.

Source: *A system of integrated agricultural censuses and surveys. Volume 1, FAO, 2010.*

![Figure 11](image.png)
Public Transport

Indicate the existence of public transport in the barangay such as buses, taxis, vans and/or FX, jeepneys, tricycles, pedicabs, or boats. This means that these vehicles have a transport route in the barangay. Indicate 1 for YES and 2 for NO under Question 21. See Figure 12.

Road Network

Indicate the presence of road networks (Question 22). Road surfaces may be made of concrete, asphalt, gravel, or natural/earth. If a road is present in the barangay, enter code 1, and answer Questions 23–25.

Question 23 pertains to the length (in kilometers) of the road/street. Question 24 pertains to the present condition of the road/street (code 1 – good, 2 – fair, and 3 – poor). Question 25 pertains to who is maintaining the road and/or street (1 – private, 2 – national, 3 – provincial, 4 – municipal, 5 – barangay, and 6 – others).

If the barangay has no concrete road or street, determine the distance (in kilometers) of the nearest concrete road or street from the barangay (Question 26). Likewise, if there is no asphalted road in the barangay, determine the distance (in kilometers) of the nearest asphalted road or street from the barangay (Question 27). See Figure 13.
Water Supply

Determine if a water station/company serves the barangay (Question 28). Enter the appropriate code (1 – Yes, 2 – No) in the corresponding box. If there is a water station and/or company in the barangay (enter Code 1 under Question 28), list the name of the water station/company, and the number of households being serviced by the company (Questions 29 and 30).

A water station and/or company serves the community by installing inside the house a faucet that is connected to a water pipeline provided by the local water network system and/or company. Water supplied by these companies is usually sourced from dams, lakes, springs, rivers, and waterfalls. The water from these sources is processed in treatment plants, which convert it from raw water to clean and potable water.

For Question 31, determine if the source of the water (e.g., dams, springs, lakes) supplied by the existing water company is located in the barangay. If the source of water is located in the barangay, give the location in latitude and longitude coordinates (Question 32). Otherwise, enter code 2 in Question 31 and leave a dash (–) under Column 32 to indicate that the question is not applicable. See Figure 14.

A table is also provided for other sources of water in the community such as deep wells, artesian wells, shallow wells, commercial water refill stations, and other sources

a. Deep well – water is taken from a tubed/piped well, which is at least 100 feet (5 pcs. of 20-feet pipes) or 30 meters deep

b. Artesian well – water is taken from a tubed/piped well, which is less than 100 feet deep

c. Shallow well – water is taken from a well, which may be installed with a protective device against contamination or pollution

d. Commercial water refill stations – water stations selling and refilling mineral/distilled water in bottles, gallons, or any other such containers

e. Others – others that do not fall under any of the above categories. Specify this in the questionnaire.

Determine the communal water facilities present in the barangay, indicating code 1 for YES and code 2 for NO in Column 33. If the barangay has a water facility, indicate the total number of units and note whether these are functioning (Question 34). List the names (or any identification) of the water facility in the barangay (Column 35). Indicate whether the facility is functioning under Column 36 (Code 1 – Yes, 2 – No). If the facility is functioning, record the corresponding number of households being served by the different sources of water in the barangay (Question 37). Give the location of the facility (in latitude and longitude) for Question 38. If the water facility is not functioning (Code 2 – No), skip Questions 37 and 38. See Figure 15.

---

**FIGURE 14**

<table>
<thead>
<tr>
<th>Water Supply</th>
<th>IF YES IN (28)</th>
<th>(29)</th>
<th>(30)</th>
<th>(31)</th>
<th>(32)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(28) Is the barangay being served by a water station/company?</td>
<td>1: Yes (GO TO 29)</td>
<td>1</td>
<td>Municipal water district</td>
<td>120</td>
<td>150.89</td>
</tr>
<tr>
<td></td>
<td>2: No</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Level II water system</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Level III water system</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Garbage/Waste Disposal System

Determine the presence of a community garbage disposal facility in the barangay (Question 39). The garbage disposal system can be open dumping, using sanitary landfills, compost pits, a material recovery facility, or other disposal methods.

a. Open dumpsite – garbage is thrown in open pits and left to decay in an open area, usually in a vacant land
b. Sanitary landfill – waste is buried between layers of earth to build up low-lying land
c. Compost pits – garbage is thrown in uncovered dug pits and allowed to decay under controlled conditions
d. Material Recovery Facility (MRF) – a specialized plant that receives, separates, and prepares recyclable materials for marketing to end-user manufacturers.
e. Others – other garbage disposal facilities not classified above. Specify these in the questionnaire.

Enter the appropriate code in the corresponding box (1 = Yes, 2 = No) in the column for Question 39. If the barangay has a waste disposal system (Code 1), enter the total number of units in Column 40, and list the names (or any identification) of the disposal facility in Column 41. Record the number of households being served by each disposal facility in Column 42, and enter the latitude and longitude coordinates in Column 43. If the barangay has no disposal facility, determine the distance from the barangay to the nearest garbage disposal facility (Question 44). See Figure 16.
Electricity Service

Determine the source of electricity in the barangay (Question 45). For each source listed, enter the appropriate code in the corresponding box (Code: 1 – Yes, 2 – No).

List the name(s) of the company(ies)/or association(s) providing or maintaining the electrical services and the number of households being served in the community (Questions 46 and 47).

For Question 48, indicate if the electric company has an electric substation within the barangay. If yes, record the location coordinates (latitude and longitude) of the electrical substation in Column 49.

If there is no electrical station/company in the barangay, indicate in kilometers the nearest electrical station/company from the barangay (Question 50). See Figure 17.

Definition of Terms

An electrical substation is a subsidiary station of an electricity generation, transmission and distribution system where voltage is transformed from high to low or the reverse using transformers. Electric power may flow through several substations between generating plant and consumer, and may be changed in voltage in several steps.

Source: http://internationalengineering.org/references/electrical-substations

Credit Institutions and Organizations

Indicate whether credit institutions are present in the barangay under Question 51. A credit institution can be a private moneylender, pawnshop, cooperative, nongovernment organization, or a government institution from where the people in the barangay can obtain a loan. List the name/s of the organization/s (Question 52), the contact person in the organization, and his/her contact details (Question 53). See Figure 18.

Registered Business Firms in the Barangay

Record the total number of business firms registered with the barangay and/or establishments operating in the barangay (Question 54).
Significant Events in the Barangay in the Past 3 Years

Indicate the frequency of occurrence of significant events in the barangay (Question 55). A significant event is an event that results in negative shock or an adverse situation (e.g., natural calamity or socioeconomic difficulty) or positive shock or a beneficial situation (e.g., opening of a large firm that provides local employment). Figure 19 is a sample filled-up section.

Definition of Terms

1. **Typhoon**
   Large-scale closed circulation system in the atmosphere above the western Pacific with low barometric pressure and strong winds that rotate clockwise in the southern hemisphere and counterclockwise in the northern hemisphere. Maximum wind speed of 64 knots or more.

2. **Flood**
   Significant rise of water level in a stream, lake, reservoir, or coastal region.

3. **Drought**
   Long lasting event, triggered by lack of precipitation. A drought is an extended period characterized by a deficiency in a region's water supply that is the result of constant below average precipitation. A drought can lead to losses in agriculture, affect inland navigation and hydropower plants, and cause famine or lack of drinking water.

4. **Earthquake**
   Shaking and displacement of the ground due to seismic waves. This is the earthquake itself WITHOUT secondary effects. An earthquake is the result of a sudden release of stored energy in the earth’s crust that creates seismic waves. These can be of tectonic or volcanic origin. On the earth’s surface, these are felt as shaking or displacement of the ground. The energy released in the hypocenter can be measured in different frequency ranges. There are different scales for measuring the magnitude of a quake according to a certain frequency range: surface wave magnitude (Ms), body wave magnitude (Mb), local magnitude (ML), and moment magnitude.
5. **Volcanic Eruption**
All volcanic activity like rock fall, ash fall, lava streams, gases, etc. Volcanic activity describes both the transport of magma and/or gases to the earth’s surface, which can be accompanied by tremors and eruptions, and the interaction of magma and water (e.g., groundwater, crater lakes) underneath the earth’s surface, which can result in phreatic eruptions. Depending on the composition of the magma, eruptions can be explosive and effusive and result in variations of rock fall, ash fall, lava streams, pyroclastic flows, and emission of gases, among others.

6. **Landslide**
Any kind of moderate to rapid soil movement such as lahar, mudslide, and debris flow. A landslide is the movement of soil or rock controlled by gravity and the speed of the movement, usually ranging between slow and rapid, but not very slow. It can be superficial or deep, but the materials have to make up a mass that is a portion of the slope or the slope itself. The movement has to be downward and outward with a free face.

7. **Tsunami**
Waves advancing inland. A tsunami is a series of waves caused by a rapid displacement of a body of water (ocean, lake). The waves are characterized by a very long wavelength with much smaller amplitude offshore. The impact in coastal areas can be very destructive as the waves advance inland and can extend over thousands of kilometers. Earthquakes, volcanic eruptions, mass movements, meteorite impacts, or underwater explosions can trigger a tsunami.

8. **Fire in the House/Business/Property**
Fire involving residential, commercial, or industrial buildings or structures.

9. **Forest fire**
Fires in forests that cover extensive damage. They may start by natural causes such as volcanic eruptions or lightning, or they may be caused by arsonists or careless smokers, by those burning wood, or by clearing a forest area.

10. **Epidemic/Disease Outbreak**
Either an unusual increase in the number of cases of an infectious disease affecting humans, which already exists in the region or population concerned, or the appearance of an infection previously absent from a region.

11. **Pest infestation (e.g., insect, disease, weeds)**
Pervasive influx and development of insects, parasites, or rodents affecting crops and materials.

12. **Livestock/Poultry Diseases**
Reported cases of diseases affecting livestock (e.g., foot-and-mouth disease) or poultry (e.g., avian flu).

For Codes 14, 15, 17, and 18, which relate to business firms, refer to the following definitions of large and small firms. Republic Act No. 9178, otherwise known as the Barangay Micro Business Enterprise (BMBE) Act of 2002 has defined the categories for enterprises as follows:

Number of employees:
- **Micro** = less than 10
- **Small** = 10–99
- **Medium** = 100–199
- **Large** = 200+

Small firms referred to in Codes 15 and 18 can be either micro, small, or medium-sized enterprises, while large firms referred to in Codes 14 and 17 are large enterprises.

**Disaster Risk Reduction and Preparedness**

Determine if the barangay has a written disaster risk reduction plan (Question 56) and enter the appropriate code in the corresponding box (Code 1 – Yes, 2 – No). Indicate if the barangay has a disaster/emergency response team (Question 57) and enter appropriate code in the space provided (1 – Yes, 2 – No).

Determine if the barangay has any disaster/emergency response equipment (Question 58). Indicate the code accordingly (1 – Yes, 2 – No). If the barangay owns disaster/emergency response equipment, indicate the type of equipment. Ask whether the barangay has any of the following equipment: rubber boats, handheld radios, rain gear, emergency vehicle, flashlights, medicines/first aid supplies, life vests, or megaphones. Indicate if the barangay has other types of equipment besides those listed.

Ask if the barangay has designated evacuation centers (Question 59). List the names of the evacuation centers (if any) in Column 60 and get the location coordinates in latitude and longitude (Question 61). See Figure 20.

**Definition of Terms**

Evacuation centers are temporary shelters for persons or families who are victims of natural or man-made disasters (e.g., flood, earthquake, or armed conflict). Public buildings or facilities such as gym, school, and church are usually designated as evacuation centers.
Peace and Order

Indicate the number of reported crime cases in the barangay. A crime is an act or offense from a public law, which makes the offender liable to punishment under that law. Crimes are classified into three types: against persons, against property, and other crimes.

(i) Crime against persons such as murder, homicide, physical injury, rape, etc.

(ii) Crime against property such as robbery, theft, and other similar cases

(iii) Other crimes

a. Prohibited drug abuse – refers to the prohibited possession and use of addictive drugs

b. Human trafficking – the commercial trade (smuggling) of human beings who are subjected to involuntary acts such as begging, sexual exploitation (e.g., prostitution and forced marriage), or unfree labor (e.g., involuntary servitude or working in sweatshops). Trafficking involves a process of using physical force, fraud, deception, or other forms or coercion or intimidation to obtain, recruit, harbor, and transport people (Source: New World Encyclopedia).

c. Illegal recruitment

d. Prostitution – as defined by the Merriam Webster dictionary, refers to the act or practice of engaging in promiscuous sexual relations especially for money

e. Spousal/partner abuse – can be in the form of physical abuse, sexual abuse, emotional abuse, economic abuse, financial abuse, passive abuse, and spiritual abuse

Economic abuse – means having no access to the family’s money. This implies that the abusive partner maintains control of the family finances, deciding without regard for the other person how the money is to be spent or saved, thereby reducing the person to complete dependence for money to meet his/her personal needs. For example, a woman may live in a comfortable house, wear good clothing, or have children who are well-equipped with toys and luxuries, but she may have no control over what monies come into the family or over any decisions about what will be bought. It can include withholding or restricting money for necessities like food or clothing, preventing her from getting or keeping a job, taking her money, denying her independent access to money, or excluding her from financial decision making.
f. Sexual harassment – any unwanted, unwelcome sexual conduct, advances or attention, request for sexual behavior or other physical verbal or nonverbal conduct that is sexual in nature.

From this basic concept, two main elements of sexual harassment emerge:

1) The conduct committed must be of a sexual nature, which may be viewed to mean that the harassment was committed in reference to the sex, i.e., female or male person receiving the harassment. For example, harassment happens to a woman because she is female. This may also mean that the act committed relates to the biological difference of men and women and uses this reality to debase the person of the victim. The sexual conduct or attention is unwanted. This means that the victim does not welcome the attention and does not intend for the act to continue. It is not solicited; rather, it is imposed.

2) Some forms of sexual harassment include catcalls, green jokes, obscene letters, sexual proposition, intentional touching, suggestive looks, leering, posting of explicitly sexual materials, and persistent demands for dates or sex.

g. Other types of crimes – other crimes not classified above. Specify these in the space provided.

On the appropriate space, enter the number of reported cases for each crime reported during the past 12 months. Disaggregate the victims of crimes by age (below 18 years old and above 18 years old). The sum of the number of male and female victims must be equal to the total number of victims in the leftmost column (Figure 21).
Barangay Programs, Projects, and Activities

This section aims to determine the programs, projects, and activities implemented in the barangay during the past year. Ask for the names of these programs and write these on the space under Question 64. Ask the respondent for a brief description of the program (Question 65), the amount of resources allotted by the barangay for the particular program (Question 66), and the number of beneficiaries of the program (Question 67) during the past year. Indicate the unit for the number of beneficiaries (i.e., children, women, households, etc.). Note that the projects must have been implemented during the past year (Figure 22).

Budget, Revenue, and Expenditure

Indicate in Philippine pesos the total amount of budget, revenue, and expenditure of the barangay during the last 3 years (Question 68). Write the figures per year on the space provided. See Figure 23.

![TABLE VI. Programs, Projects and Activities](image)

<table>
<thead>
<tr>
<th>What programs, projects and activities (PPAs) were implemented in the barangay during the past year?</th>
<th>Provide a brief description of the PPA.</th>
<th>How much was allotted for the PPA?</th>
<th>How many benefited from the PPA during the past year? (Indicate unit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Busog-Lusog Feeding Program</td>
<td>Daily breakfast for children</td>
<td>Php 150,000</td>
<td>150 children</td>
</tr>
</tbody>
</table>

![FIGURE 22](image)

FIGURE 22

![TABLE VII. Budget, Revenue and Expenditure](image)

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget</th>
<th>Revenue</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Php 1.2 M</td>
<td>Php 500,000</td>
<td>Php 1 M</td>
</tr>
<tr>
<td>2</td>
<td>Php 1.7 M</td>
<td>Php 800,000</td>
<td>Php 1.1 M</td>
</tr>
<tr>
<td>3</td>
<td>Php 2.0 M</td>
<td>Php 950,000</td>
<td>Php 1.2 M</td>
</tr>
</tbody>
</table>

![FIGURE 23](image)

FIGURE 23

Barangay Spot Map

This section indicates that a spot map of the barangay should be prepared. A spot map is like a picture of an area taken from the top view perspective.

Specify the boundaries in the barangay. Natural boundaries such as creeks, rivers, waterfalls, and other water tributaries, caves, and historical landmarks should be clearly specified. Man-made infrastructures such as road networks, bridges, and railroads should also be indicated in the spot map.

Visible building establishments such as houses, barangay halls, multipurpose halls, gymnasiums/stadiums, sports complex, basketball/volleyball/pelota/tennis courts, swimming pools, library/reading centers, cockpits, barangay outposts, elementary and secondary schools, colleges/university, hospitals/clinics, day care centers, banks, markets, restaurants, and other buildings existing in the barangay should be clearly indicated in the spot map. Other sites such as those for garbage disposal like an open dumpsite, sanitary landfill, and material recovery plants should also be marked on the spot map.
The location of each household should be clearly marked in the map. The spot map will be used to locate the specific households surveyed.

**Steps in creating a barangay spot map**

1. Draw the natural boundaries such as bodies of water (river, creeks, waterfalls, etc.), caves, hills, etc. Include also historical landmarks.
2. Draw the road networks in the barangay. Indicate the type of road surface, whether concrete, asphalt, or natural/earth. Indicate railroads and bridges if these are present in the barangay.
3. Delineate the *purok* boundaries. Usually, if there are natural boundaries and a road network, delineation of puroks follow the same trail.
4. When all the necessary landmarks are in place, indicate the location of building establishments such as houses, barangay halls, multipurpose halls, gymnasiums/stadiums, sports complex, basketball/volleyball/pelota/tennis courts, swimming pools, library/reading centers, cockpits, barangay outposts, elementary and secondary schools, colleges/universities, hospitals/clinics, day care centers, banks, markets, restaurants, and other buildings in the barangay.
5. Other sites such as those for garbage disposal like an open dumpsite, sanitary landfill, and material recovery plants should also be marked in the spot map.
6. Indicate the location of all households in the barangay. Each household should have a unique household number. This household ID number should match the household ID number in the household profile questionnaire.
7. Indicate a legend to identify what is included in the spot map.

Attach the completed barangay spotmap together with the Barangay Profile Questionnaire before submitting this form to the supervisor. Indicate in the BPQ the date the spot map was prepared in month-day-year format (Question 69), and whether important details—location of households, facilities, boundaries, and landmarks—are shown in the barangay spotmap (Question 70), using the options yes (code 1) or no (code 2), and for features not present in the barangay, indicate as not applicable (code 3). See Figure 24.
EXAMPLE OF A BARANGAY SPOTMAP (BARANGAY BAYAN-BAYAN, LABO, CAMARINES NORTE)

SPOT MAP
BARANGAY BAYAN-BAYAN

Scale: 1:26,000
Distance: 12.5 kilometers

Legend:
- Road
- River
- Creek
- Elem. School
- Brgy. Hall
- Brgy. Health Center
- Day Care Center
- Chapel
- Household

Brgy. Matandang
Brgy. Napaod
Brgy. Bayo
Brgy. Tulay na Lupu
About the Census

The Community-Based Monitoring System (CBMS) is designed as an organized process of data collection, processing, validation, and integration of data in local development processes. It is a local-level and area-specific census of households. In addition to collecting basic demographic information of population, the CBMS also gathers data on different socioeconomic variables.

Census Objectives and Uses of the Data

The CBMS was developed as an aid to provide policy makers with a regular and frequent source of information on the possible impact of macroeconomic adjustment policies on households and individuals, particularly those belonging to the vulnerable groups.

Specifically, it seeks to provide the following:

- an organized system of collecting information for policy makers and program implementers at all geopolitical levels,
- up-to-date information on the welfare status and needs of communities and households,
- a tool in monitoring and evaluating the impact of projects and programs, and
- a tool for better local governance.

The CBMS entails the participation of people in the community to collect, process and use the data. It will provide information on the welfare conditions of all community members.

The CBMS is tasked to generate data on a predetermined core set of indicators (Table 1) at the barangay level. CBMS indicators define the basic criteria for attaining a decent quality of life and corresponds to the minimum basic needs covering (a) health, (b) nutrition, (c) housing, (d) water and sanitation, (e) basic education, (f) income, (g) employment, and (h) peace and order. Other indicators relevant to that particular community may supplement this set of indicators. These will help explain the observed trends in the welfare status of the community. The information gathered from these indicators will serve as input to data banks in barangays, municipalities, cities, and provinces.

A barangay will gather information on CBMS indicators and whatever the community deems necessary for its own planning requirements. The need for a database has increased with devolution, and barangays are now tasked with the preparation of annual barangay development plans. CBMS indicators will be useful to the barangays themselves when they make profiles of their communities. The indicators will help the barangays identify their problems. Since financial resources are limited, these communities can prioritize their projects to address these problems.
### TABLE 1. CBMS CORE INDICATORS

<table>
<thead>
<tr>
<th>Basic Needs</th>
<th>Core Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Health</td>
<td>1. Proportion of children less than 5 years old who died</td>
</tr>
<tr>
<td></td>
<td>2. Proportion of women who died due to pregnancy-related causes</td>
</tr>
<tr>
<td>B. Nutrition</td>
<td>3. Proportion of children 0–5 years old who are moderately and severely underweight</td>
</tr>
<tr>
<td>C. Housing</td>
<td>4. Proportion of households living in makeshift housing</td>
</tr>
<tr>
<td></td>
<td>5. Proportion of households who are squatters</td>
</tr>
<tr>
<td>D. Water and Sanitation</td>
<td>6. Proportion of households without access to safe water supply</td>
</tr>
<tr>
<td></td>
<td>7. Proportion of households without access to sanitary toilet facilities</td>
</tr>
<tr>
<td>E. Basic Education</td>
<td>8. Proportion of children 6–11 years old who are not in elementary school</td>
</tr>
<tr>
<td></td>
<td>9. Proportion of children 12–15 years old who are not in secondary school</td>
</tr>
<tr>
<td>F. Income</td>
<td>10. Proportion of households with income below the poverty threshold</td>
</tr>
<tr>
<td></td>
<td>11. Proportion of households with income below the food threshold</td>
</tr>
<tr>
<td></td>
<td>12. Proportion of households that experienced hunger due to food shortage</td>
</tr>
<tr>
<td>G. Employment</td>
<td>13. Proportion of persons in the labor force who are unemployed</td>
</tr>
<tr>
<td>H. Peace and Order</td>
<td>14. Proportion of households with members who are victims of crime</td>
</tr>
</tbody>
</table>

### Data Collection Authority

The conduct of the CBMS is authorized by a resolution passed by the sangguniang bayan (city/municipal council). This is required before a local government unit (LGU) can enter into a memorandum of agreement with the CBMS International Network Coordinating Team (CBMS-INCT) on the provision of technical assistance to implement the system in coordination with national and local partners.

### Confidentiality of Information

LGU officials, personnel, and hired staff shall hold in complete confidence all data provided by census respondents. The information collected from households shall be used for planning, research, and statistical purposes only and shall never be used for taxation, regulation, or investigation purposes. Only the local chief executive, senior staff of the CBMS local technical working group, or any designated personnel can access the whole database. The CBMS-INCT has access to individual-level data of households critical in its ongoing development and improvement of the system. Likewise, key personnel from the Department of the Interior and Local Government–Bureau of Local Government Development (DILG-BLGD) and the National Anti-Poverty Commission (NAPC) will also have access to this information for targeting and crafting the national development agenda.

Meanwhile, other interested parties requesting for data should be provided with requested information, not the whole database and data processing system. In some cases where specific studies/research will be conducted, they should only be provided with a subset (only applicable variables). Moreover, the data set should be made anonymous, that is, names of household members are removed to protect confidentiality of information.

However, aggregated information in summary forms or statistical tables can be provided as it does not reveal the identity of respondents.

### Scope and Coverage of the Census

The household is the statistical or enumeration unit. It is defined as 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 preparing and consuming food. The CBMS covers all households in the province, city/municipality, or barangay and does not discriminate respondents on the basis of sex, ethnicity, religion, disability, socioeconomic background, and other characteristics. It aims to collect information on every household in the area where the system is being implemented.

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CHAPTER 2

Census Forms

This chapter lists and describes the forms used in CBMS implementation. It also includes instructions on how to accomplish the forms.

Household Profile Questionnaire

The Household Profile Questionnaire (HPQ) is the basic census form for the CBMS. The form was designed to capture CBMS core indicators (Table 1). Other indicators were included in the questionnaire to generate additional information needed by LGUs.

In addition, the latest version of this form was also designed to gather information on the location of the housing unit/building of the household using the Global Positioning System (GPS) instrument. (Refer to Chapter 4.)

The questionnaire consists of 12 pages, including the cover page. Questions on pages 2 to 6 seek information on each household member; the rest are concerned with the household as a whole. (See the enumerator’s manual for the guide on how to appropriately administer the HPQ.)
Barangay Profile Questionnaire

The Barangay Profile Questionnaire (BPQ) gathers supplementary information for the HPQ. The questionnaire is composed of seven pages, including the cover page, and aims to collect data that can be used to prepare a comprehensive barangay profile.

Questions on pages 1–2 of the questionnaire refer to the physical and demographic characteristics of the barangay, while those on pages 3–6 gather information on the availability/accessibility of service institutions and other facilities in the barangay as well as the location of these institutions or facilities. The last page of the questionnaire collects information on the significant events in the barangay, disaster risk reduction and preparedness, programs, projects and activities, budget, and revenue and expenditure during the last three years and preparation of a spot map. (See the manual on filling out the BPQ for procedures in administering said form.)

Distribution Forms

The distribution forms for field coordinators were designed to track and monitor the distribution of materials, such as HPQs, stickers, pentel pens, and others, needed for data collection. The procedure on filling out the distribution form is discussed in the next section.

Monitoring Forms

The monitoring forms for enumerators and field coordinators were developed to record the progress of data collection. The proper procedure in filling out these forms is discussed in the succeeding section.

CBMS Household Callback Form

The CBMS Household Callback Form is used by enumerators to list down respondents who should be called back or revisited. The form also lists respondents who refused to participate in the census. Discussion on how to accomplish this form is found in the next section.
**Accomplishing the Forms**

This section provides instructions on how to accomplish the distribution, monitoring, and callback forms used in field operations.

**Distribution Forms**

Note that distribution forms are to be accomplished by field coordinators.

Write the name of the municipality and barangay in the space provided.

Column 1 [Name of enumerator]: Write the name of the enumerator.

Column 2 [HPQ]: Indicate the quantity [Number] of HPQs received by the enumerator in column 2A. Columns 2B and 2C, respectively, should contain the date when the enumerator received the HPQs and his/her signature.

Column 3 [Stickers]: Indicate the quantity of stickers received by the enumerator in column 3A [Number]. In columns 3B and 3C, have the enumerator affix his/her signature and the date he/she received the stickers.

Column 4 [Pentel pen]: Indicate the quantity of pentel pens received by the enumerator in column 4A [Number] and, in columns 4B and 4C, respectively, and have the enumerator affix his/her signature and the date he/she received the pentel pens.

Column 5 [Others]: Indicate the quantity of other supplies/materials received by the enumerator in column 5A [Number] and have the enumerator affix his/her signature and the date he/she received the other supplies/materials in columns 5B and 5C.

Before the field coordinator submits this form to the overall coordinator (who could be a member of CBMS-Technical Working Group), he/she should sign and write his/her name at the bottom of the form.

**Monitoring Forms**

**For Field Coordinators**

Write the name of the field coordinator, the number of enumerators being coordinated, and contact number of the field coordinator at the top of the form. Also indicate the province, municipality/city, and barangay in the space provided.

Column 1 [Day countdown]

Column 2 [Date]: Write the actual starting date of data collection and subsequent fieldwork (i.e., Day 2, Day 3, etc.).

Column 3 [Name of enumerator]: Write the name of the enumerator on the space provided. Indicate the number of HPQs submitted by the enumerator in column 3A, the number of HPQs edited by the field coordinator in column 3B, the number of HPQs returned to enumerators for callback in column 3C, and the number of HPQs completely edited in column 3D.

Column 4 [Signature of CBMS TWG]: Ask the designated CBMS-TWG staff to affix his/her signature in column 4.

Column 5 [Remarks]: If the field coordinator has additional observations, he/she may indicate these in column 5.

Do not forget to compute the grand total of columns 3A, 3B, 3C, and 3D and indicate the sum in the space provided. Likewise, the field coordinator should affix his/her signature at the bottom of the form, as indicated, before submitting the form to the CBMS-TWG staff or overall coordinator.

**For Enumerators**

Write the province, the names of the enumerator and the field coordinator, city/municipality, barangay, and contact number in the space provided at the top of the form.

Column 1 [Day countdown]

Column 2 [Date]: Write actual starting date of data collection and subsequent fieldwork (i.e., Day 2, Day 3, etc.).

Column 3 [Quota (A)]: Indicate the number of households to be interviewed (quota) per day.

Column 4 [Number of households completely interviewed (B)]: Indicate the number of households completely interviewed by the enumerator in column 4.

Column 5 [Advance/deficit (B)-(A)]: Determine the progress of the interviews (advanced or backlogged/“on deficit” by getting the difference between columns 3 and 4, and indicate the number in column 5.
Column 6 [Signature of field coordinator]: Ask the field coordinator to affix his/her signature in column 6.

Column 7 [Remarks]: If the enumerator has additional observations, he/she may indicate these in column 7.

Do not forget to compute the grand total of columns 4 and 5 and indicate the sum in the space provided. Likewise, the enumerator should affix his/her signature at the bottom of the form before submitting it to the CBMS-TWG staff.

**CBMS Household Callback Form**

When respondents are not at home or are busy, an interview could not be carried out. In these cases, the enumerators must take note of these respondents and revisit them at another time. The CBMS Household Callback Form is a list of respondents who have to be revisited for various reasons. Do not forget to write the city/municipality and barangay at the top left corner of the form. Also, beside the geographical location, write the name of the enumerator. To avoid misplacement of the forms, ensure that the pagination is properly followed and noted at the top right corner. Refer to instructions below on how to accomplish the form.

Column 1 [Household ID]: This is the unique ID number assigned to each household in the barangay or area of enumeration. Write the same household ID as it appears on the HPQ.

Column 2 [Address]: Write the complete address of the structure where the household of the respondent is residing. Where street addresses are not clearly defined in the area of enumeration (e.g., often in rural areas), simply describe the structure and give any details (i.e., nearest landmarks) that may help in locating the household (e.g., in front of the school or next to a store).

Column 3 [Name of household head]: Write the name of the household head. There can only be one head per household.

Column 4 [Reason for callback]: Write the code of the reason why the enumerator has to return to the household (callback) in column 4. Refer to the codes that can be found at the bottom of the form. Possible answers include “incomplete interview” (code 1), “respondent is busy” (code 2), “temporarily away/on vacation” (code 3), “no eligible respondent at home” (code 4), “refused to be interviewed” (code 5), and other reasons aside from those enumerated.

Column 5 [first revisit]: Write the date and time of the first revisit in columns 5A and 5B, respectively. Indicate in column 5C [Success (Y/N)] if the first revisit was successful by writing code “Y.” Write code “N” if otherwise. In column 5D write the code for the reason why the enumeration of the household was not successful. Refer to codes that can be found at the bottom of the form.

Column 6 [Second revisit]: A second revisit is conducted when the first revisit was not successful (or code “Y” in column 5C). Write the date and time of the second revisit in columns 6A and 6B, respectively. Indicate in column 6C if the second revisit was successful by writing code “Y.” Write code “N” if otherwise. Then, in column 6D, write the code of the reason why the enumeration was not successful. Refer to codes at the bottom of the form.

Column 7 [Third revisit]: If the household was not interviewed during the second revisit, the enumerator should visit again for the third time. Write the date and time of the third revisit in columns 7A and 7B, respectively. Indicate in column 7C if the second revisit was successful by writing code “Y.” Write code “N” if otherwise and indicate in column 7D the code of the reason for the unsuccessful enumeration. Refer to codes found at the bottom of the form.

Column 8 [Refused (Y/N)]: If the enumerator was not able to interview an eligible respondent after three attempts or revisits (or code “N” in columns 5C, 6C, and 7C), indicate the particular household as “refused” by writing code “Y” in column 8. Otherwise, just put a dash (“–”) in said column. Enumerators should submit the callback forms to the barangay chairperson/officials for appropriate action and coordination.

Column 9 [Number of male and female members of the household]: If the enumerator was not able to successfully carry out the interview (“Y” in column 8), ask the household for the number of male and female members of the household or get it from the barangay records. Indicate the number in columns 9A and 9B, respectively.

Below is a sample of an accomplished CBMS Household Callback Form:
### Distribution Form for Field Coordinators

<table>
<thead>
<tr>
<th>Name of Enumerator</th>
<th>Received the following forms/supplies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HPQ</td>
</tr>
<tr>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
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<tr>
<td>6</td>
<td></td>
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<td>7</td>
<td></td>
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<td>8</td>
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<td>12</td>
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<td>13</td>
<td></td>
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<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
</tbody>
</table>

Prepared by:

__________________________
Name and Signature of Field Coordinator
<table>
<thead>
<tr>
<th>DATE</th>
<th>QUOTA</th>
<th>NO. OF HOUSEHOLDS COMPLETELY INTERVIEWED</th>
<th>ADVANCED/DEFICIT</th>
<th>SIGNATURE OF FIELD COORDINATOR</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(A)</td>
<td>(B)</td>
<td>(B) - (A)</td>
<td></td>
</tr>
<tr>
<td>DAY 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAY 2</td>
<td></td>
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<tr>
<td>DAY 3</td>
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<tr>
<td>DAY 4</td>
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<td>DAY 5</td>
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<td>DAY 6</td>
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<td>DAY 7</td>
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<td>DAY 8</td>
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<td>DAY 9</td>
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<td>DAY 10</td>
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<td>DAY 11</td>
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<tr>
<td>DAY 12</td>
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<tr>
<td>DAY 13</td>
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<td>DAY 14</td>
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<tr>
<td>DAY 15</td>
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<td>DAY 16</td>
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<td>DAY 17</td>
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<tr>
<td>DAY 18</td>
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<tr>
<td>DAY 19</td>
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<tr>
<td>DAY 20</td>
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ADDITIONAL NOTES:

Prepared by:

Name and Signature of Enumerator
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<th>DATE</th>
<th>Name of Enumerator</th>
<th>No. of HPQs submitted</th>
<th>No. of HPQs field-edited by FC</th>
<th>No. of HPQs returned to enumerators for callback</th>
<th>No. of HPQs completely edited</th>
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ADDITIONAL NOTES:

Prepared by:

Name and Signature of Field Coordinator
## Community-Based Monitoring System (CBMS) Household Callback Form

### HH ID

### Address

### Name of Head of Household

### Reason for Callback

<table>
<thead>
<tr>
<th>First Re-Visit (Answer if NO in 5C)</th>
<th>Second Re-Visit (Answer if NO in 6C)</th>
<th>Third Re-Visit (Answer if NO in 7C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date (5A)</td>
<td>Time (5B)</td>
<td>Success (Y/N) (5C)</td>
</tr>
</tbody>
</table>

### Refused (Y/N) (8C)

### Number of Male Members of the Household (9A)

### Number of Female Members of the Household (9B)

### Schedule (See Codes Below For Reason For Callback)

1. Incomplete Interview
2. Respondent is busy
3. Temporarily away/on vacation
4. No eligible respondent at home
5. Refused
6. Others, specify

**NOTE:** If the enumerator fails to complete an interview from an eligible respondent after three attempts, record this particular household as a refused household (code "Y" in Column 8).
Any data-gathering activity aims to get accurate and complete information. This chapter presents basic principles that should be followed for a successful interview.

**Whom to Interview**

Interview any responsible adult member who can provide accurate answers to the questions and give correct information for the household. The household head or the spouse would be the most qualified respondent.

**Building Rapport with the Respondent**

“The interviewer and the respondent are strangers to each other. Yet one main task of an interview is to establish rapport. The respondent’s first impression of you will influence his or her willingness to cooperate in the census. Be sure that you are neat and friendly as you introduce yourself.”

“Make a good first impression. When approaching the respondent, do your best to make him feel at ease. With a few well-chosen words you can put the respondent in the right frame of mind for the interview. Open the interview with a smile and salutation such as “Good morning” or “Magandang umaga,” and proceed with your introduction.”

Below is an example of a good introduction:

“Good morning/afternoon. I am (your name), (also a resident of this barangay). We are conducting the community-based monitoring system census. I would like to talk to you and ask you questions.”

Explain also to the respondent the objectives and importance of the CBMS census. An example is:

“The data obtained from the activity will be used to determine the appropriate services for your community. These services will be identified through the active participation and cooperation of the residents in this barangay.”

“Always have a positive approach. Never adopt an apologetic manner, and do not use words such as “Are you busy?” or “Would you mind answering some questions?” Such questions invite refusal to be interviewed. Rather, say courteously, “I would appreciate it very much your answering the questions in this undertaking.”

“Stress confidentiality of responses when necessary. If the respondent hesitates to participate in the interview or he/she is asking where the data will be used, explain that the information that you will collect will remain confidential, that is, no individual names will be used for any purpose and that all information will be produced in computer-generated tables. In this case, to prove that you are true to your word, you should never mention other interviews to him/her or show any completed questionnaires to other interviewers, supervisors, or any other respondents in front of him/her.”

“Answer any questions from the respondent pleasantly and directly. Before agreeing to be interviewed, the respondent may ask you some questions about the census or how he/she was selected to be interviewed. Be direct and pleasant when you answer. The respondent may also be concerned about the length of the interview. If he/she asks, tell him/her that the interview usually takes 30 to 45 minutes. Indicate your willingness to return at another day or time if the respondent requests to be interviewed later.”

---

**Pointers in Conducting the Interview**

**Be neutral throughout the interview.** Most people are polite and tend to give answers that they think you want to hear. It is therefore very important that you remain absolutely neutral as you ask the questions. Never, either by facial expression or by the tone of your voice, allow the respondent to think that he has given the “right” or “wrong” answer to the question. Never appear to approve or disapprove of the respondent’s responses. The questions are carefully worded to be neutral. They do not suggest that one answer is more likely or preferable to another answer.

If the respondent gives an ambiguous answer, probe in a neutral way by asking questions such as “Can you please explain a little more?” or “I did not quite hear you; could you please tell me again?”

“Never suggest answers to the respondent.” If a respondent’s answer is not relevant to a question, do not prompt him/her by saying something like “I suppose you mean that., is that right?” In many cases, he/she will agree with your interpretation of his/her answer, even if that is not what he/she means. Rather, probe in such a manner that the respondent comes up with the relevant answer.

**Do not change the wording or sequence of the questions.** The wording of the questions and their sequence in the questionnaire must be maintained. Ask all questions as worded. If the respondent misunderstands the question, you should repeat the question but be careful not to alter the meaning of the original question. Provide only the minimum information required to get an appropriate response.

**Handle hesitant respondents tactfully.** During the interview, respondents may simply say, “I don’t know,” give irrelevant answers, act very bored or indifferent, contradict something they have already said, or refuse to answer the question. In such cases, you must try to bring their interest back to the conversation. Spend a few moments talking about things unrelated to the interview, such as their home town or village, the weather, daily activities, etc.

If the respondent is giving irrelevant answers, do not stop him/her abruptly or rudely but listen to what he/she is saying. Then gently steer him/her back to the original question. A good atmosphere must be maintained throughout the interview. The best atmosphere for an interview is one in which the respondent sees the interviewer as a friendly, sympathetic, and responsive person who does not intimidate him/her and to whom he/she can say anything without feeling shy or embarrassed.

If the respondent is reluctant or unwilling to answer a question, try to overcome such reluctance by explaining once again that the question is being asked of all respondents of the household census. If you have successfully completed the interview, you may try to obtain the missing information at the end, but do not push too hard for an answer. Remember, the respondent cannot be forced to answer.

**Make the respondent at ease and comfortable.** You must not form expectations as to the ability and knowledge of the respondent. Remember that differences between you and the respondent may influence the interview. The respondent may be afraid to trust you. You should always behave and speak in such a way that he/she is at ease and comfortable talking to you.

**Do not be in a hurry in conducting the interview.** Ask the questions slowly to ensure that the respondent understands what is being asked. Do not make the respondent feel that you’re in a hurry to finish the interview for he/she may formulate his/her own opinion and may respond with “I don’t know” or give an inaccurate answer. On the other hand, if you feel the respondent is answering without thinking just to speed up the interview, politely say that his/her response is very important and that he/she needs to be careful in answering each question. Also tell them to take a moment to think about the answer and to not be in a hurry.

**Know the objective of the census and the purpose of each item in the questionnaire.** Be knowledgeable to explain the objectives of the census and be prepared to explain to respondents why you are asking certain questions that they think are not necessary. If you are authoritative or you can explain properly the purpose of the question, the respondent can readily give you his/her response.”

---

Thank the person(s) for cooperating. Always try to leave the respondent with a good feeling about this activity. Remember that this census will be undertaken regularly. Thus, after an interview, express your appreciation for the person’s cooperation. For example, “Thank you very much for your time in answering the questions.”

How to Handle Data-Collection Problems

During data collection, you may encounter some problems along the way. If such difficulties are not covered below or in any part of the manual, do not hesitate to contact your supervisor for assistance.

No qualified respondent is at home or all household members are out. If during the first visit no responsible respondent is at home or all the household members are out, visit the household again or call back. Inquire from children or neighbors about the soonest day and time for a callback.

Refusal to participate in the census. If the respondent refuses to cooperate in the census, stress its importance. Explain to him/her that the information to be collected will be used confidentially and will be used as a basis to identify social programs beneficial to the community. If everything else fails, ask the assistance of the coordinator.
CHAPTER 4

This chapter introduces the Global Positioning System (GPS), its uses, and some basic concepts. It also discusses the different GPS coordinate formats and notation.

Global Positioning System (GPS)

“GPS is a satellite-based navigation system used to locate positions anywhere on the earth. It is made up of a network of 24 satellites placed into orbit by the US Department of Defense. GPS was originally intended for military applications, but in the 1980s, the government made the system available for civilian use."4

Uses of GPS

“GPS has various applications on land, at sea, and in the air. Basically, it is usable everywhere except where signals cannot be received, such as inside most buildings, in caves and other subterranean locations, and underwater.5

GPS is used in navigation, surveying, recreation, geology (measuring fault movements), mapping, and military applications, among others.

Basic Concept of GPS6

“GPS satellites circle the earth twice a day in a very precise orbit and transmit signal information to earth. GPS receivers/trackers take this information and use triangulation to calculate the user’s exact location.”

Essentially, the GPS receiver compares the time a signal was transmitted by a satellite with the time it was received. The time difference tells the GPS receiver how far the satellite is. Now, with distance measurements from a few more satellites, the receiver can determine the user’s location coordinates and display these on the unit’s electronic map.”

Formats and Notation of GPS Coordinates

GPS receivers/trackers record the location coordinates in different formats depending on the device. GPS devices often use the following formats:

Latitude/Longitude

“Humans have drawn on the earth imaginary sets of lines that run parallel to the equator (latitude) and from the North Pole to the South Pole (longitude). The intersection of the lines of the latitude and the longitude describes where we are on the earth. To increase precision, each degree of longitude and latitude is divided into 60 minutes (’) and each minute into 60 seconds (”). Besides the more familiar “degrees, minutes, seconds” (D/M/S) format, coordinates can be reported in “decimal degrees” (DD.DDDD) that present the minutes and seconds as a fraction of one degree. Common practice reports the latitude value first then the longitude value.”

UTM (Universal Transverse Mercator)

“This worldwide mapping system creates 60 zones around the world. Locations are reported in meters as “eastings” (measured from the central meridian) and “northings” (measured from the equator), instead of latitude and longitude.

Most GPS devices usually inform the user which format they are using; if not, the formatting in which the coordinates are written can provide the information. Table 2 shows the same point location presented in three different coordinate formats.”

1 University of Minnesota Extension, Understanding Maps, GPS, and Coordinate Systems (page 2)
2 University of Minnesota Extension, Understanding Maps, GPS, and Coordinate Systems (page 3)
Note that in the CBMS data entry using CSPro and mobile system, only the decimal degrees format is accepted (Example 1 in the above table). For LGUs with GPS receivers and trackers, ensure that the device you are using can display the location coordinates in decimal degrees. Otherwise, conversion should be done to conform with the specified format.

### TABLE 2. COORDINATE SYSTEMS AND DATA FORMAT

<table>
<thead>
<tr>
<th>Coordinate System</th>
<th>Abbreviation</th>
<th>Example of the Same Point Location</th>
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</thead>
<tbody>
<tr>
<td>1. Decimal Degrees</td>
<td>DD.DDDD</td>
<td>32.8303° N, 116.7762° W</td>
</tr>
<tr>
<td>2. Degrees/Minutes/Seconds</td>
<td>D/M/S</td>
<td>32° 49′ 49″ N, 116° 46′ 34″ W</td>
</tr>
<tr>
<td>3. Universal Transverse Mercator</td>
<td>UTM</td>
<td>520944 meters E, 3632496 meters N</td>
</tr>
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</table>

CHAPTER 8


CHAPTER 1

Introduction

There has been an emerging need to fast track the generation of Community-Based Monitoring System (CBMS) census results to serve as timely inputs in local development planning. In addition, there has been an increased demand for the use of information technology in improving the CBMS process. As part of the continuing research work of the CBMS Network, the CBMS Accelerated Poverty Profiling (APP) has been developed for use of local government units (LGUs) adopting the CBMS.

The CBMS APP mobile platform application uses both the web technology and the mobile devices to allow the utilization and deployment of forms\(^1\) in mobile devices for collecting household and community data. Captured data can then be transmitted to CBMS web portals toward a more efficient process of acquiring household and community data.

The CBMS APP enhances data collection through the use of android tablets. As more affordable mobile devices, particularly tablets, become available in the market, the adoption of this kind of platform appears to be more ideal. This is not just due to the technological advantage but also due to operational and administrative factors. This document will discuss the CBMS APP mobile data capture (MDC) platform and how it can be made operational in the field.

\(^1\) This is roughly similar to a “questionnaire” and will be discussed in Chapters 2 and 3.

Why Go Mobile

One of the challenges in implementing CBMS is speeding up data capture while enhancing data quality. In the current process, the skipping patterns and calculations are done by the enumerator. In addition, spot maps of households and facilities are done separately and merged with the household data in later stages. These processes are relatively tedious...
and error prone, compared to a process wherein the system of relevant questions and calculations are done automatically while more accurate global positioning system (GPS) readings are incorporated in the household data.

The MDC in CBMS APP integrates filling out household and barangay profile questionnaires (HPQ and BPQ) using their mobile versions (M-HPQ and M-BPQ) with GPS capturing and data entry (see Figure 1.1).

Aside from an integrated system, there is a gain in the whole CBMS process. Figure 1.2 shows the basic difference between a paper-based CBMS implementation and a mobile-based one. The major difference is the link between data collection and processing (CBMS STATSIMPro). It can be seen that the materials and tools are fewer in the “Tablet” column and the process is expected to be shorter with fewer factors to manage and control. This is expected to enhance the data collection procedure and quality by several folds.

Figure 1.3 shows the data collection path. It can be seen that there are many stages in the CBMS process that can be improved by using APP. The old field editing procedures are virtually eliminated and replaced by a more focused editing on contents and consistency of responses. The field editors can now focus more on recoding responses since they do not have to worry about missing answers. The data is also being sent to the CBMS PORTAL, hence, consolidation and concatenation are eliminated in addition to encoding. These are consequent gains due to the integrated processes.

Table 1.1 shows a comparative summary of a paper-based data collection and a mobile-based one. Another feature within the nature of CBMS is security. The CBMS APP supports different types of users with different levels of access. Hence, only allowed persons can access/view the data based on the structure prescribed by local government units (LGUs). Furthermore, panel data can be facilitated since many features are already in aid of this, such as the GPS and the integrated IDs. Cost reduction can be further enhanced if the devices are used in other endeavors, compared to paper, due to paper wastes and storage costs.

**FIGURE 1.2. Basic Differences Between Paper and Accelerated Poverty Profiling**
The CBMS APP: Getting Started

The MDC of CBMS APP is composed of three major components:

1. Data Capture through SCAN,
2. Data Transfer through SCAN and PORTAL, and
3. Form Generator.

In this manual, only CBMS SCAN and CBMS PORTAL will be tackled. Both of these tools contain administrative support tools for tracking the deployment of mobile devices, managing user accounts, and setting parameters in the devices and in the web portal. Figure 1.4 shows the general functions of the two components that will be detailed in Chapters 2 and 3.
Users of SCAN need to secure permission and get form or data definitions from the PORTAL. Users then use SCAN for data gathering and save them in the devices and desktops, then send them to the PORTAL for consolidation.

CBMS APP requires tablets with the following minimum specifications:

- WIFI
- 3G (optional)
- 7" 1024x600
- Camera (optional)
- Built-in GPS chip (not assisted GPS through the net)
- Dual core processor
- Android 4.1
- USB (to connect to computer)
- Li-Ion 4000 mAh battery (1200 hours standby / 40 hours talk)
- backup charger (battery pack)

Built-in 3G is optional since internet is only needed during device registration and data sending. However, it must be noted that the GPS chip must be built-in and can lock in satellites without internet connection. The minimum android operating system version is Android 4.1. In field operations, the need for battery packs or powerbanks will be discussed.

In addition to tablets, a desktop to serve as repository of downloaded data and as a processing machine is required. The following is the recommended specification:

- Processor: Intel i5 or AMD Phenom X2
- Memory: 2GB
- Hard disk: 500GB
- Graphics: 512MB memory (e.g., Integrated Intel HD graphics, NVIDIA 8600GT or ATI HD4850)
- Operating System: Windows 7 64-bit with MS Office (or Open Office)
- Essentials: Internet connection, Monitor, Keyboard, Mouse, Printer

Summary

Mobile-based data collection is highly recommended due to the gains (efficient collection, reduced costs, etc.) compared to the traditional case. It facilitates sustainability since the cost of succeeding rounds of data collection is significantly reduced because the equipment need not be procured for every round. Furthermore, the equipment and infrastructure to be established can be expanded/extended and can be used in other initiatives (e.g., monitoring health conditions, disaster response, and others).

---

1 Device registration and data sending will be discussed in Chapter 3.

2 Device registration and data sending will be discussed in Chapter 3.

3 In Chapter 2, the details of the server where the data will be sent will be discussed. The server in the CBMS PORTAL is different from the machine being discussed in this section.
CHAPTER 2

CBMS PORTAL

CBMS PORTAL, as shown in Figure 1.4, serves as a “hub” and repository of the data, form or data definitions, and user credentials in an APP implementation. This is the component wherein users can create and manage user accounts and workgroups, monitor devices, download submitted data, and view available forms. Before the fielding of tablets, PORTAL must be customized by the LGU’s CBMS Technical Working Group (TWG).

As discussed earlier, CBMS PORTAL supports different types of users. Each can be, for example, a system administrator, LGU officer, field coordinator, field editor, or enumerator. Each user is granted access to a set of features in the web portal and in the mobile device, as defined by a system admin during account creation.

Each user is also assigned to a workgroup that is used to determine his/her data access coverage. For example, various workgroups can be set up to represent different regions, provinces in the regions, and cities/municipalities in the provinces. A user belonging to a specific region can access all the data captured by officers in that region (including the provinces and the cities of that region). A user belonging to a specific city can only access the data captured by officers in that city.

**Getting Started**

The requirements to operate the CBMS PORTAL are as follows:

- A computer and internet literate operator
- A machine, either desktop or laptop
- Internet connection
- Web browser: Internet Explorer, Google Chrome, or Mozilla Firefox
- System administrator user to access the features of the CBMS PORTAL

To open the site to CBMS PORTAL, the user must be someone who has been given access to the web server under a specific workgroup, which will be discussed in Sections 2.3 and 2.4. For simplicity, let us assume that the user is a system administrator under the “CBMS Philippines” workgroup.

1. Open your browser and type the following address on the URL: cbms.dlsu.edu.ph/portal
2. The following page will appear. Type your username and password on the appropriate fields and click “Login.”

**FIGURE 2.1. CBMS PORTAL Login Page**

3. The following main page will appear on your browser. Congratulations, you have entered the CBMS PORTAL!

Although the site can be accessed through Internet Explorer, the PORTAL works best on Google Chrome or Mozilla Firefox.

To be provided by the CBMS Team or by another LGU admin.
Home

The main or home page (see Figure 2.2) displays the following:

1. The main menu on the left side of the page that allows you access to the different functions in the web portal.
2. The announcement window in the middle of the page.
3. The profile box on the right side of the page that displays your username and workgroup (Section 2.4).
4. The “Download installer” for downloading a copy of the CBMS SCAN to your mobile device.

Accounts

The Accounts tab in the main page provides facilities for managing the different user accounts in your workgroup. These include viewing the list of existing user accounts, adding new user accounts, modifying the details of existing user accounts, and enabling/disabling existing accounts. Clicking the “Accounts” tab will show the page in Figure 2.3.

The page shows all the accounts in the scope of the current user. The scope visible to a user is all users in his/her current workgroup, and other users in workgroups under his/her workgroup. In Figure 2.3, all accounts are shown with their full name, workgroup, status, and levels of access. The meaning of the icons of each level of access can be shown by hovering on the left side of the browser. Table 2.1 shows the levels of access and description.

Adding a New User Account

To add a new user account, click on the “Add New User Account.” The Create New User Account form shown in Figure 2.4 will be displayed. Perform the following:

1. Enter a new Username. This must be unique, and the PORTAL will prompt the user when the username is already taken.
2. Specify the full name of the user.
3. Provide a Password, and retype Password.
4. Check the “Activate this account” if you want this user account to be activated upon creation.
5. Choose the Workgroup for the new user account. Only your current workgroup and the workgroups belonging to your workgroup will be available for selection.
6. Choose the Area Assignment of the user account (optional).

---

6 This is visible only to users with accounts management privilege.
### TABLE 2.1. Levels of Access of User Accounts

<table>
<thead>
<tr>
<th>Featured access level</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to CBMS Website</td>
<td>The user can login and view the CBMS PORTAL page.</td>
</tr>
<tr>
<td>Send form data/data transmission</td>
<td>This means that the user can send data from the mobile device to the CBMS PORTAL using his/her mobile device.</td>
</tr>
<tr>
<td>Manage user accounts</td>
<td>The accounts management page can only be accessed if the user has this level of access. This enables him/her to create new and modify existing user accounts in his/her workgroup.</td>
</tr>
<tr>
<td>Workgroups Management</td>
<td>This feature allows the user to access the Workgroup Management page, enabling him/her to create new and modify existing workgroups.</td>
</tr>
<tr>
<td>Form management</td>
<td>This feature allows the user to access the Form Management page, enabling him/her to create and to upload new forms (or new versions for existing forms) to the web server. It must be noted that users without this level of access can still view the Form Management page but will not be able to modify/create forms.</td>
</tr>
<tr>
<td>Data export/management</td>
<td>This feature allows the user to request the system to generate text data files from submitted form data through the server’s data download service.</td>
</tr>
<tr>
<td>Device Registration/Management</td>
<td>This feature allows the user to access the Device Management page, enabling him/her to register new mobile devices into the system. Note that new devices may only be registered as long as the user has not exceeded the quota assigned to his/her workgroup.</td>
</tr>
</tbody>
</table>

**FIGURE 2.4. CBMS PORTAL: Adding New User Account**

![CBMS Portal: Adding New User Account](image-url)
7. Set the User Features or the list of levels of access functions that this new user will be allowed to access. The features are listed in Table 5-1.

8. Click “Create New Account.”

Modifying an Existing User Account

To modify the details of an existing user account, click the Edit ( ) icon beside the account entry. The Edit User Account form will be displayed, similar to Figure 2.4. Perform the necessary changes as discussed earlier then click “Update Account.”

To modify the status of an existing user account, click the Status(✓) icon beside the account entry.

Workgroups

The Workgroups option in the main menu provides facilities for managing the different workgroups in the system. These include viewing the list of existing workgroups, adding new workgroups, and modifying the details of existing workgroups.

The Workgroup Management page is shown in Figure 2.5. A workgroup is organized as a hierarchy. All users belonging to a workgroup that is found at the top of the hierarchy has access to all the SCAN data of the workgroups under it. The reverse, however, is not true. That is, a user in a lower workgroup cannot access the scan data of its parent or container workgroup (or the workgroup above it).

Consider the workgroups shown in Figure 2.6. Users belonging to the NCR–National Capital Region workgroup can access all the SCAN data belonging to that workgroup and any sub-workgroup that belong to the NCR workgroup, such as Manila. Users belonging to the Manila workgroup can access all the data belonging to the Manila workgroup and any sub-workgroup that belong to the Manila workgroup, such as Tondo and Binondo; but they cannot access the scan data belonging to the Cavite, Baguio, Luzon, or any workgroup that are found at the upper levels of the hierarchy.

Adding a New Workgroup

To add a new workgroup, click on the Add New Workgroup link. The Create New Workgroup form shown in Figure 2.7 will be displayed.

1. Enter a new “Workgroup Name.”
2. Provide a “Workgroup Description.”
3. Specify the “Device Registration Quota” for the new workgroup. This value is used to limit the number of devices that can be registered by a user from a given workgroup. Also note that the quota of a workgroup is counted toward the quota of the parent workgroup.
4. Specify the “Quota Expires After” value. This refers to the number of days from the current system date for the workgroup to register new devices.
5. Choose the “Parent Workgroup.” The parent workgroup can be your current workgroup, or any workgroup that belongs to your workgroup.

6. Click “Create Workgroup.”

The new workgroup is created and is shown in the list of workgroups in the Workgroup Management page.

Modifying an Existing Workgroup

To modify the details of an existing workgroup, click (2) beside the workgroup name. Notice that you can only modify the details of the workgroup where you belong, as well as those workgroups below your workgroup. Perform similar steps in Section 2.4.1.

Devices

The Devices option in the main menu provides facilities for tracking the different mobile devices used for collecting community data. These include viewing the list of existing registered devices, assigning devices to LGUs, viewing device assignment history, and viewing scan data submission logs. Only registered devices can be used to submit scans to the portal and to download mobile forms from the portal. Note that devices cannot be registered through the CBMS PORTAL, but instead, through the CBMS SCAN mobile data collection application.

Figure 2.8 shows an example of the list of devices registered. It contains the serial number or device ID, the date registered, the user who registered the device, and the workgroup assignment.

There are “actions” that can be done for each device. To change the assignment of an existing registered device to another workgroup, click the “Device Reassignment” icon beside the entry of the device to be reassigned. Select the new workgroup where the device will be deployed. To reassign a batch of devices, click “Reassign Multiple Devices” link and the window in Figure 2.9 will appear. Check on the devices to be reassigned and to which workgroup, then click “Reassign these groups.”

It is highly recommended that after a device had been reassigned, the head officer in the LGU should log in to the portal using the device in order to synchronize the device settings with that of the portal. The device settings include the account details of the authorized users in the new workgroup, the location details of the new workgroup, and the forms assigned to the new workgroup. Without synchronization, the users may not be able to access the various features of the mobile application, including collecting community data and submitting scans to the portal.

7 This is visible in the CBMS SCAN application.
Use the “Device Form Log” icon to view the history list of forms downloaded to this device, as shown in Figure 2.10.

Use the “Device Reassignment Log” icon to view the history list of device assignment, as shown in Figure 2.10.

**Forms and census management tools**

The Forms option in the main menu shows the list of forms or questionnaires available for the current workgroup. Only forms visible in this facility will be available for distribution to the registered devices.

The Forms page is shown in Figure 2.11. Each form entry includes the name of the form, a short description of the form, the number of existing versions for the form, the current version being used, and a set of actions that you can perform on the form. Clicking the form activities icon of a given form/questionnaire will show the details of usage of a form (see left of Figure 2.11). In this window, each user’s usage, such as enumeration and uploads (also information on recent upload), can be viewed. This is useful in census management and in determining whether the enumerators are on track with their assigned number of interviews and whether field coordinators/editors are keeping up.
On the other hand, clicking the download data icon of a given form/questionnaire will show the download menu for acquiring CSV data (see Section 2.7 and Figure 2.13).

**Data**

The Data option in the main menu provides facilities to extract scan data from the web portal and send these in CSV format to the requesting LGU. Note that the requesting user is only allowed access to data or forms that are associated to their workgroup. Figure 2.12 shows the “Data management page.” Note that this is populated since there are already submitted data requests. The list of requests for data exportation is shown, including the date of request, the workgroup where the data originated, the name of the form used in collecting the data, the status of the request, and a download icon.

To request for data to be downloaded, click the “Request Export Data” link. The form for the Request for Data to be exported, as shown in Figure 2.13, will be displayed.

1. Select the name of the Form used to collect the data to be extracted.
2. Specify the Date Range or period when the data were collected from the community. A calendar control box will appear to assist the user in selecting the range.
3. Specify the Workgroup or the scope of data coverage to be included in the extraction. Note that only those data in your workgroup and your sub-workgroup will be available to you.
4. Click “Submit.”
You will see your request in the list of data extraction requests in the Data Management page, with the status “Processing.” Once the status has changed to “Done Exporting,” click the “Download” icon to receive a zipped copy containing the CSV files of the data you requested. Note that the waiting time until “Processing” is finished depends on the scope/size of the data being requested.

FIGURE 2.13. Forms/Questionnaires Page (left) and CBMS HPQ Activities Sample (right)
CHAPTER 3
CBMS SCAN

Getting Started: Guides on How to Install

Before you start, prepare your android device and familiarize with it. The bulk of the learning will depend on how you know your device. Make sure it is updated and ready to install and run this additional application. To allow the installation of the CBMS SCAN, follow these pointers:

- If your android device has firmware updates, you should apply by going to Settings > About device > Software update.
- If it has been used before, make sure it has space for additional application of at least 5 MB. Remember that the performance of your tablet depends on running applications that you have, hence, it is recommended that unnecessary applications are not running when using the CBMS SCAN.
- Since CBMS SCAN is a non-market application and not posted on Google Play, you must enable installation from unknown sources. You can do this by checking Settings > Security > Unknown sources.

To install the CBMS SCAN on your device, perform the following:

1. Get the android application package (called APK) from the CBMS PORTAL (see Section 2.2). You can use the built-in browser of your android device. Or it can be sent to you by your team leaders/coordinators through email, or manually via SD card.

2. Go to the path where you downloaded the SCAN.apk by using “My Files” or any file manager application of your tablet and screen tap it.

3. A menu will pop up asking whether to allow the device to access certain features of the device. Screen tap “Allow.”

4. After installation, either click “Open” or browse your applications and look for CBMS SCAN. The screen in Figure 3.1 will appear.

Using it for the First Time: How to Register the Device

The screen in Figure 3.1 prompts the user to register the device on CBMS PORTAL. As discussed in Section 2.3, only allowed users can use or register it. “Device serial” is the identification of the device that will appear in the PORTAL.

To install the CBMS SCAN on your device, perform the following:

1. Get the android application package (called APK) from the CBMS PORTAL (see Section 2.2). You can use the built-in browser of your android device. Or it can be sent to you by your team leaders/coordinators through email, or manually via SD card.

2. Go to the path where you downloaded the SCAN.apk by using “My Files” or any file manager application of your tablet and screen tap it.
For first time installation, follow these simple steps:

a. Enter the PORTAL IP Address or URL cbms.dlsu.edu.ph.
b. Enter your username.
c. Enter your password.
d. Screen tap “Register Device.”

SCAN will attempt to authenticate and if your credentials are valid and you have not reached your device quota for your workgroup, you will be directed to the “Downloadable Forms” page as shown in Figure 3.2. You have to download the forms assigned to your workgroup to your mobile device before you can perform any data collection activities.

**FIGURE 3.2. Downloadable Forms Page**

### Getting/Updating Forms

To download forms, screen tap “Get Downloadable Forms.” The list of possible forms available to you (based on your workgroup assignment) will be provided, as shown in Figure 3.3. Select the form that you need. For instance, if you need the CBMS Barangay Profile Questionnaire (BPQ) VN 08201301, screen tap it and its details will be displayed, as shown in right side of Figure 3.3. “Form ID” is the internal ID of the form, “Form Name” is the visible name of the form, and “Description” provides some details of the selected form. Screen tap “Download” and a progress dialog will pop up, indicating that SCAN is communicating with the server. Once the form is downloaded to your device, the “Download” button will become disabled.

Click the back option found at the upper right portion of the page to go back to the previous page of the app. If you repeat the same process above (i.e., try to re-download the form), the “Update to Latest Version” will be displayed instead of “Download” in Figure 3.3, to allow you to get the latest version of the specific form. This will be useful in the future when there are changes in definition in the questionnaire/form.

### Application Settings

The Mobile Data Collection app on your mobile device has other administrative facilities to allow you to manage the settings of the application. As shown in Figure 3.4, these are “Application Settings” and “User Management.”

The “Application Settings,” as shown in Figure 3.5, allows you to set the IP address of the CBMS web portal. This address is used not only to download new forms but, more importantly, to submit scans to the portal. You can also view your device ID and the date when it was registered at the web portal.

**FIGURE 3.3. Downloadable Forms (left) and Download Form (right) screens**
The “Sync Device” option allows you to synchronize your application settings to that of the portal, to ensure that you will continue to be granted access to the portal when needed. This is particularly important when you transfer the device to another workgroup.

The “User Management” option allows you to view the authorized users in your workgroup who can use this device, as shown in Figure 3.6. These authorized users were registered through the “User Account Management” feature in the web portal (see Chapter 2).

When you click on a user entry in the list in 3.6, the user profile showing the user’s type and full name are displayed, as shown at the right side of the figure.

Navigating the Application

Figure 3.7 shows the login page to the CBMS SCAN application if your device has already been properly registered. Notice that you are given two login options using your user account:

- **Login to server**—allows you to login to the device and to the web portal.
- **Login locally**—allows you to login to the device only. Use this option if you do not have internet connection, or if you do not need to access or to submit anything to the web portal.
Figure 3.8 shows the main page of the CBMS SCAN. Note that you can only reach this page if your device has been properly registered.

There are five buttons—the first three are associated with features of the data capture module, while the fourth feature belongs to the data submission module.

- **Select Form.** This list allows you to select the type of form that you will use to collect data, as shown in Figure 3.9. Only those forms assigned to your workgroup and that you have downloaded from the web portal will be included in the list. If there are missing forms, just perform the download form operation again through the Administrator Tools function.

- **Create New Form.** Use this option to start a new data collection process. This is discussed further in Section 3.6.

- **View Existing Forms.** Use this option to view the list of existing scans and to open them for further editing. This is discussed further in Section 3.6 on Capturing Community Data.

- **Send Data.** Use this option to submit completed scan data to the server. This is discussed further in Section 3.8.

**Administrator Tools.** Use this option to access the different administrator tools available in the mobile device. This was discussed earlier in Section 3.4.

- **Logout.**

### Creating and Editing Interview Forms

To collect community data, use the CBMS SCAN installed in your mobile device. It provides access to mobile forms you downloaded from the CBMS PORTAL. These forms or scans are used by authorized field personnel to collect new data, to modify existing data, and to validate completed interviews. Validated scans can then be submitted to the PORTAL using the Data Transfer function as discussed in Section 3.8. Make sure that you have downloaded the latest versions of the forms that you will need for data collection. Refer to the previous section for instructions on how to download forms to your mobile device.

In this section, you will learn the basic features and user-interface controls available in the forms that you will be using for data collection.
Basic Interface of the Form

Navigation. A form is subdivided into multiple pages. The page number is found at the bottom of each page. You can use the previous and next icons beside the page number to go to the previous or to the next page, as needed. You can also swipe left and right to move through the pages.\(^8\) Note that the number of pages does not correspond to the number of pages in the questionnaire. In later sections, it will be shown that a different numbering of pages can be found in multiple items, such as the member roster.

You can jump to a different page by using the “Outline” icon that is found in all of the pages. You can swipe up and down to scroll through the items in a lengthy page.

Quick Functions. When you click the “Outline” icon or “Back” button of the android, the page in the left side of Figure 3.10 is shown with the following options:

- Notes. This icon provides you with a scratch space where you can jot down notes, as shown in the right side of Figure 3.10.

\(^8\) Works only on Android 4.1 and later versions.
FIGURE 3.11. Outline View of the Form

- **View Outline.** This function displays the tiles or names of the pages that you can jump to, as shown in Figure 3.11.
- **Save and Continue.** This icon saves the data that you have entered into your mobile device, and allows you to continue entering data for the current scan.
- **Save and Exit.** This icon saves the data that you have entered into your mobile device, and returns you to the main page of the Data Collection app.
- **Exit without Saving.** This icon discards any changes you made to the current scan, and returns you to the main page of the Data Collection app.
- **Back.** This icon returns you to the page in the current scan to allow you to continue with your data collection activity.

**Dependent fields and questions.** As discussed earlier, SCAN takes care of skipping mechanisms by evaluating relevant questions. Figure 3.12 shows an example of a skipping pattern that is taken care of by SCAN. Instead of disabling the fields, SCAN hides the irrelevant field so that you can focus only on questions that are needed. On the left side, since the household did not do any crop farming or gardening activity, the fields to capture income from these sources are hidden. On the right side, the income fields are shown since the household did some crop farming.

“Others” is another typical type of dependent field. If you select this, SCAN will show the text...
field wherein the description of other type should be keyed in.

**Required and constraints.** To further validate and enhance data quality, required fields are enforced and constraints on fields are also embedded. In Figure 3.13, Question (5) is a required response, and so is Question (10). The answer in (10) must exceed (5). As a result, SCAN prompts the user and does not proceed until a set of valid answers is inputted.

**Translations.** Whenever available, each question is translated. In Figure 3.14, the first line/s using a larger font is the “primary” question:

**Question:** Ano ang pinagkukunan ng tubig na inumin ng sambahayan?

The translated question uses a smaller font:

**Question:** What is your household’s main source of drinking water?

---

**Basic user input controls of the form**

Forms in SCAN use different user interface controls and buttons to allow you to enter the data that you have collected from the respondent. These controls are as follows:

**Dropdown listbox.** When you screen tap on this control, you can select answers from items in the given list. See the following example:

**Question:** Ano ang pinagkukunan ng tubig na inumin ng sambahayan?

---

**FIGURE 3.13. Required Questions and Constraints**

---

**FIGURE 3.14: Drop-down List**

---

**FIGURE 3.15. Search List**
Search list. This is a modified version of the drop-down list in which choices can be searched. The list narrows down to the most relevant items based on the typed keyword. For instance, Figure 3.15 shows the question on previous country of residence. Here “Italy” is the answer. Typing “it” will narrow down the choices. This is particularly useful in coded responses but with so many choices and repetitive answers, such as surnames.

Option (radio) buttons. You can select only one item from the given options (see Figure 3.16). The following is an example:

**Question:** Ano ang uri ng tirahan ng sambahayan?
**Question:** Anong uri ng materyales ang ginamit sa paggawa ng bubong ng tirahan?

Date and Time entry. This displays the current date and time. An example is the date and time of interview.

Multiple entries. Some items in the scan allow you to specify multiple entries. For example, after inputting the number of members in the household, SCAN will automatically generate “separate” forms (consequently, differently numbered pages), one for each member based on the numeric value that you have provided. This is discussed further in Section 3.6.3.

Numeric boxes. Only number input buttons in the keyboard are enabled. This prevents unintended or erroneous entry of strings in a numeric only response. One example is the income amounts.

Grayed fields. You cannot change the values in the fields that are grayed. The values are either calculated automatically by the application or retrieved from some other entries in the form. An example is the total household income.

Global Positioning System (GPS) coordinates. As discussed in Chapter 1, SCAN features integrated GPS. When “Search” button is screen tapped, CBMS SCAN communicates with the android system and locks in GPS coordinates. This will be discussed further in Section 3.6.3.

---

9 Only in devices with GPS.
Filling out the questionnaire

This section will go through the pages of SCAN form for CBMS Form 1 VN 07-2013-01. The discussion will be by section of the questionnaire and the corresponding fields to be filled out in the SCAN form and by page. However, keep in mind that page numbers are indicative only and are discussed under the assumption that each question is asked. This is because there are some pages that are entirely hidden since it is not applicable to the respondent. Hence, the features Begin page and End page are used to indicate a page.

In addition, there can be more than one fields in one question such as name, residence, etc. Whenever applicable, a question comprising more than two fields will be expanded.

Note that you do not need internet or any data connection when using this part of SCAN.

INTRODUCTION

This is where you will search for the GPS coordinates of the household, as shown in Figure 3.21. Be sure to turn on the GPS satellite communication of the device before screen tapping “Search.” Figure 3.22 shows how to turn on the GPS in an android tablet.10

1. Swipe-down from the upper edge to display the quick switch panel.
2. Screen tap GPS to turn it on (green).
3. Swipe up or screen tap back button.
4. After going back to page 1, screen tap “Search” and a status bar “searching for GPS satellites” will appear.
5. Wait until “latitude” and “longitude” fields are filled out with GPS location.

10 Another way is to go to Settings> Location services and check “Use GPS satellites.”
Note that the time until it locks in with the GPS will vary depending on the location and device. See Chapter 4.

---

**A. IDENTIFICATION**

This page of the tablet form is the identification page. See Figure 3.23.

**Region.** Screen tap the list to select region. Note that whenever possible/appropriate, this will be set by default, such as the example in the figure.

**Province.** Screen tap the list to select province. Similarly, this will be set by default, if possible.

**City/municipality.** Screen tap the list of cities/municipalities and select the location.

**Zone.** The default is “None,” otherwise, screen tap the list of zones.

**Barangay.** Screen tap the list to select the barangay.

**Purok.** The default is “None,” otherwise, screen tap the list of purok and select one.

**Street.** Type in the street where the household is located.

**House number.** Enter the house number. Note that this is different from household control number.

**Household control number.** Enter the household control number.

**Respondent.** Type in the name of the respondent.

**Interview date.** This is the date of the interview; note that this is automatically set by the tablet.

---

**B. DWELLING**

This page is about the characteristics of the house or dwelling. See Figure 3.24.

(1) **Type of dwelling.** From the options, select the type of dwelling of the household. Note that when “others” is selected, a new field “Other type of dwelling” will be shown. Type in the dwelling type that is not classified in the codes.
(2) Number of bedrooms. Key in the number of bedrooms of the dwelling.

(3) Construction materials for the roof.

(4) Construction materials for the wall.

Questions (3) and (4) have the same codes. Select the appropriate codes as observed.

C. HOUSEHOLD CHARACTERISTICS

This page is about the characteristics of the household. See Figure 3.25.

(5) Number of overseas Filipino workers (OFWs). Key in the number of OFWs.

(6) Number of nuclear families. Enter the number of nuclear families.

(7) With pregnant member. This is a binary question, select “Yes” or “No.”

(8) With solo parent member. This is a binary question, select “Yes” or “No.”

(9) With disabled member. This is a binary question, select “Yes” or “No.”

D. DEMOGRAPHY

This page is dedicated for the member roster. The number of buttons with “Click to input” is dependent on Question (10). See Figure 3.26.

(10) Household size. Key in the number of members in the household, including OFWs. Note that there are several validation routines in this field. For example, in Figure 3.13, when household size is less than or equal the value in Question (5), SCAN will prompt you that you have entered an invalid entry. This is because there must be at least one member of the household present in the dwelling.
Once the household size is entered, corresponding “subforms” for each member will be generated; these can be accessed by buttons with “Click to input” caption. The number of subforms will be adjusted accordingly when the number of household members has changed. The icon \times\ beside the buttons is used to delete the corresponding subform. This will be useful later when there are adjustments in the members.

**Member roster.** To enter multiple household members, the following must be done:

1. Input the total number of family members in the household including OFWs, as shown in Figure 3.13.
2. To enter the details of a household member, screen tap “Click to input.” The page in Figure 3.28 will be shown.
3. Answer Questions (11) to (58) for the household member. Note that the details page may comprise multiple subpages.
4. Once you are done entering the details of a household member, the entry details will be displayed in the main page, as shown in Figure 3.27.
5. Repeat steps 2–3 for each household member.
(i) **Surname.** Note: In iterations two onwards (second member and so on), the surname will be presented as a search list, such as the following:

![Surname Search List]

(ii) **First name.**

(iii) **Middle name.**

(12) **Membership in a nuclear family.** Screen tap the field and choices will be shown, then select in which family the member belongs. Note that the list is dependent on Question (6).

(13) **Relationship to the household head.** Screen tap the field and choices will be shown, then select the relationship. If you select “other relative” (“ibang kamag-anak”), a field for other type of relationship will be shown. Key in the other relationship.

(14) **Sex.** Select either “Male” or “Female.”

(15) **Birthday and age.** This is a calendar/date type of field. Enter the date of birth of the member. “Age” will be automatically generated.

(16) **Birth registry.** Select either “Yes” or “No.”

(17) **Civil status.** Screen tap the field and choices will be shown, then select the member’s civil status.

(18) **Ethnic group.** This is a search list. Partially type in the response and the shortlist will be shown. Screen tap the appropriate answer and it will be set on the field.

(19) **Previous residence.** This comprises the following fields:

   i. **Country.** This is also a search list. Partially type in the name of the country and the shortlist will be shown. Screen tap the appropriate country and it will be set on the field.

   ii. Fields (19).(ii) to (19).(iv) are only shown when the answer in (19).(i) is “Philippines.”

   iii. **Province.** This is another search list. Partially type in the name of the province in the Philippines and the shortlist will be shown. Screen tap the appropriate answer and it will be set on the field.

   iv. **City/municipality.** If the answer in (ii) is inside **Province**, then the display will be a search list. Otherwise, this will just be a textbox. Key in the answer.

v. **Barangay.** Similar to (iii), if the answer in (iii) is inside **City/Municipality**, then the display will be a search list. Otherwise, this will just be a textbox. Key in the answer.

Question (20) is only shown when the answer in (5) is not zero (0).

(20) **OFW indicator.** Select between “Yes” and “No.”

__________ End member page __________

**Swipe to the left or screen tap “>>” at the bottom.**

The whole page for E and F is shown only if the member is at least three years old in Question (15).

__________ Begin member page __________

E. **EDUCATION**

Questions (21) to (i) are shown only if the member is at least three years old in Question (15).

(21) **Education indicator.** Select between “Yes” and “No.”

Questions (22) and (23) are shown only if the answer in (21) is “Yes.” Otherwise, question (24) is the one shown.

(22) **Grade/year level.** Screen tap the field and choices will be shown. Select the appropriate item.

(23) **Public/private.** Select between “Public” and “Private.”

(24) **Reason for not attending school.** Screen tap the field and choices will be shown. Select the appropriate item.

(25) **Educational attainment.** This is divided into the following fields.

   i. **Level of educational attainment.** Almost similar to grade/year level (22).

   ii. **Course.** This is only shown if educational attainment(i) is “Postsecondary,” “College,” or “Post-graduate.” This is a search list, therefore, type in the partial name of the course and select the appropriate item.
iii. Other course. This is only shown if the course (ii) is not in the list or is in “others.” Key in the appropriate response.

Question (26) is shown only if the member is at least 10 years old in Question (15).

(26) Literacy indicator. Select between “Yes” and “No.”

F. COMMUNITY

Questions (27) and (28) are shown only if the member is at least 15 years old in Question (15).

(27) Registered voter. Select between “Yes” and “No.”
(28) Voted during the last election. Select between “Yes” and “No.”
**DATA COLLECTION**

End member page

_Swipe to the left or screen tap “>>” at the bottom._

The whole page for G is shown only if the member is at least five years old in Question (15).

Begin member page

**G. EMPLOYMENT**

(29) _With job._ Select “Yes” or “No.”

Question (30) is shown only if “No” is selected in (29).

(30) _Engaged in business._ Select between “Yes” and “No.”

Questions (32) to (39) are shown only if “Yes” is selected in either (29) or (30).

(31) _Number of occupation._ Key in the number of work or occupation of the member.

(32) _Occupation._ This question is composed of the following fields:

  i. _Occupation description._ Type the full description of the occupation.

  ii. _Occupation code._ Code of the occupation. This is usually checked or filled out by the Field editor. Screen tap the field and choices will be shown. Select the appropriate item.

(33) _Business/industry._ This question is composed of the following fields:

  i. _Business/industry description._ Type the full description of the business or industry.

  ii. _Sector code._ Select the code of the type of business or industry. This is usually checked or filled out by the Field editor. Screen tap the field and choices will be shown. Select the appropriate item.

Questions (34) to (49) are shown only if the member is at least 15 years old in (15).

(34) _Nature of employment._ Screen tap the field and choices will be shown. Select the appropriate item.

(35) _Normal working hours per day._ Key in the number of hours per day during the past week.

**FIGURE 3.31. Member with Job Page**
(36) **Number of hours last week.** Key in the number of hours worked during the past week.

(37) **Want more working hours.** Select between “Yes” and “No.”

(38) **Want extra work.** Select between “Yes” and “No.”

(39) **Class of worker.** Select between “Yes” and “No.”

Questions (40) to (47) are shown only if “No” is selected in both (29) and (30).

(40) **Looking for work.** Select between “Yes” and “No.”

Questions (41) to (43) are shown only if “Yes” is selected in (40).

(41) **First time to look for work.** Select between “Yes” and “No.”

(42) **Means of looking for work.** Screen tap the field and choices will be shown. Select the appropriate item. If “others” is selected, a new field for other means of looking for work will be shown.

(43) **Weeks looking for work.** Key in the number of weeks the member has been looking for work.

Questions (44) and (45) are shown only if “No” is selected in (40).

(44) **Reasons for not looking for work.** Screen tap the field and choices will be shown.

Select the appropriate item. If “others” is selected, a new field for other means of looking for work will be shown.

(45) **Last time the person looked for work.** Screen tap the field and choices will be shown. Select the appropriate item.

(46) **Had the opportunity for work.** Select between “Yes” and “No.”

(47) **Willing to work.** Select between “Yes” and “No.”

(48) **Salaries/wages.** This question is divided into two fields:

i. **In Cash.** Key in the amount the member received in cash.

ii. **In Kind.** Key in the amount the member received in kind.

(49) **SSS member.** Select between “Yes” and “No.”

------------------------End member page------------------------

**H. HEALTH**

Question (50) is shown only if the answer is female in (14) and “Yes” is selected in (7).

(50) **Pregnant member.** Select between “Yes” and “No.”

Question (51) is shown only if “Yes” is selected in (8).

(51) **Solo parent.** Select between “Yes” and “No.”

Questions (52) to (52) are shown only if “Yes” is selected in (9).

(52) **With disability.** Select “Yes” or “No.”

(53) **Type of disability.** Screen tap the field and choices will be shown. Select the appropriate item. Another field for “others” will be shown for other types of disability.

(54) **With PWD ID.** Select between “Yes” and “No.”

Question (55) is shown only if the member is 60 years old and above.

(55) **Senior Citizen's ID.** Select between “Yes” and “No.”

------------------------End member page------------------------

**FIGURE 3.32. Member's Health Page**

---

*Swipe to the left or screen tap “>>” at the bottom.*
I. CRIME

(56) **Victim of crime.** Select between “Yes” and “No.”

(57) **Types of crime.** If the answer in (56) is “Yes,” the following fields for each type of crime will be shown:

i. **Theft.** Key in the amount the member received in cash.

ii. **Rape.** Key in the amount the member received in kind.

iii. **Physical injury.** Key in the amount the member received in kind.

iv. **Carnapping.** Key in the amount the member received in kind.

v. **Cattle rustling.** Key in the amount the member received in kind.

vi. **Other crime.** Key in the amount the member received in kind.

vii. **Specify other crimes.** Key in the amount the member received in kind.

**Swipe to the left or screen tap “>>” at the bottom.**

---

J. NUTRITION

(59) **Nutrition information.** This question is composed of the following:

i. **Nutrition status.** Screen tap the field and choices will be shown. Select the appropriate item.

ii. **Date of report.** This is a time field. Enter the appropriate time.

**Swipe to the left or screen tap “>>” at the bottom.**

---

The whole page for J is shown only if the member is 0–5 years old in Question (15).


K. WATER AND SANITATION

**FIGURE 3.35.** Water and Sanitation

(59) *Drinking water.* Screen tap the field and choices will be shown. Select the appropriate item. When “others” is selected, a field for others will be shown. The description of the drinking water shall be inputted in this field.

Question (60) is shown only if the answer in (59) is not owned, bodies of water, peddler, bottled water, or others.

(61) *Distance from source.* Key in the answer.

(62) *Toilet.* Screen tap the field and choices will be shown. Select the appropriate item. When “others” is selected, a field for others will be shown. The description of the toilet facility shall be inputted in this field.

**FIGURE 3.36. Housing**

(64) *Imputed rent.* Key in the amount of imputed rent.

(65) *With electricity.* Select between “Yes” and “No.”

(66) *Source of electricity.* This will be shown only if “Yes” is selected in (64). This is composed of

i. Electric company. Select between “Yes” and “No.”

ii. Solar. Select between “Yes” and “No.”

iii. Battery. Select between “Yes” and “No.”

iv. Generator. Select between “Yes” and “No.”

v. Others. Select between “Yes” and “No.” If “Yes” is selected, a text field to describe other sources will be shown.

Questions (66) and (67) are expanded by types in (i)-(xxiii). Question (66) will be asked for each of the asset types. Question (67) will only be shown in asset types with number that exceeds 0.

(67) *Number of specific asset.* Key in the number of asset/amenity.

(68) *Asset newly acquired.* Select between “Yes” and “No.”

i. Radio

ii. Television

iii. VCD/VHS/DVD

iv. Stereo/component

v. Karaoke

vi. Refrigerator

vii. Electric fan

viii. Electric iron

ix. Gas stove

x. Washing machine

xi. Microwave oven

L. HOUSING

(63) *Tenure status.* Screen tap the field and choices will be shown. Select the appropriate item.

When “others” is selected, a field for others will be shown where description of the tenure status shall be keyed in.

Question (63) is shown only if the household is not renting in (62).

*Swipe to the left or screen tap “>>” at the bottom.*
M. WASTE MANAGEMENT

(70) System of garbage disposal. This question is spanned by the following:

i. Collected. Select “Yes” or “No.”
ii. Burned. Select “Yes” or “No.”
iii. Composted. Select “Yes” or “No.”
iv. Recycled. Select “Yes” or “No.”
v. Segregated. Select “Yes” or “No.”
vi. Closed pit. Select “Yes” or “No.”
vii. Open pit. Select “Yes” or “No.”
viii. Thrown in the river. Select “Yes” or “No.”
ix. Other methods. Select “Yes” or “No.” When “Yes” is selected, a field for others will be shown where description of the method shall be keyed in.

Questions (71) and (72) are shown only if “Yes” is selected in (70).(i).

(71) Garbage collector. Screen tap the field and choices will be shown. Select the appropriate item. When “others” is selected, a field for others will be shown where description of the collector of waste shall be keyed in.

(72) Frequency of garbage collection. Screen tap the field and choices will be shown. Select the appropriate item. When “others” is selected, a field for others will be shown where the description of the garbage collection frequency shall be keyed in.
FIGURE 3.38. Entrepreneurial Activities

N. SOURCES OF INCOME

N.1 Entrepreneurial Activities

Questions (73) to (83) are spanned by the following:

- Engaged in entrepreneurial activity. Select between “Yes” and “No.”

Questions (A) and (B) are only shown when “Yes” is selected for Engaged in entrepreneurial activity.

(A) Income from the activity in cash. Key in the amount.

(B) Income from the activity in kind. Key in the amount.

N.2 Salaries and Wages

Questions (84) to (94) are spanned by

- Income from the source in cash. Indicate the amount.
- Income from the source in kind. Indicate the amount.

(84) Total income from entrepreneurial activities. This comprises (A) cash and (B) kind.

These are read-only fields and are automatically computed by SCAN based on Questions (73) to (83).

N.3 Other Sources of Income

(86) Net share of crops
(87) Receipts from OFW
(88) Receipts from abroad
(89) Receipts from domestic
(90) Rentals received
(91) Interest earned
(92) Pensions received
(93) Dividends
(94) Other sources of income NEC
DATA COLLECTION

(95) **Total income from other sources.** This comprises (A) cash and (B) kind. These are read-only fields and are automatically computed by SCAN based on Questions (86) to (94).

(96) **Total imputed rent.** This is imputed by SCAN based on Question (63).

(97) **Total income (Cash and Kind).** This comprises (A) cash and (B) kind. These are read-only fields and are automatically computed by SCAN.

(98) **Total income.** This is a read-only field and is automatically computed by SCAN.

---

**Swipe to the left or screen tap “>>” at the bottom.**

The whole page for O, i.e. Questions (99) to (104) is only shown if “Yes” is selected in (73).

---

**O. AGRICULTURE-FARMING**

**FIGURE 3.39. Agriculture-Farming Management**

---

(99) **Tenure in agricultural land.** Screen tap the field and choices will be shown. Select the appropriate item. When “others” is selected, a field for others will be shown where description of tenure status in agricultural land is keyed in.

(100) **Area of farm.** Screen tap the field and choices will be shown. Select the appropriate item.

Note: An auxiliary field “number of types of crops harvested” will appear to generate the types of crop. Key in the response and iterations of Questions (101) and (102) will be shown.

---

**This part is an iterative section**

(101) **Type of crop.** Screen tap the field and choices will be shown. Select the appropriate item.

(102) **Volume harvested.** Key in the value.

---

**End of an iterative section**

(103) **Agricultural equipment.** Select between “Yes” and “No.”

(104) **Own agricultural equipment.** Select between “Yes” and “No.” This item will be shown only if “Yes” is selected in (103).

Questions (103) and (104) will be spanned by the following types:

i. Beast of burden
ii. Plow
iii. Harrow
iv. Mower
v. Thresher/corn sheller
vi. Insecticide/pesticide sprayer
vii. Farm tractor
viii. Hand tractor
ix. Turtle/mudboat
x. Planter/transplanter/dryer
xi. Mechanical dryer
xii. Multipurpose drying pavement
xiii. Rice/corn/feed mill
xiv. Harvester
xv. Warehouse granary
xvi. Farm shed
xvii. Irrigation pump
xviii. Others
P. LIVESTOCK RAISING

(105) Type of livestock/product. Select between “Yes” and “No.” When in “Others,” selecting “Yes” will show another field for description.

(106) Volume/number. Key in the volume/number of the product sold.

Questions (105) and (106) will be spanned by the following products:

i. Live animals. This will be spanned by the following animal types:
   (a) Hog
   (b) Goat
   (c) Carabao
   (d) Cow
   (e) Chicken
   (f) Duck
   (g) Others

ii. Meat. This will be spanned by the following animal types:
   (a) Hog/sow
   (b) Goat
   (c) Carabao
   (d) Cow
   (e) Chicken
   (f) Duck
   (g) Others

iii. Milk. This will be spanned by the following animal types:
   (a) Goat
   (b) Carabao
   (c) Cow
   (d) Others

iv. Eggs. This will be spanned by the following animal types:
   (a) Chicken
   (b) Duck
   (c) Others

v. Other product. This will be spanned by the following animal types:
   (a) Hog/sow
   (b) Goat
   (c) Carabao
   (d) Cow

Q. FISHING

(107) Fishing. This question is spanned by the following:
   (1) Fish catching. Select between “Yes” and “No.”
   (2) Culturing fish. Select between “Yes” and “No.”

Question (108) is only shown if “Yes” is selected in (107).(1).

(108) Location of catching fish. Screen tap the appropriate answer

(109) Use boat. Indicate code “1” if Yes.

(110) Own boat. Indicate code “1” if Yes.
Questions (109) and (110) are spanned by the following types of boats:

1. Boat with engine and outrigger
2. Boat with engine but without outrigger
3. Boat without engine but with outrigger
4. Boat without engine and outrigger
5. Raft

Note: An auxiliary field “number of types of equipment” will appear to generate the types of equipment. Key in the response and iterations of Questions (111) and (112) will be shown.

(111) Type of gears/accessories/devices. Screen tap the field and choices will be shown. Select the appropriate item.

(112) Owned equipment. Select between “Yes” and “No.”

(113) Aquatic farm. Select between “Yes” and “No.” This will be spanned by the following types:

i. Fishpond
ii. Fishpen
iii. Fishcage
iv. Seaweed farm
v. Oyster farm
vi. Mussel farm
vii. Fish tank
viii. Hatchery
ix. Others

Note: An auxiliary field “number of types of aquatic animals harvested” will appear to generate the types of animals/fish. Key in the response and iterations of Questions (114) and (115) will be shown.

(114) Type of aquatic animal. Screen tap the field and choices will be shown. Select the appropriate item.

(115) Volume harvested. Key in the volume.

End page

Swipe to the left or screen tap “>>” at the bottom.
R. CLIMATE CHANGE

(116) Years in dwelling unit. Screen tap the appropriate choice.

Questions (117) to (147) are shown only if “3 years and above” is indicated in (116).

R.1 Agriculture

FIGURE 3.42. Climate Change (Agriculture)

(118) Change in harvest. Screen tap the appropriate choice.

Question (119) is shown only if “Decrease” is indicated in (118).

(119) Primary reason for the decrease in harvest. Screen tap the appropriate choice. If “others” is selected, another field will appear to present the other descriptions.

(120) Change in crops. Select between “Yes” and “No.”

(121) Reason for change in crops. This is shown only if “Yes” is selected in (120). Screen tap the appropriate choice. If “others” is selected, another field will appear to present the other descriptions.

Questions (120) and (121) are spanned by

i. Same crops, and
ii. Primary crops.

(122) Insurance. Select between “Yes” and “No.”

(123) Insurance provider. This is shown only if “Yes” is selected in (122). Screen tap the appropriate choice.

If “others” is selected, another field will appear to present the other descriptions.

Questions (122) and (123) are spanned by

i. Crop insurance, and
ii. Agriculture equipment insurance.

R.2 Livestock

Question (124) will not be shown if “not more than 3 years” is indicated in (116) or “No” is selected in (74).

(124) Years in livestock/poultry. Screen tap the appropriate choice.

Questions (125) to (128) are shown only if “3 years and above” is indicated in (124).

(125) Change in the number of livestock and poultry. Screen tap the appropriate choice.

Question (126) is shown only if “Decrease” is indicated in (125).

(126) Primary reason for the decrease in number of livestock and poultry. Screen tap the appropriate choice.

(127) With livestock/poultry insurance. Select between “Yes” and “No.”
(128) **Insurance provider.** This is shown only if “Yes” is selected in (127). **Screen tap** the appropriate choice.

If “others” is selected, another field will appear to present the other descriptions.

**R.3 Fishery**

Question (129) will not be shown if “not more than 3 years” is indicated in (116) or “No” is selected in (75).

(129) **Number of years in fishing.** **Screen tap** the appropriate choice.

Questions (130) to (133) are shown only if “3 years and above” is indicated in (129).

(130) **Change in fish catch.**

Question (131) is shown only if “Decrease” is indicated in (130).

(131) **Primary reason for the decrease in fish catch.** **Screen tap** the appropriate choice.

(132) **With fisheries insurance.** Select between “Yes” and “No.”

(133) **Insurance provider.** This is shown only if “Yes” is selected in (132). **Screen tap** the appropriate choice.

If “others” is selected, another field will appear to present the other descriptions.
Compared to 3 years ago, is the temperature hotter now in your area? Select between “Yes” and “No.”

R.5 Electricity

Compared to 3 years ago, are brownouts more frequent now in your area? Select between “Yes” and “No.”

R.6 Sea level

Sea level 3 years ago. Screen tap the appropriate answer.

R.7 Water supply

Water supply 3 years ago. Screen tap the appropriate answer.

Primary reason for the decrease in water supply. Shown only if “Decrease” is indicated in (137).

R.8 Flood

Compared to 3 years ago, do floods occur more often in your area now? Screen tap the appropriate answer.

Three years ago, how long does it usually take for the flood to subside? Screen tap the appropriate answer.

During the past 12 months, how long does it usually take for the flood to subside? Screen tap the appropriate answer.

R.9 Drought

Occurrence of drought. Screen tap the appropriate answer.

Duration of drought. This is shown only if “Yes” is selected in (142). Screen tap the appropriate answer.

R.10 Evacuation

Moved out/Left previous dwelling unit. Select between “Yes” and “No.”

Primary reason for moving out/evacuating from the previous dwelling unit. Shown only if “Yes” is selected in (144). Screen tap the appropriate answer. The “Others” field will be shown as appropriate.

Temporarily evacuated house due to any calamity. Select between “Yes” and “No.”

Place of stay during evacuation. Shown only when “Yes” is selected in (146). Screen tap the appropriate answer. The “Others” field will be shown as appropriate.

R.11 Calamity

Experienced this type of calamity. Select between “Yes” and “No.”

Questions (149) to (151) are shown only if “Yes” is selected in (148).

Frequency of calamity. Key in the number of times.
(150) Received aid. Select between “Yes” and “No.”

(151) Source of aid. Screen tap the appropriate answer. The “Other” field will be shown when others is selected.

Questions (148) to (151) are spanned by the following:

i. Typhoon
ii. Flood
iii. Drought
iv. Earthquake
v. Volcanic eruption
vi. Landslide
vii. Tsunami
viii. Fire
ix. Forest fire
x. Armed conflict
xi. Others

R.12 Disaster preparedness

(152) With disaster kit. Select between “Yes” and “No.”

Questions (153) and (154) are shown only if “Yes” is selected in (152).

(153) Type of kit. Select between Yes” and “No.”

(154) Days to last. Key in the number of days.

Question (155) is spanned by the following:

i. Water
ii. Food (canned goods, biscuit, bread)
iii. Matches/lighter
iv. Flashlight/emergency light
v. Radio/transistor radio
vi. Candle
vii. Medical kit
viii. Whistle
ix. Clothes
x. Blanket
xi. Battery
xii. Important documents
xiii. Other types

Question (154) is spanned by (i), (ii), and (xiii).

FIGURE 3.47. Hunger
S. HUNGER

(155) Experienced hunger. Select between “Yes” and “No.”

Questions (156) and (157) are only shown when “Yes” is selected in (155). Also, (156) and (157) are spanned by first, second, and third months from the date of interview.

(156) Month experienced hunger. Check if the selected month is the last three months from the interview. For instance, if the month of interview is August, consecutive months must be July, June, and April.

(157) Number of days. Key in the number of days for each month.

If “Yes” is selected in (158), an auxiliary field “number of members who died” will appear. This field will generate the roster. Key in the number. Follow the instructions similar to filling out the members of the household.

This part is an iterative section

Screen tap “Click to input”

T. HOUSEHOLD MEMBERS WHO DIED

FIGURE 3.48. Members Who Died

(158) Noong nakaraang labindalawang buwan, mayroon ba kayong dating miyembro ng sambahayan na namatay? Was there any household member who died in the past 12 months?

Yes
No

(158.1) Ilan ang namatay? How many deaths?

End member page

End of an iterative section

U. PROGRAMS

(163) Type of program. Select between “Yes” and “No” for each type.

Questions (164) to (166) are only shown when “Yes” is selected in (163).

(164) Name of the program. Key in the name of the program.

(165) Number of beneficiaries in the household. Key in the number of members.

(166) Implementer. Screen tap the choices, the “others” field will be shown accordingly.
Questions (165) and (166) are spanned by the following:

i. Sustainable Livelihood Program
ii. Food-For-School
iii. Food-For-Work
iv. Cash-For-Work
v. Social Pension for the indigent senior citizens
vi. CCT/4Ps
vii. CARP
viii. Day care center
ix. Philhealth - OFW
x. Philhealth - Employed
xi. Philhealth - Individually Paying
xii. Philhealth - Sponsored
xiii. Philhealth - Lifetime

Follow the instructions similar to filling out the members of the household for Questions (164)–(166).

An auxiliary field “number of other programs received” will appear that will generate the roster. Key in the number.

This part is an iterative section

Screen tap “Click to input”
Reviewing Filled Out Forms

Reviewing forms is almost similar to creating it.

1. Go to main screen (see Figure 3.8).
2. Select a form (see Figure 3.9).
3. The button “View existing forms” will be enabled. Screen tap it.
4. Figure 3.51 will be shown.

The filled out forms will be listed labeled by “internal ID”—“Respondent”—“Validation status”—“Sending status.” The “internal ID” is the identification of the system. If it is already sent, it will be updated by the PORTAL, such as in Figure 3.51. You can go back to editing the form as in Section 3.6 by screen tapping the corresponding form.

Validation

A form can be marked as validated if

- There are no invalid entries in the form—marked as “Contains invalid content,”
- The form is still marked as “Not validated,”
- The user who logged in is a field editor, and
- The user who will be marking it is sure that the form can be accepted as a valid case.

Deleting forms

To delete a form, simply screen tap –, and Figure 3.52 will be shown. Select a form and screen tap “delete.” Note that the list contains both validated and non-validated ones so be careful in deleting forms!
Submitting data

Form data can be sent to PORTAL from SCAN if:

- It is marked as “Valid,” and
- The user who logged has access to data sending facility, e.g., a field editor.

To use the data sending facility, screen tap “Send data” on the main screen. Figure 3.54 will be shown. Note that the list here will only include validated but unsent forms. Select forms to send by screen tapping each box. Screen tap “Send to Server” to start submitting data. An “Uploading” screen will prompt the user. Wait until it disappears. Text display of sent forms are in GREEN color while forms that failed to be sent are in RED color.

![FIGURE 3.54. Validating a Form](image)
CHAPTER 4
CBMS APP FIELD OPERATIONS

This chapter is supplementary to the main CBMS Field Operations Manual. Data quality starts with data collection, therefore some operational guides essential for the APP field should be discussed. Factors affecting the field operation that is essential to APP will be discussed here and these include organization and personnel, device-enumerator assignment, device rotation, power management, data connection and location, security and timing.

Organization and Personnel

In APP, there is a slight difference in personnel composition when compared to the CBMS Field Operations Manual. The CBMS team is composed of the CBMS Technical Working Group (CBMS-TWG), which works with the FIELD EDITOR, the FIELD COORDINATOR, and the ENUMERATOR. Each of them has integral roles to play in preparatory, field census, and post-census tasks.

CBMS-TWG

The CBMS-TWG of the LGU is the lead actor in the implementation of CBMS and is in charge of the overall implementation of CBMS-related activities. The CBMS TWG undertakes the following tasks:

1. Preparatory tasks
   • Identify the enumerators, field editors, and field coordinators.
   • Register all devices in the CBMS PORTAL.
   • Generate and furnish usernames/workgroups of FIELD EDITOR, FIELD COORDINATOR, and ENUMERATOR.
   • Perform all other preparatory tasks for both SCAN and PORTAL, such as installation and form downloading.
   • Undertake overall coordination of CBMS implementation in the city/municipality.

2. Census proper
   • Ensure the timely and efficient distribution of survey materials and devices/tablets.
   • Assist the FIELD COORDINATOR and the FIELD EDITOR whenever a problem arises in their assigned locations.
   • Monitor the performance and coordination done by the FIELD COORDINATOR with their FIELD EDITOR and ENUMERATOR with the aid of PORTAL.
   • Provide logistical support to the FIELD COORDINATOR in the conduct of regular visits to the field.
   • Prepare summary reports on the progress of data collection on a daily basis.
   • Double-check the accomplishment of HPQs and performs random checking.

3. Post-census
   • Download all data from the workgroup.
   • Consolidate all submitted finalized data.

Field Coordinator

The FIELD COORDINATOR is the person in charge of the overall pace of enumeration in his/her given area. The major duties and responsibilities of the field coordinator are as follows:

1. Preparatory tasks
   • Attend training on CBMS Module 1.
**Field Editor**

The FIELD EDITOR serves as the counter-checker of the interview data from ENUMERATORS. His/her tasks include the following:

1. **Preparatory tasks**
   - Attend training on CBMS Module 1.
   - Take responsibility/accountability of one gadget to be used in data collection.

2. **Census proper**
   - Help the CBMS-TWG perform preparatory tasks.
   - Swap tablet with enumerators systematically.
   - Obtain nutrition status of children less than 5 years old from barangay health workers (BHW) or barangay nutrition scholars (BNS) and record them accordingly.
   - Provide codes to specific sections in the questionnaire.
   - Random check the encoded information for consistency.
   - Coordinate and return to the enumerators all the household data forms with incomplete entries (e.g., occupation such as manager needs to be more specific, such as sales manager, restaurant manager, etc.).
   - Validate and send completed and finalized information to CBMS PORTAL.
   - Maintain a record of the number of submitted HPQs and provide the FIELD COORDINATOR with regular updates.

3. **Post-census**
   - Turn over the gadget to the field coordinator after data collection.

**Enumerator**

The quality of data greatly depends on the ENUMERATOR’s ability to properly collect information. Aside from his/her intrinsic roles, his/her tasks are as follows:

- Assign target areas for each ENUMERATOR and plan a systematic way for ENUMERATORS to interview households by determining the organization of neighborhoods based on the spot maps.
- Facilitate the distribution of questionnaires with pre-assigned HH ID, callback form, household sticker, and other materials for the survey.
- Coordinate with other field supervisors in assigning ID numbers for all households in the barangay.

2. **Census proper**
   - Directly coordinate the enumerators in the field and ensure that data collection procedures are followed.
   - Conduct random interviews to verify gathered information from selected household.
   - Assist enumerators with any challenges that may arise in the field.
   - Conduct enumeration in case enumerators under him/her fall short of their target.
   - Coordinate with barangay officials on the progress of data collection activities and ask for assistance if there are households that refuse to be interviewed.
   - Monitor the progress of CBMS data collection operations at their designated barangays using the monitoring form.
   - Coordinate with the technical working group (TWG) to monitor the progress of data collection activities.
   - Maintain the integrity of devices.
   - Ensure the complete coverage of households in assigned barangay/s.
   - Provide a copy of the callback forms to the barangays concerned.

3. **Post-census**
   - Download all data from the workgroup.
   - Consolidate all the submitted and finalized data.

---

15 Remove unnecessary programs/applications and content that would likely impede device performance.
16 See CBMS Field Operations Manual.
1. **Preparatory tasks**
   - Attend training on CBMS Module 1.
   - Take responsibility/accountability for one gadget to be used in data collection.

2. **Census proper**
   - Use gadget during interviews with household respondents in assigned areas.
   - Ensure that all households in the assigned areas are interviewed.
   - Ensure that all Household Profile (HPQ) Forms have been completely filled out, encoded correctly, and accounted for.
   - Meet with the field coordinator on a daily or weekly basis to report updates, submit household profile questionnaires and callback forms, and receive additional instructions.
   - Return to the household and ask for missing information, if any, after the field-editing conducted by the field editor.
   - Maintain a record of those who were not interviewed (callback form).
   - Ensure the safety of the gadget used in the data collection.
   - Ensure that the gadget is used for data collection only.
   - Edit and submit finalized data to the field editor.

3. **Post-census**
   - Turn over the gadget to the field coordinator after data collection.

**Minimum Qualifications of a FIELD COORDINATOR, FIELD EDITOR, and ENUMERATOR**

In order for the personnel to perform their tasks, some basic qualifications must be strictly observed:

1. The selected personnel must be a resident of the barangay.
2. He or she must be at least a high school graduate, preferably a college graduate.
3. He or she must be able to read, write legibly, and do simple computations.
4. He or she must be computer literate.
5. He or she must be knowledgeable in Android platform (FIELD EDITOR and ENUMERATOR).

The suggested enumerators are barangay health workers (BHW) and nutrition scholars (BNS). Other community volunteers can also be tapped, such as teachers, students, barangay officials, etc.

**General instructions**

**Form operations**

This section discusses how to operate the electronic forms properly and elicit responses correctly.

Note that in no circumstance shall a user use a username other than his/her username.

Consult the FIELD EDITOR or CBMS-TWG in securing a user name and password.

**Recording the answers**

- Get familiarized with the device. The appearance of forms and controls may differ from one device to another.
- Be wary of spelling and ensure that each word is correct.
- Do not read to your respondents the displayed choices in the form. Let the respondents give their answers to your questions.

**FIGURE 4.1. Do not read options/Choices, Texts in Bold and in Capital Letters**
• Since the SCAN does not accept multiple answers, when a respondent gives multiple answers, ask him/her to prioritize the answers, and then get the first one.
• Do not read to the respondent the words, phrases, and statements that are written in bold letters and in CAPITAL LETTERS. These are intended to guide you in the progress of the interview and, hence, should be read silently.
• Skipping some questions is already taken care of by the device, hence, you cannot skip a required question.
• Do not worry about the not applicable items.
• For open-ended responses/write-in entries, the appropriate responses/entries should be entered in the text field or in the space provided.

Checking completed forms

It is very important to record all answers in the most specific form possible, particularly the open-ended or text answers. This is because the FIELD EDITORs are going to check if the assigned classification (or code) is correct. These are (but not limited to) the following:

• Classification of responses, e.g., employment—both occupation and industry.
• Examination of “others” and reclassification, when necessary.

The reviewer of the form data must go through all the pages to see if the form is properly filled out. Recall that in Chapter 3, the item “Contains invalid...
content” indicate that there are still required items to be filled out. The FIELD EDITOR should return the form or device immediately to the corresponding enumerator for completion.

If the form is filled out completely and correctly, the FIELD EDITOR can mark the form as “Valid.” See Section 3.7 on how to mark the form as “Valid.”

Submission

When you get to the Submission or Sending part in the form data, this indicates that you have reached the finalization of data and that the data is ready to be processed. These are the requirements before sending the data:

1. Sender must log in as FIELD EDITOR or CBMS-TWG.
2. Ensure that internet connection is available. There is no need to perform “Log in to server.” Simply “Log in” locally.
3. Ensure that the data to be sent are already finalized and are considered valid.

See Section 3.8 for a more detailed discussion on how to submit form data using CBMS SCAN. Always work with maximum efficiency. Form data can be sent as a bulk to maximize internet connection and save on steps.

Copying Form Data to Hard Drive

CBMS PORTAL only serves as a host of the data being collected. One can view this as mirror copies only of the “original” data, which are in the mobile device/tablet. Hence, it is required that the data in the tablet be copied to a local hard drive owned by the LGU.

It is important that you have a catalog of your devices to avoid confusion (see Section 4.2.4). Follow these steps in copying form data to your hard drive:

1. Connect your tablet via USB (see Figure 4.4 for the needed cable).17
2. Browse your desktop, e.g., using “Windows Explorer.”
3. Go to [device name]\[internal storage]. In Figure 4.5, the device name is “GT-P3100” and the internal storage is “Tablet.”
4. Look for “cbmsandroid” folder, right click and click “copy.”
5. Go to “C:\CBMSDatabase\REGN\PROV\MUN.” The example in Figure 4.6 is Pasay: “C:\CBMSDatabase\13\76\05”

FIGURE 4.6. Rename “cbmsandroid”

Figure 4.4. A Typical Samsung USB Cable

Figure 4.5. Copy “cbmsandroid” Folder

Figure 4.6. Rename “cbmsandroid”

17 Make sure that you have installed the latest drivers for a specific operating system. See your device manual for more information.
6. Right click and paste.
7. **Rename** the folder according to the naming convention you have adopted, e.g., “cbmsandroid-1”.

**Tablet-personnel assignment: Device options**

Each Enumerator should have one device or tablet and another one for the Field Editor. This is the basic cost component of CBMS-APP. This entails a careful setting of accountability mechanisms.

The number of devices needed by an LGU may vary depending on many things that include:

1. number of households,
2. number of households that can be covered per day,
3. duration of enumeration, and
4. allowable Field Editor: Enumerator (ratio).

The cost may also vary depending on the available infrastructure in place in the LGU. There can be three main options:

1. All devices are data-enabled (high-end),
2. All devices use WIFI only but with pocket-WIFI option (mid-level), and
3. All devices use WIFI only with internet rental (low-end). These are some of the costs to be considered:

<table>
<thead>
<tr>
<th>Device</th>
<th>Approx. cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tablet (WIFI only)</td>
<td>Php 9,000</td>
</tr>
<tr>
<td>Tablet (3G/WIFI)</td>
<td>12,000</td>
</tr>
<tr>
<td>Battery pack</td>
<td>2,500</td>
</tr>
<tr>
<td>Pocket WIFI</td>
<td>3,000</td>
</tr>
<tr>
<td>Internet rental/hr</td>
<td>50</td>
</tr>
<tr>
<td>Unlimited data (credit)</td>
<td>200</td>
</tr>
</tbody>
</table>

The number of devices for enumerators is determined by this formula:

\[
\text{Number of households} = \frac{\text{Number of HH per day} \times \text{number of working days}}{10 \times 22 \times 2}
\]

Hence, in a municipality with household population of 110,000 to be covered in two months at 10 households per day, the number of tablets can be approximated as 110,000/(10 × 22 × 2) = 250. On the other hand, the number of tablets for Field Editors can be approximated by dividing the number of devices for enumerators by the ratio of Field Editor to Enumerator: 250/4 = 63. It is recommended that each team has a Pocket-WIFI.

To illustrate, let us see each option, given a 110,000 number of households, at 1:4 Enumerator and Field Editor ratio:

Option (1) Each Enumerator and Field Editor has a mobile device with both WIFI and 3G connections. There will be cost for unlimited (unli) data credit, e.g., per week for each of the data sender. See Table 4.2.
TABLE 4.2. Device Option (1)

<table>
<thead>
<tr>
<th>Months</th>
<th>No. of tablets</th>
<th>Total equipment cost (Php)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enumeration</td>
<td>Editing</td>
</tr>
<tr>
<td>1</td>
<td>500</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>250</td>
<td>63</td>
</tr>
<tr>
<td>3</td>
<td>167</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>125</td>
<td>31</td>
</tr>
</tbody>
</table>

Option (2) Each ENUMERATOR and FIELD EDITOR has a mobile device with WIFI-only connection. Pocket WIFI replaces built-in 3G, hence, there will be cost for unli-data credit. Notice that the costs are way lower compared to Option (1) due to the removal of 3G chip. See Table 4.3.

TABLE 4.3. Device Option (2)

<table>
<thead>
<tr>
<th>Months</th>
<th>No. of tablets</th>
<th>Total equipment cost (Php)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enumeration</td>
<td>Editing</td>
</tr>
<tr>
<td>1</td>
<td>500</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>250</td>
<td>63</td>
</tr>
<tr>
<td>3</td>
<td>167</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>125</td>
<td>31</td>
</tr>
</tbody>
</table>

*plus credit

Option (3) Looking at Table 4.4, the incurred cost is only on internet rental, assuming there are internet shops or services. The approximate cost is given on assumption that the FIELD EDITOR sends data weekly.

TABLE 4.4: Device Option (3)

<table>
<thead>
<tr>
<th>Months</th>
<th>No. of tablets</th>
<th>Total equipment cost (Php)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enumeration</td>
<td>Editing</td>
</tr>
<tr>
<td>1</td>
<td>500</td>
<td>125</td>
</tr>
<tr>
<td>2</td>
<td>250</td>
<td>63</td>
</tr>
<tr>
<td>3</td>
<td>167</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>125</td>
<td>31</td>
</tr>
</tbody>
</table>

It is possible that there are more than one enumerator using a single tablet. This is allowed to maximize the utility of the mobile device. Hence, it is also possible that more than one FIELD EDITOR are using a single tablet. Hence, it is important to guide the rotation of devices (see Section 4.2.4).
**Device operation**

Operating and managing the device efficiently can boost data quality and lead to maximum speed.

**Device queuing, rotation and timing**

To manage the devices, apart from monitoring them in CBMS PORTAL, it is vital to simply catalog them on paper for monitoring purposes, especially in the field. For instance, the devices or tablets can be labeled using stickers by assigning internal serial numbers (Figure 4.8).

![Figure 4.8. Assigning Internal Serial Number](image)

After assigning the devices to ENUMERATORS and FIELD EDITORS, the next step is to manage the devices for interview-checking purposes. A typical flow of device exchange is shown in Figure 4.9.

An ENUMERATOR can interview 8–10 households per day. The device used (e.g., Device A), shall be passed on to the FIELD EDITOR, and the device held currently by the FIELD EDITOR.

The cycle will be iterative. The case is different when there are more devices and this will depend partly on the time/shift of the ENUMERATORS. For instance, in an urban area where households are being interviewed during night time, the FIELD EDITORS can do the editing during the day. However, the next concern is the volume of interviews that will be passed on to the FIELD EDITOR.

![FIGURE 4.9. Typical Flow of Device Use](image)

Table 4.5 shows how the interview forms are passed on to the FIELD EDITOR for checking assuming a ratio of 1:4 FIELD EDITOR to ENUMERATOR ratio, and 10 households per day. On week 1, ENUMERATOR 1 passes 10 forms on Monday, ENUMERATOR 2 passes 20 forms on Tuesday, and so on. In the long run, the FIELD EDITOR will be regularly checking 40 interview forms per day on the average. This will help illustrate how the tablet will rotate among the team to be checked.

**Power management**

Another factor that must be given importance is power usage. The advantage of capturing data through mobile devices may be rendered futile when power is not managed effectively. In APP field operation, the mobile device is as good only as its battery life. To get the most output from the mobile device in terms of power longevity, everyone must take note of the following guidelines:

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19 Based on average CBMS survey duration.
Table 4.5: How Devices are Passed on to a Field Editor

<table>
<thead>
<tr>
<th>Week</th>
<th>Day</th>
<th>Number of forms to be checked</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ENUMERATOR 1</td>
</tr>
<tr>
<td>Week 1</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Week 2</td>
<td>1</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>–</td>
</tr>
</tbody>
</table>

- As much as possible, start the enumeration with full battery. If the enumeration is during the day, before leaving for field work, ensure that the device is fully charged. For those with battery packs, ensure that these are fully charged as well.
- Ensure that the device is devoted to data capture only. Avoid unnecessary usage particularly on field work. Remove unnecessary applications particularly those running on the background (e.g., push services, games, etc.).
- Avoid using non-compatible charger, always check your device manual.
- Turn off system services that are not being used.
  - During interviews, WIFI is not needed, so turn it off. For devices with 3G/4G, disable data connection.
  - After getting GPS locations, turn off location services.
  - Disable auto-rotate as well as this drains the battery.
  - When the device is not in use, activate “power saving mode.”
- Try to recharge the device when you have the chance during the enumeration. It is better to finish the day with a couple of battery bars.
- Identify a charging station for your team. For instance, if a team is assigned to a barangay, coordinate with barangay officials regarding charging in the barangay hall or other barangay premises. For those with battery packs, recharge them as well.

**Data connection and location**

You only need data connection when registering/synchronizing device with the PORTAL and sending form data. ENUMERATORS do not have to worry about this; sending form data is the FIELD EDITOR’s task. FIELD EDITORS should use data connection with prudence. Hence, it is recommended to send data by bulk.

In capturing location, data connection is not needed provided that you have the prescribed specifications, as discussed in Chapter 3. In capturing location, ensure that

- the GPS icon on the upper left is activated, and
- the mobile device with you is in an open-air location. The GPS cannot lock in locations inside buildings.

In the household questionnaire, the GPS field comes first. This is to get the location while introducing CBMS to the respondent. In the event that the interview went quickly and the GPS was not yet captured during the first part of the interview, do not forget to go back and lock in the location. FIELD EDITORS cannot mark the interview as valid if it has no GPS location.
See the discussion on GPS in the General Field Operations Manual to know more about GPS.

**Taking care of the device**

As in APP, the mobile device virtually replaces the paper and pencil, thus, users should take utmost care of the device. The cost allocations discussed in this chapter are very basic. Casing and screen protectors, in addition to umbrellas, may be needed especially when the field operation is expected to be conducted during the rainy season.

Security issues are inevitable in this undertaking. Accountability mechanisms should be established based on existing ones in the LGU. Each user should be conscious of the device on field. Another issue is security on the field. In areas where theft is a threat, additional caution should be put in place. Coordinate with local officials to prevent theft.

**Summary**

Fielding the CBMS APP depends on awareness on the roles and responsibilities of each basic player—CBMS-TWG, FIELD COORDINATOR, FIELD EDITOR, and ENUMERATOR. The role template is almost similar to a paper-based data collection; in this case, the mobile devices have effected additional roles particularly to fundamental users. The efficiency of the APP depends on how well the undertaking has been planned and designed.

The basic process for the mobile device is registration, enumeration, checking and validation, and data sending/submission. Data connection is only needed at both ends—registration and submission. Location services or GPS is only needed at every start (or end) of an interview.

The usefulness of the CBMS APP depends also on how the users operate and take care of the devices. These factors should be incorporated in the planning and design stage of the system in each LGU.
What Is Field Editing?

At the end of survey operations every day, the enumerator should submit to the field supervisor/coordinator the accomplished Household Profile Questionnaires (HPQs). Before doing so, the enumerator shall edit the accomplished HPQs for completeness and accuracy of entries. He/she should make sure that all households assigned to him/her are properly accounted and that instructions in the manual were followed.

Through editing, errors during enumeration are detected and can be verified and corrected. This would then help minimize problems in the latter stages of the implementation of the Community-Based Monitoring System (CBMS) of a local government unit (LGU). For inconsistent entries that cannot be corrected based on the answers in the other items in the HPQ, the enumerator should refer to the field editor/coordinator. If the problems are major, the enumerator should go back to interview the respondent again. Note that under NO circumstances should the enumerators/supervisors make up an answer.

General Guidelines in Field Editing Household Profile Questionnaires

- Always check for missing pages in the questionnaire.
- Check if the upper right hand portion of the pages of the questionnaire have identification (ID) numbers written.
- Always refer to this manual for some details. This ensures uniformity in the concepts, definitions, and procedures to be done.

Specific Guidelines in Field Editing the CBMS Household Profile Questionnaire (HPQ)

Identification

- Identification of Location – Check if the province, city/municipality, zone, barangay, purok/sitio, street, and house number are specified.
- Household Identification Number – Check if there is an entry. Also, check if the ID number was also entered on every page of the questionnaire. If not, enter the ID number on the upper right hand corner of each page of the questionnaire.
- Coordinates – Check if the entries are in decimal degrees. Also, check for the lowest possible reading of accuracy of the global positioning system (GPS) before recording.
- Name of Respondent – Check the full name of the respondent. See if the name appears in the list of household members that can be found on pages 2 (column 11), 4, and 6 of the questionnaire.
• Date of Interview – Check the date of the interview.
• Time Started – Check if the time of the start of interview is written. Make sure AM or PM is indicated.
• Time Finished – Check if the time of the end of interview is written. Make sure AM or PM is indicated.
• Name and Signature of Enumerator – Check the name and signature of the enumerator.
• Name and Signature of Field Editor/Coordinator – Check the name and signature of the field editor/coordinator.

Housing Characteristics

Question 1: Type of Building where Household Resides

Check if the appropriate code for the type of building/house/dwelling unit is entered in the box. The corresponding codes are “1” to “5.” If the answer is “5” (Others), check if there is an entry indicating the type of building/house/dwelling unit not identified in the choices.

Question 2: Number of Bedrooms

A valid entry to this question is the actual number of bedrooms in the housing unit. Zero ("0") entries are acceptable if there are no separate quarters for sleeping.

Question 3: Construction Materials Used on the Roof of the House

A valid code should be within the range of “1” and “7,” corresponding to the classification of the materials used on the roof of the house (enumerated below this question).

Questions 4: Construction Materials Used for the Outer Walls of the House

A valid code should be within the range of “1” and “7,” corresponding to the classification of the materials used for the walls of the house, enumerated below this question.

Household Characteristics

Question 5: Number of Household Members who are Overseas Workers

Valid entries are the actual number of overseas workers in the household. If no household member works overseas, “0” entries are acceptable.

Question 6: Number of Nuclear Families in the Household

Valid entries are the actual number of nuclear families in the household. Zero ("0") entries are not acceptable.

Question 7: Pregnant Members of the Household

Valid codes are “1” (Yes) and “2” (No).

Question 8: Solo Parent Members of the Household

Valid codes are “1” (Yes) and “2” (No).

Question 9: Disabled Members of the Household

Valid codes are “1” (Yes) and “2” (No).

Demography

COLUMN 10A: NUMBER OF HOUSEHOLD MEMBERS

Check if one of the precoded numbers, indicating the number of household members, is encircled. The range is between “1” to “10.”
Also, ensure that the question “Are there more than 10 members in this household?” has an entry of code “1” (Yes) or “2” (No). If the answer is “1” (Yes), check if the enumerator submitted another form indicating the record of the other household members. Check also if the preprinted line number in the additional form/s is changed from “1” to “11”, “2” to “12”, and so on.

**Question 11: Names of Each Household Member**

Read carefully the name of each household member to spot any fictitious or repeatedly reported name. The orderootnote{Based on the Enumerator’s Manual of the 2010 Census of Population and Housing of the National Statistics Office.} of listings should be as follows:

- Head
- Spouse of the household head
- Never-married children of head/spouse from oldest to youngest, regardless of sex, and never-married children of head/spouse from previous marriage (if any) from oldest to youngest, regardless of sex
- Ever-married children of head/spouse and their families from oldest to youngest (for instance, son first, followed by daughter-in-law, then grandchildren; or son-in-law first, followed by daughter, then grandchildren, as the case may be)
- Other relatives of the head such as parents, grandparents, brothers, sisters, parents-in-law, and others (including all other relatives of the spouse of the head)
- Nonrelatives of the head such as boarders (including relatives who are mere boarders) and domestic helpers (including relatives who are employed as working as domestic helpers)

In case this order was not followed—i.e., household head was not listed in line number 1—do not rearrange the listing. Retain the original order.

**Question 12: Nuclear Family**

Check the entry in Question 6 and ensure that the number recorded in Question 6 is the same as that referenced for Question 12. For example, if the answer to Question 6 is “2,” the members of the household should belong to either nuclear family “1” or “2.”

**Question 13: Relationship to Household Head**

A valid code is within the range of “1” to “9,” corresponding to the classification of the relationship of household members to the household head, placed at the bottom of page 2 of the questionnaire. The first member listed should be the household head; thus, the first line in Question 13 should have a code “1.” The order of entry should be similar to that of Question 11. If the code is “7” (Other relatives) or “9” (Others), check if there is an entry for the specific relationship to the household head, not elsewhere classified in the given choices.

**Question 14: Sex**

Valid codes are “1” (Male) and “2” (Female). If there is no entry, determine the sex based on the name (Question 11) and the relationship to the household head (Question 13). If this is not possible, verify with the editor/coordinator.

**Question 15: Date of Birth**

Check if the date of birth follows the format MM/DD/YYYY. For example, a person born on March 7, 1947 will have the following entry in Question 15, “03/07/1947.”

In the column in Question 15, the age should also be indicated on the space provided. If a household member is less than one year old, the valid entry is “0.”

Check that each household member has an entry for the date of birth and age as of last birthday. Also, check for the reasonableness of the date of birth and the age with the reported relationship to the household head (Question 13), e.g., the year of birth of the child is 1992 while that of the father is 1987 (the child is 15 years, and the father is 20 years). Verify with the editor/coordinator any questionable entry and correct the entry as necessary.
Question 16: Birth Registration
Valid codes are “1” (Yes) and “2” (No).

Question 17: Civil Status
A valid code is within the range of “1” to “6,” corresponding to the classification of the civil status, listed at the bottom of the questionnaire. Check any questionable entry, e.g., the age of the person is 5 years old and civil status is “2” (married).

Question 18: Ethnicity
This column should have a worded and coded entry. Check if the entry gives the exact ethnicity of the household member. Check whether the ethnicity corresponds to the code entered. Valid codes of ethnicity range from “1” to “150.”

Check if there is an entry to this question for all members of the household.

Question 19: Overseas Workers
Valid codes are “1” (Yes) and “2” (No). Check if this has an answer if the entry in Question 5 is greater than “0” and the age of the household member is more than 10 years old.

Question 20: Residency 3 Years Ago
Valid codes are “1” (Same address now) and “2” (Other address, specify). If the code is “2,” check if there is an entry indicating the former address of the household member. The barangay, city or municipality, province, and country should also be indicated.

Question 21: Continuing Education
Valid codes for this question are “1” (Yes) and “2” (No).

Question 22: Grade/Year Currently Attending
If the code in Question 21 is “1” (Yes), this column should have an entry. Check the reasonableness of the grade/year reported against the age reported in column 15.

Question 23: School Attendance in Public/Private Schools
Valid codes for this question are “1” (Public) and “2” (Private).

Question 24: Reason for Not Attending School
A valid code should be within the range of “1” to “15.” If the code is “15” (Others), check if there is an entry referring to the other reasons for not attending school not identified in the choices.

Question 25: Educational Attainment
Check if grade level code is provided accordingly. For example, if the educational attainment of the household member is 3rd year high school, the entry should be 19.

If the entry is any of the codes 100, 200, 300, and 400, check if there is an entry indicating the course (e.g., BS Biology, BS Accounting, MS Statistics, etc.).

Check for the reasonableness of the highest educational attainment against the reported age in Question 15. Also, check for the consistency of the highest educational attainment with that of the grade/year currently being attended by the household member (Question 22). For household members who are still studying, the highest educational attainment should
be the grade/year he/she attended and completed last school year. (For example, if the household member is currently in Grade 6, the code in this item should be 15, indicating that the household member has completed Grade 5.)

For those who do were not able to study or is not yet studying, ensure that the answer is “0.”

For the column on course codes, valid codes are 0010000 to 6899902, which are enumerated in the HPQ Codebook.

If the household member is below 5 years old (refer to Question 15), the entry in Question 26 should be ¾.

**Question 26: Literacy**

Check that only the lines of household members 5 years old and over (column 15) have entry for this column. Valid codes are 1 (Yes) and 2 (No).

Check for the reasonableness of the entry against highest educational attainment, e.g., highest educational attainment in Question 25 is 3rd year college while column 26 is “2.”

**Community/ Political Participation**

If the age of the household member is below 15 years old (refer to Question 15), the entry in Questions 27–28 should be —.

**Question 27: Registered Voter**

Check that only the lines of household members 15 years old and over (column 15) have valid codes for this column. Valid codes in this column are “1” (Yes) and “2” (No).

**Question 28: Able to Vote in the Last Election**

Check to see if only the lines with code “1” in column 27 have an entry for this column. Valid codes are “1” (Yes), “2” (No), or “3” (Don’t know).

If code is “2” (No) in column 27, the entry for this column should be —.

**Economic Activity**

If the age of the household member is below 5 years old (refer to Question 15), the entry in Questions 29–49 should be —.

**Question 29: Work**

Valid codes are “1” (Yes) and “2” (No).

**Question 30: Job or Business**

If the answer to Question 29 is code “1,” the valid entry for Question 30 is (—). If the answer to Question 29 is code “2,” valid codes for Question 30 are “1” (Yes) and “2” (No).

If the code to both questions 29 and 30 is “2” (No), entries to Questions 31–39 should be —.

**Question 31: Number of Occupation, Job, or Business**

If there is at least one code “1” response to Question 29 or Question 30, valid codes for Question 31 should be greater than “0.”

**Question 32: Primary Occupation, Job, or Business**

This column should have a worded and coded entry. Check if the entry specifically describes the occupation of the household member. Check whether the specific description of the economic activity or
occupation corresponds to the code entered as the classification of that particular economic activity.

A valid code should be within the range of 0111 to 9909, corresponding to the specific economic activity or occupation, which is enumerated in the HPQ Codebook.

**Question 33: Type of Industry/Sector**

Check whether the specific business or industry is recorded. A valid code should be within the range of 0111 to 9333, corresponding to the specific business or industry, which is enumerated in the HPQ Codebook.

**Question 34: Nature of Employment**

Valid codes for this question are codes “1” to “3.”

**Question 35: Usual Working Hours during the Past Week**

Check if the entry provides the member’s usual working hours during the past week in his/her primary occupation. This number should not exceed 168 hours (24 hours x 7 days).

**Question 36: Total Working Hours during the Past Week**

Check if the entry provides the member’s total working hours during the past week in his primary occupation. This number should not exceed 168 hours (24 hours x 7 days).

**Question 37: Desire for Longer Hours of Work**

Valid codes are “1” (Yes) and “2” (No).

**Question 38: Looked for Additional Work**

Valid codes are “1” (Yes) and “2” (No).

**Question 39: Class of Worker**

Valid codes for this entry are “1” to “7”.

If the code in Question 29 or in Question 30 is “1” (Yes), entries to Questions 40–45 should be —.

**Question 40: Looked for Work during the Past Week**

Valid codes are “1” (Yes) and “2” (No).

If the code in Question 40 is “2” (No), entries to Questions 41–43 should be —.

**Question 41: First Time Looked for Work**

Valid codes are “1” (Yes) and “2” (No).

**Question 42: Job Search Method**

A valid code should be within the range of “1” to “7.” If the code is “7” (Others), check if there is an entry not identified in the choices.

**Question 43: Number of Weeks Looking for Work**

Check whether the entry to this question is greater than “0.”

If the code in Question 40 is “1” (yes), entries to Questions 44–45 should be —.

**Question 44: Reasons for Not Looking for Work**

A valid code should be within the range of “1” to “9.” If the code is “9” (Others), check if there is an entry not identified in the choices.

**Question 45: Last Time Looked for Work**

A valid code should be within the range of “1” to “4.”

If the code to both Questions 29 and 30 is “2” (No), there should be entries to Questions 46–47.
Question 46: *Currently Available for Work*

Valid codes are “1” (Yes) and “2” (No).

Question 47: *Willing to Work*

Valid codes are “1” (Yes) and “2” (No).

Question 48: *Salaries/Wages*

If a household member is an Overseas Filipino Worker (OFW) or household maid/boy/katulong, entries to the two columns under this question (cash and in kind) should be —.

Question 49: *SSS/GSIS Membership*

Valid code should be within the range of “1” to “4.”

If the code in question 8 is “2” (No), entry to question 51 should be —.

Question 50: *Pregnant Members of the Household*

Valid codes are “1” (Yes) and “2” (No).

If code in Question 9 is “2” (No), entry to Question 52 should be —.

Question 51: *Solo Parents in the Household*

Valid codes are “1” (Yes) and “2” (No).

If code in Question 52 is “2” (No), entries to Questions 53–54 should be —.

Question 52: *Physical or Mental Disability*

Valid codes are “1” (Yes) and “2” (No).

If the code in Question 56 is “2” (No), entries to Questions 57a and 57b should be —.

Question 53: *Type of Disability*

A valid code should be within the range of “1” to “17.” If the code is “17” (Others), check if there is an entry not identified in the choices.

Question 54: *PWD’s ID*

Valid codes are “1” (Yes) and “2” (No).

If the household member is below 60 years old in Question 15, entry to Question 55 should be —.

Question 55: *Senior Citizen’s ID*

Valid codes are “1” (Yes) and “2” (No).

Crime

Question 56: *Members Who Are Crime Victims*

Valid codes are “1” (Yes) and “2” (No).

If the code in Question 56 is “2” (No), entries to Questions 57a and 57b should be —.

Question 57a: *Types of Crime Victims*

A valid code should be within the range of “1” to “7.” If the code is “7” (Others), check if there is an entry not identified in the choices.
Question 57b: Location of Crime

Valid code should be within the range of “1” to “4.”

Nutrition

Question 58: Nutritional Status of Children

This information should be obtained from the weighing report of barangay health workers (BHW) or barangay nutrition scholars (BNS) and recorded daily at the end of the survey operation. Make sure that the weighing report of the BNS/BHW is already with the field editor/coordinator during the survey operation.

Only the lines of household members 0–5 years old (Question 15) should have entries. For household members 6 years old and above, the entry should be —.

From column 15, determine those members who are 0–5 years old. Match the names of these members with the list of children in the report of the BHW/BNS. Determine from the report the nutritional status of the children. Enter the appropriate code for each child. A valid code should be within the range of “1” to “4”, corresponding with the nutritional status of the child based on the report of the BNS/BHW. Also, do not forget to put in the space provided the date (month and year) when the nutritional status was reported.

Water and Sanitation

Question 59: Main Source of Drinking Water

A valid code should be within the range of “1” to “12.” If the code is “12” (Others), check if there is an entry not identified in the choices.

Question 60: Distance of Water Source from House

If the entry to Question 59 is any of the codes “2,” “3,” “4,” “5,” “6,” “7,” “8,” “9” or “12,” check if there is an entry to Question 60. Entries here should be in meters.

If the entry to Question 59 is any of the codes “1,” “10” or “12,” entry to this question should be —.

Question 61: Type of Toilet Facility Used

Valid code should be within the range of “1” to “10.” If the code is “10” (Others), check if there is an entry not identified in the choices.

Housing

Question 62: Tenure Status of Housing Unit and Lot Occupied

A valid code should be within the range of “1” to “10.” If the code is “10” (Others), check if there is an entry not identified in the choices.

Question 63: Imputed Rent of Owned and/or Rent-Free Occupied House and Lot

If the entry to Question 62 is any of the codes “1,” “3,” “4,” “5,” “6,” “7” or “9,” the entry to Question 63 pertains to imputed rent of house and/or lot. Entries here should be monthly imputed rent. If the entry to Question 62 is any of the codes “2” or ”8” (Rent house/room including lot or living in a public space with rent), the box provided for the answer this question should have an entry of —.

Question 64: Access to Electricity

Valid codes are “1” (Yes) and “2” (No).

Question 65: Source of Electricity

If the entry to Question 64 is code “1”, valid entries to Question 65 are “1” (Yes) and “2” (No).

If the entry to Question 64 is code “2”, entry to this question should be —.

Question 66: Ownership of Household Amenities

Valid entries to this question are the total number of amenities/appliances owned by the household per amenities/appliances.
Question 67: Number of Assets Acquired in the Past 3 Years

If the entry to Question 66 is “0,” entry to this question should be __. Note that the number to be recorded in Question 67 should not exceed the number recorded in Question 66.

Question 68: Insurance

Valid codes are “1” (Yes) and “2” (No) for each item in Question 68.

Question 69: Insurance Provider

If the entry to Question 68 is code “1” (Yes), check that Question 69 should have an entry corresponding to the insurance provider.

Waste Management

Question 70: System of Garbage Disposal

For every system of garbage disposal listed, the line space provided should have an entry. Valid codes are “1” (Yes) and “2” (No).

Question 71: Collection of Garbage

If the code in Questions 70.1 (Garbage collection) is “1” (Yes), this question should have an entry. Valid codes are “1” to “4” (Others). Check if there is an entry indicating who collects the garbage not classified in the given choices.

If the code in Question 70.1 is “2” (No), the box provided for the answer to this question should have an entry of —.

Question 72: Frequency of Garbage Collection

If the code in Question 70.1 (Garbage collection) is “1” (Yes), this question should have an entry. Valid codes are “1” to “5.” If the code is “5” (Others), check if there is an entry indicating the frequency of garbage collection not classified in the given choices.

If the code in Question 70.1 is “2” (No), the box provided for the answer to this question should have an entry of —.

Sources of Income

N.1. Entrepreneurial Activity

Question 73: Crop Farming and Gardening

Valid codes in the second column are “1” (Yes) and “2” (No). If the code is “1” (Yes) in the second column, boxes 73A and 73B should have an entry. If the code in the second column is “2” (No), the entry in boxes 73A and 73B should be —.

Question 74: Livestock and Poultry

Valid codes in the second column are “1” (Yes) and “2” (No). If the code is “1” (Yes) in the second column, boxes 74A and 74B should have an entry. If the code in the second column is “2” (No), the entry in boxes 74A and 74B should be —.

Question 75: Fishing

Valid codes in the second column are “1” (Yes) and “2” (No). If the code is “1” (Yes) in the second column, boxes 75A and 75B should have an entry. If the code on the second column is “2” (No), the entry in boxes 75A and 75B should be —.

Question 76: Forestry

Valid codes on the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 76A and 76B should have an entry. If the code in the second column is “2” (No), entry in boxes 76A and 76B should be —.

Question 77: Wholesale and Retail Trade

Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 77A and 77B should have an entry. If the code in the second column is “2” (No), entry in boxes 77A and 77B should be —.
Question 78: Manufacturing
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 78A and 78B should have an entry. If the code is “2” (No), the entry in boxes 78A and 78B should be —.

Question 79: Community, Social, and Personal Services
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 79A and 79B should have an entry. If the code is “2” (No), the entry in boxes 79A and 79B should be —.

Question 80: Transportation and Communication
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 80A and 80B should have an entry. If the code is “2” (No), the entry in boxes 80A and 80B should be —.

Question 81: Mining and Quarrying
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 81A and 81B should have an entry. If the code is “2” (No), the entry in boxes 81A and 81B should be —.

Question 82: Construction
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 82A and 82B should have an entry. If the code in the second column is “2” (No), the entry in boxes 82A and 82B should be —.

Question 83: Activities Not Elsewhere Classified
Valid codes in the second column are “1” (Yes) and “2” (No). If the code in the second column is “1” (Yes), boxes 83A and 83B should have an entry. If the code in the second column is “2” (No), the entry in boxes 83A and 83B should be —.

Question 84: Total Net Income from Entrepreneurial Activity
Entry in the third column in 84A is arrived at by adding all the entries in 73A–83A (third column). Entry in the fourth column in 84B is arrived at by adding all the entries in columns 73B–83B (fourth column). Check if the computation is correct. If it is not correct, make the necessary corrections. If the entries in Questions 73A–83A and 73B–83B are all —, entry in boxes 84A and 84B should be “0.”

84A = 73A + 74A + 75A + 76A + 77A + 78A + 79A + 80A + 81A + 82A + 83A
84B = 73B + 74B + 75B + 76B + 77B + 78B + 79B + 80B + 81B + 82B + 83B

If the entries in Questions 73A–83A and 73B–83B are all —, entry in boxes 84A and 84B should be “0.”

N.2. Salaries and Wages from Employed Members

Question 85: Salaries and Wages
Check if the computations of the total salaries and wages in cash and in kind in Questions 48A and 48B are correct. If they are not correct, make the necessary corrections. If there are no household members who received salaries and wages, entry in boxes 85A and 85B should be “0” (zero).

N.3. Other Sources of Income

Question 86: Income Share from Other Households
Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from other sources; an entry of zero (“0”) means otherwise.

Question 87: Remittances from Overseas Filipino Workers
Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source; an entry of zero (“0”) means otherwise.
Question 88: Cash Receipts, Gift, Support, Relief, and Other Income from Abroad

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 89: Cash Receipts, Support, Assistance, and Relief from Domestic Source

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 90: Rentals from Nonagricultural Lands, Buildings, Spaces, and Other Properties

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 91: Interest

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 92: Pension and Retirement, Workmen’s Compensation, and Social Security Benefits

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 93: Dividends from Investment

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 94: Other Sources of Income Not Elsewhere Classified

Valid entries are zero (“0”) and above. If the entry is greater than zero (“0”), the household received additional income from this source while an entry of zero (“0”) means otherwise.

Question 95: Total Income from Other Sources

The answer in box 95A is generated by adding all the entries in 86A–94A while that in box 108B is generated by adding all the entries in 86B–94B.

\[
95A = 86A + 87A + 88A + 89A + 90A + 91A + 92A + 93A + 94A \\
95B = 86B + 87B + 88B + 89B + 90B + 91B + 92B + 93B + 94B
\]

Question 96: Total Imputed Rent from Owned or Rent-Free House and/or Lot

The entry for this question should be the amount entered in Question 63 multiplied by 12. Check if the computation is correct; if it is not, make the necessary corrections.

Question 97: Total Income (in Cash and in Kind)

The answer in box 97A is generated by adding all the entries in 84A, 85A, and 95A, while that in box 97B is generated by adding all the entries in 84B, 85B, 95B, and 96B. Check if the computation is correct; if it is not, make the necessary corrections.

\[
97A = 84A + 85A + 95A \\
97B = 84B + 85B + 95B + 96B
\]

Question 98: Total Household Income

The answer in Question 98 is generated by adding the entries in 97A and 97B. Check if the computation is correct. If it is not correct, make the necessary corrections.

\[
98 = 97A + 97B
\]
Agriculture - Farming

If the code in Question 73 is “2” (No), the entries in Questions 99–104 should be —.

Question 99: Tenure Status in Agricultural Land

A valid code should be within the range of “1” to “9” referring to the tenure status in agricultural land. If the code is “9” (Others), check if there is an entry not identified in the choices.

For households tilling more than one parcel, the tenure status for each parcel should be separated by a comma in the box.

Question 100: Area of Agricultural Land

Valid entries are in hectares of agricultural land for each type of tenure status recorded in Question 99.

Question 101: Type of Crops or Fruit-Bearing Trees Harvested

There should be at least one crop or fruit-bearing tree.

Question 102: Volume of Crops Harvested

For each crop listed in Question 101, check if there is an entry for the volume of crops harvested. The entry should be in kilograms.

If Question 101 has no entry, it should be —.

Question 103: Agricultural Implements/Equipment

Entries should be the number of listed agricultural implements/equipment used by the household. Zero (“0”) entries are acceptable; this means that the household does not use specific agricultural implements/equipment.

Question 104: Ownership of Agricultural Equipment

Entries should be the number of listed agricultural implements/equipment that the household owns.

Entries in Question 104 should not exceed those in Question 103.

Livestock Raising

If the code in Question 74 is “2” (No), the entries in Questions 105–106 should be —.

Questions 105: Livestock Raised that Provided a Product

Valid codes are “1” to “7” for each type of product on the 1st column. If the code is “7” (Others), check if there is an entry indicating the livestock/poultry raised not included in the given choices.

Question 106: Volume of Production Sold and Consumed

If there is an entry in the second column of Question 105 corresponding to “1” to “7,” there should be an entry in the volume sold and consumed (106a and 106b). Otherwise, the boxes provided should be marked with —.

Fishing

If the code in Question 75 is “2” (No), the entries in Questions 107–115 should be —.

Question 107: Fishing Activity

Valid codes are “1” (Yes) and “2” (No).

Question 108: Location of Fishing Operation

If the code in Question 107 (fishing activity) is “1” (Yes), this question should have an entry. Valid codes are “1” to “3.”

If the code in Question 107 is “2” (No), the box provided for the answer to this question should have an entry of —.
Question 109: Use of Boat/Vessel

For each kind of boat listed, entries should be the number of boats.

Question 110: Ownership of Boat/Vessel

For each kind of boat with entries greater than "0" in Question 109, the correct entry is the number of boats owned by the household.

Entries in Question 110 should not exceed those in Question 109.

Question 111: Kind of Gears/Accessories/Devices

Check if there is an entry for the kind of gear/accessory/device used in fishing. Valid codes of the different fishing gears commonly used in the Philippines are “1” to “26,” which are detailed in the HPQ Codebook.

Question 112: Number of Owned Gears/Accessories/Devices

For each kind of gear/accessory/device listed in Question 111, there should be an entry for the number of gears/accessories/devices owned by the household.

Question 113: Type of Aquafarm

Valid codes are “1” (Yes) and “2” (No) for each type of aquafarm.

Question 114: Fishes or Aquatic Animals Cultured or Caught by the Household

Check if there are entries of names of fishes or aquatic animals.

Question 115: Volume of Fish Harvested

For each kind of fish or aquatic animal listed in Question 114, entries should be the volume harvested in kilogram in the last 12 months.

Climate Change

Question 116: Number of Years of Household Living in Barangay

Valid codes are “1” (3 years and above) and “2” (Not more than 3 years).

R.1. Agriculture

If the code in Question 73 is “2” (No), the entries in Questions 117–123 should be —.

Question 117: Number of Years Household Is Engaged in Crop Farming

Valid codes are “1” (3 years and above) and “2” (Not more than 3 years).

If the code in Question 116 is “2” (Not more than 3 years), the entries in Questions 118–123 should be —.

Question 118: Changes in Harvest

Valid codes are “1” (Decrease), “2” (Increase), or “3” (Remain the same).

Question 119: Reason for the Decrease in Harvest

If the code in Question 116 is “1” (Decrease) in Question 118, this question should have an entry. Valid codes are “1” to “8.” If the answer is “8” (Others), check if there is an entry indicating the reason for the decrease in harvest not classified in the given choices.

If the code in Question 118 is “2” (Increase) or “3” (Remain the same), the box provided for the answer to this question should have an entry of —.

Question 120: Changes in Crops Planted

Valid codes are “1” (Yes) and “2” (No).
Question 121: Reasons for Changing Planted Crops

If the code in Question 120 is “1” (Decrease), this question should have an entry. Valid codes are “1” to “6.” If the answer is “6” (Others), check if there is an entry indicating the reason for the changes in crops planted not classified in the given choices.

If the code in Question 120 is “2” (Increase) or “3” (Remain the same), the box provided for the answer to this question should have an entry of —.

Question 122: Insurance for Crop and Agricultural Equipment

Valid codes are either code “1” (Yes) or code “2” (No) for crops and agricultural equipment.

Question 123: Insurance Provider

If the code in Question 122 is “1” (Yes), this question should have an answer. Valid codes are “1” to “4”. If the answer is “4” (Others), check if there is an answer specifying other insurance provider not classified in the given choices.

R.2. Livestock and Poultry

If the code in Question 74 is “2” (No), the entries in Questions 124–128 should be —.

Question 124: Number of Years Household is Engaged in Livestock and Poultry

Valid codes are “1” (3 years and above) and “2” (Not more than 3 years).

Question 125: Changes in Livestock and Poultry

Valid codes are “1” (Decrease), “2” (Increase), or “3” (Remain the same).

Question 126: Reasons for the Decrease in Livestock and Poultry

If the code in Question 125 is “1” (Decrease), this question should have an entry. Valid codes are “1” to “7.” If the answer is “7” (Others), check if there is an entry indicating the reason for the decrease in livestock and poultry not classified in the given choices.

If the code in Question 120 is “2” (Increase) or “3” (Remain the same), the box provided for the answer to this question should have an entry of —.

Question 127: Livestock and Poultry Insurance

Valid codes are either code “1” (Yes) or code “2” (No) for livestock insurance.

Question 128: Insurance Provider for Livestock and Poultry

If the code in Question 127 is “1” (Yes), this question should have an answer. Valid codes are “1” to “4.” If the answer is “4” (Others), check if there is an answer specifying other insurance provider not classified in the given choices.

R.3. Fishing

If the code in Question 75 is “2” (No), the entries in Questions 129–133 should be —.

Question 129: Number of Years Household Is Engaged in Fishing

Valid codes are “1” (3 years and above) and “2” (Not more than 3 years).

Question 130: Changes in Fish Catch

Valid codes are “1” (Decrease), “2” (Increase) or “3” (Remain the same).

Question 131: Reasons for the Decrease in Fish Catch

If the code in Question 130 is “1” (Decrease), this question should have an entry. Valid codes are “1” to “9.” If the answer is “9” (Others), check if there is an entry indicating the reason for the decrease in fish catch not classified in the given choices.

If the code in Question 130 is “2” (Increase), or “3” (Remain the same), the box provided for the answer to this question should have an entry of —.
Question 132: Fisheries Insurance
Valid codes are either code “1” (Yes) or code “2” (No) for fisheries insurance.

Question 133: Fisheries Insurance Provider
If the code in Question 132 is “1” (Yes), this question should have an answer. Valid codes are “1” to “4.” If the answer is “4” (Others), check if there is an answer specifying other insurance provider not classified in the given choices.

R.4. Temperature

Question 134: Increase in Temperature
Valid codes are either code “1” (Yes) or code “2” (No).

R.5. Electricity

Question 135: Frequent Power Shortage
Valid codes are either code “1” (Yes) or code “2” (No).

R.6. Sea Level

Question 136: Changes in Sea Level
Valid codes are “1” to “5.”

R.7. Water

Question 137: Changes in Water Supply
Valid codes are “1” (Decrease), “2” (Increase), or “3” (Remain the same).

Question 138: Reason for Decrease in Water Supply
If the code in Question 137 is “1” (Decrease), this question should have an answer. Valid codes are “1” to “6.” If the answer is “6” (Others), check if there is a reason for decrease in water supply not classified in the given choices.

R.8. Flooding

Question 139: Occurrence of Flooding
Valid codes are “1” (Yes), “2” (No), or “3” (Did not experience flood).

If the code in Question 139 is “3” (did not experience flood), the entries in Questions 140–141 should be —.

Question 140: Number of Days Before the Flood Subsided 3 Years Ago
If the code in Question 139 is “2” (Yes) or “3” (No), check if there is an entry for this question. Valid entries should be more than zero (“0”).

Question 141: Number of Days before the Flood Subsided in the Past 12 Months
If the code in Question 139 is “2” (Yes) or “3” (No), check if there is an entry for this question. Valid entries should be more than zero (“0”).

R.9. Drought

Question 142: Drought
Valid codes are “1” (Yes), “2” (No), or “3” (Did not experience drought).

Question 143: Length of the Occurrence of Drought
If the code in Question 142 is “1” (Yes) or code “2” (No), this question should have an answer. Valid entries range from “1” to “6.”

If the code in Question 142 is “3” (Did not experience drought), the entry for this question should be —.
R.10. Evacuation

Question 144: Move Out/Leave Dwelling Place
Valid codes are either code “1” (Yes) or code “2” (No).

Question 145: Reason for Moving Out/Evacuation
If the code in Question 144 is “1” (Yes), this question should have an answer. Valid entries range from “1” to “4.”
If the code in Question 144 is “2” (No), the entry for this question should be —.

Question 146: Temporarily Evacuated
Valid codes are either code “1” (Yes) or code “2” (No).

Question 147: Evacuation Center
If the code in Question 146 is “1” (Yes), this question should have an answer. Valid entries range from codes “1” to “6.” If the answer is “6” (Others), check if there is an evacuation center not classified in the given choices.
If the code in Question 146 is “2” (No), the entry for this question should be —.

R.11. Calamities

Question 148: Calamities
A valid code is either “1” (Yes), or “2” (No). Check if there are entries for each type of calamity listed.
If the code in Question 148 is “2” (No), the entries in Questions 149–151 should be —.

Question 149: Frequency of the Occurrence of Calamities
If the code in Question 148 is “1” (Yes), this question should have an entry indicating the number of times the calamity occur as recorded in Question 149.

Question 150: Assistance for Calamities
If the code in Question 148 is “1” (Yes), this question should have an answer whether the household received assistance for calamities or not. Valid codes are “1” (Yes) and “2” (No).

Question 151: Source of Assistance
If the code in Question 150 is “1” (Yes), this question on the source of assistance during the times of calamities should have an entry. Valid entries are “1” to “4.” If the answer is “4” (Others), check if there is an entry specifying the other source of assistance not classified in the given choices.
If the code in Question 150 is “2” (No), the entry for this question should be —.

R.12. Disaster Preparedness

Question 152: Disaster Preparedness Kit
A valid code is either “1” (Yes) or “2” (No).
If the code in Question 152 is “2” (No), the entries in Questions 153–154 should be —.

Question 153: Contents of a Disaster Preparedness Kit
If the code in Question 152 is “1” (Yes), this question on the contents of a disaster preparedness kit should have an entry. Valid codes are “1” (Yes) or “2” (No) for each item in the list of disaster preparedness kit contents.
If the code in Question 152 is “2” (No), the entry for this question should be —.

Question 154: Days the Contents Will Last
If the code in Questions 153.1 and 153.2 is “1” (Yes), the answer to this question should be the number of days that water and food will last.
If the code in Questions 153.1 and 153.2 is “2” (No), the entry for this question should be —.
Hunger

Question 155: Hunger

A valid code is either “1” (Yes) or “2” (No).

If the code in Question 155 is “2” (No), the entries in Questions 156–157 should be —.

Questions 156 and 157: Frequency of Hunger

If the code in Question 155 is “1” (Yes), this question should have an entry corresponding to any of the 12 calendar months.

Check the order of months stated. For example, the proper way of entering information for a household that experienced hunger because of food shortage during May, June, and July. The order should be as follows: (a) first month – July, (b) second month – June, and (c) third month – May.

For Question 157, the entry should not exceed the maximum number of 31 calendar days. There should be at least one entry in 3 months.

Household Members who Died

Question 158: Previous Household Members who Died

Valid codes are either “1” (Yes) or “2” (No).

If the code in Question 158 is “2” (No), the entries in Questions 159–162 should be —.

Question 159: Name of Persons who Died

The entry should be the full name (first and last name) of the person who died in the last 12 months.

Question 160: Sex of Persons who Died

Valid codes are “1” (Male) and “2” (Female).

Question 161: Age of Persons who Died

Entry should be the age of person at the time of death. If the person who died was below 1 year old, the code should be “0.”

Question 162: Main Cause of Death

A valid code should be within the range of “1” to “17,” corresponding to the possible causes of death, listed below page 6 of the questionnaire. If the code is “17” (Others), check if there is an entry indicating the cause of death not classified in the given choices.

Programs

Question 163: Programs

Valid codes are “1” (Yes) and “2” (No). For every program listed, check if there is an entry.

If the code in Question 163 is “2” (No), the box provided for the answer to Questions 164–167 should have an entry of —.

Question 164: Name of the Program

If the code in Question 163 is “1” (Yes), the full name of the applicable programs should be the answer to this question. If the answer is in acronyms, consult the editor/coordinator.

Question 165: Number of Members who Are Beneficiaries of the Program

Check if the recorded number of household member/s who is/are member or who has/have benefitted is not bigger than the household size.

Question 166: Members who Are Beneficiaries of the Program

Check if the name of the household member/s who is/are member or who has benefitted from the program is listed in column 11, page 2 of the questionnaire.

CLARIFICATION:

For programs 1, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14, ask how many household members are members of these programs.

For programs 2, 3, 4, 15, 16, 17, 18, 19, 20, 21, and 22, ask how many household members availed or were beneficiaries of these programs.
Question 167: Implementor of the Program

If the code in Question 163 is “1” (Yes), the implementer of the program should be written in the space provided. Valid codes are “1” to “8.” If the answer is “8” (Others), check if there is an answer specifying other implementer of the program not classified in the given choices.
Part 3
Data Processing
This manual contains guidelines and instructions on encoding computerized data for the Community-Based Monitoring System (CBMS).

The PEP-CBMS International Network Coordinating Team developed the CBMS computerized data encoding system for local government units (LGUs) that have implemented the CBMS in their respective localities. The encoding system is customized for CBMS application using the Census and Survey Processing (CSPro) software of the US Census Bureau, a free software package for encoding, tabulating, and disseminating census and survey data.

Setting Up the System

System Configuration

A computer will need the following minimum configuration to house the encoded data:

- Pentium processor or equivalent
- 512MB of RAM
- SVGA monitor
- Mouse
- 100GB of free hard drive (for software only)
- Microsoft Windows XP, Vista, Windows 7, or Windows 8

For quicker encoding and saving, the following computer specifications are recommended:

- Pentium IV processor or equivalent (or higher)
- 1GB of RAM
- LCD monitor
- Mouse
- 500GB hard drive space
- Windows 7 or 8

Installation

Installing the software is quick and simple. Although installation could be done repeatedly, it must be done carefully to prevent corruption. Therefore, unless a crucial update from the system developer is needed, reinstalling the system is not recommended. More importantly, one must take full responsibility in installing the software.

To install the software, follow these steps:

1. Insert the CD and/or run the installer program provided by the PEP-CBMS International Network Coordinating Team.

   (a) On the first run, or if CSPro 5.0 is not yet installed, a dialog box appears with a prompt to install CSPro. Click Install. Figure 1 shows a sample computer screen view.
(b) When the CSPro installer is launched, a pop-up screen appears, showing the name of the folder where the files will be saved. Click Next.

(c) A pop-up screen appears, indicating the language used for text. Click Next.

(d) A pop-up screen asks for the components to be installed. Check CSPro (all components). Click Next.

(e) A pop-up screen shows the folder from which the program will be installed. Click Next. CSPro will now be installed.

(f) Uncheck Look at README file and click Finish.

2. On the welcome screen, click Next. See Figure 2.

3. The License Agreement appears on screen. Click the button for I accept the terms of the license agreement and Next. See Figure 3.

4. A pop-up screen appears, showing the program folder where shortcut files will be installed. Click Next.
5. Select All components. Click Next for the installer to copy all the necessary files.

6. A welcome screen appears stating that CSPro will now be installed. Click Next.

7. Installation complete appears on screen. Click Ok.

General Instructions in Encoding Data from the CBMS Household Profile Questionnaire

Instructions

General Rules
- Before encoding, make sure that the questionnaire is properly field-edited for accuracy and consistency.
- In general, ENTER is the primary confirmation key when encoding. PgUp, PgDown, and the arrow keys are the navigational keys.
- If wrong data is entered, simply delete it and enter the correct data.
- When Out of range/invalid appears, press F8.
- Gray-colored fields in the screen are not to be filled up.

Specific Rules
There are three parts to the encoding process: (i) encoding the identification details from page 1 of the questionnaire, (ii) encoding the individual data of all household members, and (iii) encoding data pertaining to the household. Important: all data for household members must be encoded before the household-based data.

Data are encoded by fields. A field usually corresponds to the answer to a specific question. However, for some questions, there could be more than one answer; and thus, more than one sub-field to fill up under a single question.

The ENTER key is the primary key in encoding. Each field allows a specific length or number of characters. When the field is filled up, the cursor automatically leaves the field. For example, the field Region has a length of 2. Thus, when 03 is entered, the cursor automatically jumps to the next field, Province. On the other hand, entering 3 will require hitting ENTER. In either case, the same output, 3, is attained.

All encoders must refrain from using the mouse as much as possible. The cursor of the encoding system is designed to move immediately after the space is filled up. To return to a specific field and correct an erroneous entry, the arrow keys should be used.

How to Start Encoding

After installing the encoding system, go to start-up menu. Click on Programs → CBMS Database → CBMS Encoding System. An executable screen (where tasks according to encoded instructions are performed) appears, which is the main interface to be used.
In the pull-down menu, look for the name of the region and click the check button beside it. The code for the region automatically appears in the code box. To change the region, simply select another region from the pull-down list and click the corresponding check button.

**Example:** The code for Zamboanga Peninsula (Region IX) is 09.

In the pull-down menu, look for the name of the province and click the check button beside it. The code for the province automatically appears in the code box. To change the province, select another province from the pull-down list.

**Example:** The code for Tarlac is 69.

In the pull-down menu, look for the name of the municipality/city and click the check button. The code for the municipality/city automatically appears in the code box. To change the municipality/city, select another one from the pull-down list.

In the pull-down menu, look for the name of the barangay and click the check button beside it. The code and urbanity for the barangay automatically appears in the code box. To change the barangay, simply select another barangay from the pull-down list.

After clicking the encoding icon, a pop-up screen appears, showing blank fields in which information pertaining to the barangay is entered. Click on the check button; when prompted, type the **operator ID** on the pop-up screen. You are now ready to encode the data.

**Note:** The fields for **Urbanity, Region, Province, Municipality, and Barangay** are persistent numeric fields. This means that once these data fields are filled up, and encoding the questionnaire is completed, the system automatically enters the same data in the next record (i.e., these do not usually differ within groups of households). If a wrong code was entered in one of these fields, it is necessary to use **F7** to return to each field. Moreover, the fields for **Urbanity, Region, Province, Municipality/City, and Barangay** are automatically initialized (set to starting position or value) in the first instance of encoding data for a barangay.

**Note:** The common convention is that **Region, Province, Municipality, Barangay, Purok, and Household Control Number** comprise the unique ID inside the encoding system. The codes used for region, province, municipality and barangay are from the Philippine Standard Geographic Codes (PSGC) which is the national standard geographic classification and coding system.²

### Features and Interface

- **Computer-Assisted Personal Interview (CAPI)** – displays the same questions that appear in the questionnaire. This helps LGUs to enter responses directly in the computer when conducting a laptop-based interview.⁶
- **Alphanumeric/Text** – a field that accepts a string or a set of alphanumeric characters.

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¹ For more information, please visit: www.nscb.gov.ph/activestats psgc/default.asp
² Based on the 2008 CBMS experience of the Province of Tarlac.
When the number of characters entered matches the number of characters for the field, the cursor automatically goes to the next field.

- **Numeric** – a field that accepts only numeric characters.

- **Number pad** – Some items have number pads to assist users.

- **Date** – a field that contains a date value. In the encoding system, a calendar control pop-up provides help when entering dates.

- **Radio** – For items or questions with a fixed but short list of choices, a pop-up menu with radio buttons is enabled. This is also helpful for those using the CAPI. However, the coded response is still permitted for quicker encoding.

- **Listbox** – For items or questions with fixed choices, a pop-up menu with a listbox is enabled. This facilitates the implementation of the CAPI. As in the case for Radio, the coded response is still permitted for quicker encoding.

- **Default field colors** – *White* fields indicate fields that have yet to be filled out. A field becomes *yellow* when it is active or bypassed in a session, and changes into *green* when data are entered and/or the field has been passed. A field is *gray* when it is deactivated.

- **Relevant automation** – Some fields are enabled or disabled when the answer to an entry depends on other questions, which helps reduce encoding time and augments data completeness. In the following example, the amounts are enabled if the household is engaged in a specific activity, and disabled if otherwise.
• **Computed fields** – a time-saving and accuracy-enhancing system feature that readily computes items and asks the user to confirm if the answer is correct.

• **Messages** – There are messages sent by the system that either warns, stops, or notifies the user. For instance, if the user entered a figure that is not allowed in the definition, the system stops and asks the user for intervention (1). If the system detects potential inconsistency, it warns the user (2). In normal circumstances, the system only notifies the user of events (3).

1. The number of OFWs must be at most the household size.  
   Press F5 to clear.
2. There are 0 members age 18 years old and above.  
   Press F5 to clear.
3. You have fully encoded the actual number of members.  
   Press F5 to clear.

• **Rosters** – Rosters handle repeating records inside a case. A good example is data pertaining to household members. In the CSPro language,
  
  ➢ A household is a case; and
  
  ➢ Members of the households are *group* occurrences.

### Saving and Managing Encoded Data Files

There are several modes in encoding. The essential ones are **Adding mode** and **Editing/Modifying mode**. **Adding mode** occurs when the encoder begins to encode a barangay or when **CTRL A** is pressed after opening the encoding system.

**Editing mode** occurs when an existing record or household profile is being edited. This is done by double-clicking a household record in the left pane of the encoding system or highlighting it and pressing **ENTER** or **CTRL M**.

The cases are displayed with the ID items, i.e., **Urbanity**, **Region**, **Province**, **Municipality**, **Barangay**, **Purok**, and **Household Control Number**. Users can either find cases or sort cases when searching records.

```plaintext
102570200102000001
102570200101000002
```

### Saving Files

• The system automatically stores household profiles when they are accepted.

• An encoder may pause and save a partially finished encoded questionnaire during **Adding mode**. Simply click the **File** tab, select **Save**
Partial Case, and press CTRL+S or press the Stop icon. Remember that this does not mean that the record is fully registered. The same file may be accessed by simply clicking the file (with the plus sign or pen sign when being updated).

- When the end of encoding is reached, the system prompts the user to save or accept the case.

Editing Entries

- Once the system accepts a household profile, it is already registered. To update the record, simply point on the record and press ENTER or double click on it.
- If household size is being updated, the number of members must either increase or decrease. The user must press CTRL F3 to add an occurrence in the roster of members, or F4 to remove. Although the system assists the user to determine which item in the roster to remove, this function must be done with extreme precaution.

Concatenation Procedure

To speed up the encoding process, an LGU might opt to use several computers to encode several household profile questionnaires at a time (Figure 4). Since the encoded household data of one barangay needs to be stored in one text file, the encoded data from the computer text files need to be merged or joined into a single text file. To do this, the Concatenate Data Tool of CSPro, which concatenates (or consolidates) two or more text files together, is used.

FIGURE 4. WHY DO WE CONCATENATE?
Concatenation is a very simple and quick process. Simply provide the text files that need to be joined or merged as input, and the single output is maintained as

C:\CBMSDatabase\<Regrcode>\<Provcode>\<Muncode>\<Brgycode>\<PSGC.hpq>

Follow these steps to merge and/or concatenate distributed barangay encoded data:

- Copy the text files to be merged from the computers where they are saved using any data storage device such as a diskette or CD, among others. Ensure that these text files contain the household data of the same barangay before beginning the concatenation process. Likewise, ensure that the selected or copied file is the barangay text file (*.hpq) and not the other log or system files, which are also stored in the same barangay folder.

- Since it is recommended to set repository computers, copy the collected data or store them in a temporary folder (e.g., C:\CBMSDatabase\temp\). Since these files have the same file names, rename the files before copying them into the temporary folder.

- For encoded data in the computer that need to undergo concatenation, make a back-up copy of the file (i.e., rename <PSGC.hpq> as <PSGC_bak.hpq>) and include it in the temporary folder that stores the files to be concatenated.

- After preparing all the files, run the CSPro Concatenation Tool. Click Start → All Programs → CSPro 5.0 → Data Tools → Concatenate Data.

- A dialog window named CSConcat appears and the Output File contains the data to be merged. This file may be nonexistent before concatenation. If it already exists, the file’s old contents will be replaced after the concatenation process. In the Output box, put the path of the output text file, i.e.,

C:\CBMSDatabase\<Regrcode>\<Provcode>\<Muncode>\<Brgycode>\<PSGC.hpq>

Click Browse to get or create that file.

- In the Input list box, add all the text files that should be concatenated. Click Add to browse for them and add all the files.

- If a wrong file was added, click the Remove button to remove unwanted files. If you wish to remove all the added files, click Clear.

- Click Run. The process of merging the text files is done when the following confirmation window pops up.

- If all the right files have been entered, there will be no errors. Errors are usually encountered when the files and/or paths used are incorrect. In this case, address the error and rerun concatenation. Always remember to backup files.

- Reminder: Concatenation must be done only once. DO NOT concatenate a dataset multiple times. This can mess up the ID inside the data and can be very tedious to rectify.
Step-by-Step Instructions for Encoding

Identification

1. Zone
   This field is for the zone code.
   Enter 1 if there is no zone.

2. Purok
   This field is for the purok code. Please consult
   the supervisor regarding these codes.

3. Street
   Enter name of the street. For those without
   street names, type “0.”

4. House number
   Enter the number of the house. Entry can be
typed as number or block and lot location, e.g., Blk
   13 Lot 1.
   For those without house numbers, type “0.”

5. Household identification number
   Be sure that the household ID number is
   matched in the spot map, particularly for those
   who did not use GPS.
   It is better that a list of households with
   corresponding ID number used in the preparation
   of the spot map is available for easier validation.

6. Coordinates (Longitude, Latitude)
   If the LGU did not use GPS to get coordinates
   of the household, encoders are instructed to select
   “not available.”
   This is for CBMS Paper implementers with
   GPS reading.
   Longitude ranges from -180 to 180 depending
   on location while Latitude ranges from -90 to 90.
   Users can select the “not available” value from the
   drop-down tab.

7. Respondent
   Enter the full name of the respondent.

8. Date
   Enter the complete date of the interview or
   select from the calendar control.

9. Time started
   Enter the time when the interview started;
e.g., “2” for PM.
   Note: In a synchronized interview and encoding
   situation, current time is generated.

10. Time finished
    Enter the time when the interview ended.
    Valid codes are “1” for AM and “2” for PM.
    Note: In a synchronized interview and encoding
    situation, last and current time is generated.

11. Interviewer (Enumerator)
    Enter the full name of the enumerator.

12. Coordinator
    Enter the full name of the coordinator.

Housing Characteristics

(1) House type
    Valid entries are 1–5, corresponding to the
different additional identities.
    If the code entered is 5, the cursor will move
to the next field for the other house types not
included in the choices.

(2) Number of bedrooms
    Enter the numeric value.

(3) Construction materials of walls
    Valid entries are 1–7, corresponding to the
different types of construction materials.

(4) Construction materials of roof
    Valid entries are 1–7, corresponding to the
different types of construction materials.

Household Characteristics

(5) Number of members who are OFWs
    Enter the number.
    Note that this number should be at most the
    value of the household size.
(6) **Number of nuclear families**

Enter the number. This is at most the value of the household size.

(7) **Members of the household who are pregnant**

Valid entries are 1 and 2.

(8) **Members of the household who are solo parents**

Valid entries are 1 and 2.

(9) **Members of the household who are disabled**

Valid entries are 1 and 2.

**Encoding individual data for all household members (pages 2–6)**

**Demography**

(10) **Number of household members**

Enter the total number of household members identified in the accomplished questionnaire. The number of household members corresponds to the encircled number in Column 10A of the questionnaire.

Make sure that this number corresponds to the number of names of household members listed in Column 11 of the questionnaire.

**Note:** Under the modify mode, if the number of members is changed and this is less than that encoded, the user will be notified that the number differs with the actual number of members and will be prompted which of the members must be deleted or revised manually.

The encoder should take extra care in making this correction since deletion of member information from the roster is permanent. If this happens, the encoder needs to encode again the member information.

**LINE NUMBER**

This refers to the line number of each household member.

(11) **Name of household members**

Enter the surname on the first line, the first name on the second line, and the middle name on the last line.

(12) **Nuclear family membership**

Enter the number in which nuclear family the member belongs. This has maximum based on field 6.

(13) **Relation to the head of the household**

Code 1 is automatically generated for the household head. Valid entries are 2–9, which refer to the various relations to the household head.

If the code entered is 7 or 9, the cursor will move to the next field for data on other relations not included in the given choices.

(14) **Sex**

Valid entries are 1 (Male) and 2 (Female).

(15) **Birthdate and age**

Enter the date of birth of the member in this format, MM/DD/YYYY. Only month (MM) and day (DD) are the allowed fields to be unknown. The age will be automatically generated.

(16) **Birth registration**

Valid entries are 1 and 2.

(17) **Civil status**

Valid entries are 1–6.

(18) **Ethnicity code**

Enter the code corresponding to the response. The user can select from the drop-down list as well. For more information, see the CBMS Codebook.4 If the selected is “other,” the field for other ethnicity will be activated.

(19) **Overseas Filipino Worker (OFW)**

If the household has OFWs (field 5), this field will be activated. Valid entries are 1 (Yes) and 2 (No).

(20) **Residence 3 years ago**

Valid codes are 1 or 2. If code 1 is entered (same address now), the cursor will skip the place of residence 3 years ago.

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4 The CBMS Codebook contains codes for six questions in the Household Profile Questionnaire about ethnicity, courses completed, occupation, industry, nutritional status, and fishing gear. The said codes are taken from official codes from the National Statistics Office, National Statistical Coordination Board and Food and Nutrition Research Institute.
Place of residence 3 years ago

The codes for the country, province, municipality, and barangay are required to be entered. Refer to the encoding interface for the code of the countries. The country code for the Philippines is 608. Enter the code corresponding to country specified in the questionnaire.

If the place of origin is outside the Philippines, the cursor will automatically skip the location details.

If the place of origin is in the Philippines, the cursor will automatically move to the next field which refers to the province code. The list of provincial codes is found in the executable file.

Example: The provincial code for Tarlac is 69. If the place of origin is Tarlac, the cursor will automatically move to the next field, which refers to the municipality/city code.

After entering the municipal code, the cursor will move to the barangay code, which refers to the barangay code in one municipality/city.

If the place of origin is another province (e.g., not Tarlac), the cursor will skip the municipality code (since the field is only for the municipalities in Tarlac). It will move to the next field. Here, enter the name of municipality/city.

After entering the municipality or city, the cursor will proceed to the barangay field, which will require the user to enter the name of the barangay.

Education

Note: Notice that the cursor will automatically skip fields 21 to 26 if the entered age (refer to field 15) of the household member in the roster is less than 3 years old.

(21) Attending school

Valid entries are 1 (Yes) and 2 (No).
If the entry is 2, the cursor will skip fields 22 and 23 and move to field 24.

(22) Grade/year level

Enter the code for grade/year level.

(23) School type

Valid entries for school type are 1 (public) and 2 (private).

(24) Reason for not attending school

This will be activated only if answer in field 21 is code 1. Acceptable codes are 1–15.

(25) Highest educational attainment

Enter code for the highest educational attainment. If data entered is college graduate (code 300), the next field should be filled up with the code of the course.

COURSE CODE

This is based on Philippine Standard Educational Codes (PSEC). See CBMS Code Book.

Note: Notice that the cursor will automatically skip field 26 if the entered age (refer to field 15) of the household member in the roster is less than 5 years old.

(26) Literacy

Valid entries are 1 (literate) and 2 (not literate).

Political Participation

Note: Notice that the cursor will automatically skip fields 27 and 28 if the entered age (refer to field 15) of the household member in the roster is less than 15 years old.

(27) Registered voter

Valid entries are 1 (Yes) and 2 (No).
If the data entered is 2, the cursor will skip field 28 and move to field 29.

(28) Voted in the last election

Valid entries are 1 (Yes) and 2 (No).

Employment

Note: Notice that the cursor will automatically skip fields 29 to 49 if the entered age (refer to field 15) of the household member in the roster is less than 5 years old.
(29) **Job indicator**
Valid entries are 1 (Yes) and 2 (No).
If the code entered is 2, the cursor will go to field 30; otherwise, it will go to field 31.

(30) **Business indicator**
Valid entries are 1 (Yes) and 2 (No).

*Note:* Notice that the cursor will automatically skip fields 32 to 39 if code 2 is entered in both fields 29 and 30.

(31) **Number of jobs**
Enter the number.

(32) **Type of job/business**
Enter the full name of the job and its corresponding code. The codes are based on the Philippine Standard Occupational Codes (PSOC). See CBMS Code Book for more information.

(33) **Name of business or industry**
Enter the name of business or industry and the corresponding code. The codes are based on the Philippine Standard Industrial Codes (PSIC). See CBMS Code Book for more information.

*Note:* Notice that the cursor will automatically skip fields 34 to 49 if the entry is less than 15 in field 15 (age).

(34) **Nature of employment**
Enter the code of the state of employment of the individual. Valid entries are 1 (if permanent), 2 (if seasonal or temporary), and 3 (if business or job is constantly changing).

(35) **Daily working hours**
Enter the number.

(36) **Weekly working hours**
Enter the number.

(37) **Wanting additional hours of work during the past week**
Valid codes are 1 (Yes) and 2 (No).

(38) **Looked for additional work**
Valid codes are 1 (Yes) and 2 (No).

(39) **Classification of employment**
Enter the classification of the worker. Valid codes are 1–7.

*Note:* If the code on fields 29 and 30 is 1 (not employed), the cursor will skip fields 40 to 47 and automatically move to field 49.

(40) **Look for work**
Valid codes are 1 (Yes) and 2 (No).
If the code entered is 1, the cursor will proceed to field .
If code entered is 2, the cursor will proceed to field 41.

(41) **First time looking for a job**
Enter either code 1 or 2.

(42) **Job search method**
Valid entries are 1–7.

(43) **Number of weeks looking for a job**
Enter the number.

(44) **Reason for not looking for work**
Valid codes are 1–9.
If the data entered is code 9, the cursor will proceed to the next field for the specified reason for not looking for work.

(45) **Last time to look for work**
Valid entries are 1 (within last month), 2 (1–6 months), and 3 (more than 6 months ago).

(46) **Had opportunity for work**
Valid entries are 1 (Yes) and 2 (No).

(47) **Willingness to take up work**
Valid entries are 1 (Yes) and 2 (No).

(48) **Wages**
Enter amount in cash (A) and in kind (B).

(49) **Membership in SSS or GSIS**
Valid entries are codes 1-4.
Characteristics of Household Members

(50) **Pregnant**
Only activated if the code in field 7 is 1 and code 2 in field 14. Valid entries are 1 (Yes) and 2 (No).

(51) **Solo parent**
Only activated if the code in field 8 is 1. Valid entries are 1 (Yes) and 2 (No).

(52) **With disability**
Only activated if the code in field 9 is 1. Valid entries are 1 (Yes) and 2 (No).

(53) **Type of disability**
Only activated if the code in field 52 is 1. Valid entries are 1–17, with the “others” field activated when the code is 17.

(54) **Person with Disability (PWD) ID**
Only activated if the code in field 52 is 1. Valid entries are 1 (Yes) and 2 (No).

(55) **Senior Citizen’s ID**
Only activated if the number is 60 and above in field 15. Valid entries are codes 1 (Yes) and 2 (No).

Crime

(56) **Victim of crime**
Valid entries are 1 (Yes) and 2 (No).

(57) **Type of crime**
Only activated if the code in field 56 is 1. This is a multiple answer field. Enter either 1 (Yes) or 2 (No) in each crime type. For instance, if the entered codes are (1,4), the encoded in the form must be (1,2,2,1,2,2,2).

**Place of crime**
Enter the codes for each type of crime activated. Valid codes are 1–4.

Nutritional Status

**Note:** Notice that the cursor will automatically skip field 58 if the entered age (refer to field 15) of the household member in the roster is more than 5 years old.

(58) **Nutritional status**
Valid entries are 1–4, corresponding to the nutritional status of children.

Enter also the date when the nutritional report was taken. A calendar control will appear to assist you.

After filling out the roster, some other validating messages will appear.

- **You have encoded members different from the actual number of members!**
  This message appears when the number encoded for family members is not consistent with the predefined number of members. After pressing F8, the user will be prompted to change either the household size or the newly encoded number.

- **There are (number) empty person records.**
  This warns the user of empty records such as referring to sex, age, and relationship. The encoder should encode the information in empty fields.

- **There are (number) members aged 18 years old and above.**
  The encoder will be warned by the above message when no adult members are entered in the roster. However, the cursor will still go to the next section.

- **You have fully encoded the members.**
  When the number of members entered is equal to the number of member information encoded, the above message will appear and the user will be brought to the next section.

If data for all household members have all been encoded, a window will appear, validating that the encoder has already encoded data for all household members.

Pressing Function 8 (F8 button) will bring the cursor to the next section of the questionnaire.
Encoding household-based data (pages 7–12)

Water and Sanitation

(59) Source of drinking water
Valid entries are 1–12, corresponding to the different sources of drinking water.
If code entered is 12, enter the other type of drinking water.

(60) Distance of source of drinking water
This is activated only if either of the codes from 2-8 or 12 in field 59. Enter the distance.

(61) Type of toilet facility
Valid entries are 1–8, corresponding to the different types of toilet facilities.
If 8 is entered, enter the type of toilet facility is being used.

Housing

(62) Tenure status of house/lot
Valid entries are 1–10, corresponding to the different types of tenure status.
If 10 is entered, specify the tenure status.
If 2 or 8 is entered, the cursor will move to field 64.

(63) Imputed rent per month
Enter the imputed rent of house and/or lot.

(64) Electricity indicator
Valid entries are 1 (Yes) and 2 (No).
If the code entered is 1, the cursor will move to field 65.
If code 2 is entered, the cursor will move to field 66.

(65) Source of electricity
Valid entries are 1 (Yes) and 2 (No).

(66) Number of owned assets/amenities
Valid entries are integers. For every asset listed, enter the appropriate number.

(67) Number acquired in the last 3 years
This will be activated only if the number in field 66 is not zero. Enter the number of units acquired in the last 3 years.

(68) Insurance
Enter codes 1 or 2. Note that “vehicles” will not be activated if no vehicles are declared in field 66.

(69) Insurance provider
This will be activated only if 1 appears in field 68. Valid codes are 1–4.

Waste Management

(70) Type of garbage disposal
Valid entries are 1 (Yes) and 2 (No).
For every system of waste disposal listed, enter appropriate code.

Note: If 2 is encoded in field 70, fields 71 and 72 will be skipped.

(71) Garbage collector
Valid entries are 1–4. If code 4 is entered, specify the garbage collector.

(72) Frequency of garbage collection
Valid entries are 1–5, corresponding to the type of frequency of garbage collection.

Entrepreneurial Activities

Valid entries are 1 (Yes) and 2 (No). Corresponding subfields for cash (A) and kind (B) are activated only if code 1 appears in corresponding “entrepreneurial activity.”

(A) Income from the activity in cash
Key in amount.

(B) Income from the activity in kind
Key in amount.

(73) Crop farming and gardening
(74) Livestock/poultry
(75) **Fishing**
(76) **Forestry**
(77) **Wholesale/retail**
(78) **Manufacturing**
(79) **Community, social and personal service.**
(80) **Transportation, storage and communication**
(81) **Mining and quarrying**
(82) **Construction**
(83) **Other activities not elsewhere classified**

When 1 is entered, a field for “others” will be activated where a description of the entrepreneurial activity shall be keyed in.

Fields 73-83 are spanned by:

(A) **Income from the source in cash.**
Amount.

(B) **Income from the source in kind.**
Amount.

(84) **Total income from entrepreneurial activities**
This is composed of cash (A) and kind (B).
These are read-only fields and automatically computed based on fields 73 to 83.

### Agriculture Farming

Fields 99 to 104 will be activated only if code 1 appears in field 73.

(99) **Number of parcels**
This is an auxiliary field. Count the number of parcels entered and encode.

(100) **Area of farm**
Enter the specified area.

**Note:** There is an auxiliary field “number of types of crops harvested”. Key in the response. You will be asked to encode 101 to 102 with instances equal to this field.

(101) **Type of crop**
Enter or select the appropriate item.

(102) **Volume harvested**
Key in the value.

(103) **Agricultural equipment**
Valid entry is either 1 or 2.

(104) **Number of agricultural equipment owned**
Will be activated only if code 1 appears in 103. Enter the number.
Livestock Raising

(105) **Type of livestock/product**

Enter 1 or 2. When in “Others”, selecting “Yes” will show another field for description.

(106) **Volume/number**

Key in the volume/number of product sold.

Fields 105 and 106 will be spanned by the following products:

(i) **Live animals**. This will be spanned by the following animal types:
   a) Hog
   b) Goat
   c) Carabao
   d) Cow
   e) Chicken
   f) Duck
   g) Others

(ii) **Meat**. This will be spanned by the following animal types:
   a) Hog/sow
   b) Goat
   c) Carabao
   d) Cow
   e) Chicken
   f) Duck
   g) Others

(iii) **Milk**. This will be spanned by the following animal types:
   a) Goat
   b) Carabao
   c) Cow
   d) Others

(iv) **Eggs**. This will be spanned by the following animal types:
   a) Chicken
   b) Duck
   c) Others

(v) **Other product**. This will be spanned by the following animal types:
   a) Hog/sow
   b) Goat
   c) Carabao
   d) Cow
   e) Chicken
   f) Duck
   g) Others

The whole section Q, i.e., fields 107 to 115 are activated only if Yes appears in 75.

Fishing

(107) **Fishing**. This field is spanned by:

1) **Fish catching**.
   Enter 1 (Yes) or 2 (No).

2) **Culturing fish**.
   Enter 1 (Yes) or 2 (No).

Field 108 is activated only if Yes appears in 107.1.

(108) **Location of catching fish**.

Enter the appropriate answer.

(109) **Use boat**

   Enter 1 (Yes) or 2 (No).

(110) **Own boat**

   Enter 1 (Yes) or 2 (No).

Fields 109 and 110 will be spanned by the following types of boats:

1) Boat with engine and outrigger
2) Boat with engine but without outrigger
3) Boat without engine but with outrigger
4) Boat without engine and outrigger
5) Raft

Note: An auxiliary field “number of types of equipment” will appear to generate the types of equipment. Key in the response and iterations of fields 111 and 112 will be activated.
(111) **Type of gears/accessories/devices**

Enter the field and choices will be activated. Select the appropriate item.

(112) **Owned equipment**

Enter 1 (Yes) or 2 (No).

(113) **Aquatic farm.**

Enter 1 (Yes) or 2 (No). This will be spanned by the following types:
1) Fishpond
2) Fish pen
3) Fish cage
4) Seaweed farm
5) Oyster farm
6) Mussel farm
7) Fish tank
8) Hatchery
9) Others

Note: An auxiliary field “number of types of aquatic animals harvested” will appear to generate the types of animals/fish. Key in the response and iterations of fields 114 and 115 will be activated.

(114) **Type aquatic animal**

Enter the field and choices will be activated. Select the appropriate item.

(115) **Volume harvested**

Key in the volume.

**Climate Change**

(116) **Years in dwelling unit**

Enter the appropriate choice.

Fields 117 to 147 are activated only if “3 years and above” appears in 116.

**Crop Farming**

Field (117) will not be activated if “not more than 3 years” appears in 116 or “No” in 73.

(117) **Years in crop farming**

Enter the appropriate choice.

Fields 118 to 123 are activated only if “3 years and above” appears in 117.

(118) **Change in harvest**

Enter the appropriate choice.

Field 119 is activated only if “Decrease” appears in 118.

(119) **Primary reason for the decrease in harvest**

Enter the appropriate choice. If “others” is selected, another field will appear to contain the other description.

(120) **Change in crops**

Enter 1 (Yes) or 2 (No).

(121) **Reason for change in crops**

This is activated only if “Yes” appears in 120. Enter the appropriate choice. If “others” is selected, another field will appear to contain the other description.

Fields 120 and 121 are spanned by:

i) Same crops
ii) Primary crops

(122) **Insurance**

Enter 1 (Yes) or 2 (No).

(123) **Insurance provider**

This is activated only if “Yes” appears in 122. Enter the appropriate choice. If “others” is selected, another field will appear to contain the other description.

Fields 122 and 123 are spanned by:

i) Crop insurance.
ii) Agriculture equipment insurance.

Field 124 will not be activated if “not more than 3 years” appears in 116 or “No” in 74.

**Livestock and Poultry**

(124) **Years in livestock/poultry**

Enter the appropriate choice.

Fields 125 to 128 are activated only if “3 years and above” appears in 124.
(125) **Change in the number of livestock and poultry**
Field 126 is activated only if “Decrease” appears in 125.

(126) **Primary reason for the decrease in number of livestock and poultry**
Enter the appropriate choice.
If “others” is selected, another field will appear to contain other reason not in the choices.

(127) **With livestock/poultry insurance**
Enter 1 (Yes) or 2 (No).

(128) **Insurance provider**
This is activated only if “Yes” appears in 127. Enter the appropriate choice. If “others” is selected, another field will appear to contain the other description.

**Fishing**
Field 129 will not be activated if “not more than 3 years” appears in 116 or “No” in 75.

(129) **Number of years in fishing**
Enter the appropriate choice.
Fields 130 to 133 are activated only if “3 years and above” appears in 129.

(130) **Change in the fish catch**
Field 131 is activated only if “Decrease” appears in 130.

(131) **Primary reason for the decrease in fish catch**
Enter the appropriate choice.
If “others” is selected, another field will appear to contain other reason not in the choices.

(132) **With fisheries insurance**
Enter 1 (Yes) or 2 (No).

(133) **Insurance provider**
This is activated only if “Yes” appears in 132. Enter the appropriate choice. If “others” is selected, another field will appear to contain the other description.

**Temperature**
(134) **Compared to 3 years ago, is the temperature hotter now in your area?**
Enter 1 (Yes) or 2 (No).

**Electricity**
(135) **Compared to 3 years ago, are brownouts more frequent now in your area?**
Enter 1 (Yes) or 2 (No).

**Sea Level**
(136) **Sea level 3 years ago**
Enter the appropriate answer.

**Water Supply**
(137) **Water supply 3 years ago**
Enter the appropriate answer.

(138) **Primary reason for the decrease in water supply**
Activated only if “Decrease” appears in 137.

**Flood**
(139) **Compared to 3 years ago, do floods occur more often in your area now?**
Enter the appropriate answer.
Fields 140 and 141 are activated only if “Yes” appears in 139.

(140) **Three years ago, how long does it usually take for the flood to subside?**
Enter the appropriate answer.

(141) **During the past 12 months, how long does it usually take for the flood to subside?**
Enter the appropriate answer.

**Drought**
(142) **Occurrence of drought**
Enter the appropriate answer.

(143) **Duration of drought**
Activated only if “Yes” appears in 142.
Enter the appropriate answer.
Evacuation

(144) Moved out/Left previous dwelling unit
Enter 1 (Yes) or 2 (No).

(145) Primary reason of moving out/evacuation from the previous dwelling unit
Activated only when “Yes” appears in 144. Enter the appropriate answer. “Others” field will be activated appropriately.

(146) Temporarily evacuated house due to any calamity
Enter 1 (Yes) or 2 (No).

(147) Place of stay during evacuation
Activated only when “Yes” appears in 146. Enter the appropriate answer. “Others” field will be activated appropriately.

Calamity

(148) Experienced this type of calamity
Enter 1 (Yes) or 2 (No).
Fields 149 to 151 are activated only if “Yes” appears in 148.

(149) Frequency of calamity
Key in the number of times.

(150) Received aid
Enter 1 (Yes) or 2 (No).

(151) Source of aid
Enter the appropriate answer. The “Other” field will be activated appropriately.
Fields 148 to 151 are spanned by:

1) Typhoon
2) Flood
3) Drought
4) Earthquake
5) Volcanic eruption
6) Landslide
7) Tsunami
8) Fire
9) Forest fire
10) Armed conflict
11) Others

Disaster Preparedness

(152) With disaster kit
Enter 1 (Yes) or 2 (No).
Fields 153 and 154 are activated only if “Yes” appears in 152.

(153) Type of kit
Enter 1 (Yes) or 2 (No).

(154) Days to last
Key in the number of days.
Field 148 is spanned by:

1) Water
2) Food (canned goods, biscuit, bread)
3) Matches/lighter
4) Flashlight/emergency light
5) Radio/transistor
6) Candle
7) Medical kit
8) Whistle
9) Clothes
10) Blanket
11) Battery
12) Important documents
13) Other type
Field 154 is only spanned by (i) and (ii).

Hunger

(155) Experienced hunger
Enter 1 (Yes) or 2 (No).
Fields 156 and 157 are activated only when “Yes” appears in 155. Also, 156 and 157 are spanned by first, second, and third months from the date of interview.

(156) Month experienced hunger
Check if the selected month is the last 3 months from the interview. For instance, if
the month of interview is August, consecutive months must be July, June, and April.

(157) **Number of days**
Key in the number of days for each month.

**Household Members Who Died**

(158) **With member who died in the last 12 months**
Enter 1 (Yes) or 2 (No).
If “Yes” appears in 158, an auxiliary field “number of members who died” will appear that will generate the roster. Key in the number. You will follow the instructions similar to filling out the members of the household.

(159) **Surname and first name**
Key in the surname and first name in the two fields provided.

(160) **Sex**
Select “Male” or “Female.”

(161) **Age at death**
Key in the age.

(162) **Cause of death**
Enter to select cause. Another field for “others” will be activated appropriately.

**Programs**

(163) **Type of program**
Enter 1 (Yes) or 2 (No) for each type.

Fields 164 to 167 are activated only when “Yes” appears in 163.

(164) **Name of the program**
Key in the name of the program.

(165) **Number of beneficiaries in the household**
Key in the number of members.

(166) **Beneficiary member**
This is the roster that will link the line numbers in 11.A. The existing members will pop up to assist the user and select as specified in the questionnaire.

(167) **Implementor**
Enter the choices. The “others” field will be activated accordingly.

Fields 163 to 167 are spanned by:

1) Sustainable Livelihood Program.
2) Food for School
3) Food for Work
4) Cash for Work
5) Social Pension for the Indigent Senior Citizens
6) CCT/4Ps
7) ARCDP
8) Day Care Center
9) Philhealth –OFW
10) Philhealth – Employed
11) Philhealth – Individually Paying
12) Philhealth – Sponsored
13) Philhealth – Lifetime

An auxiliary field “number of other programs received” will appear that will generate the roster. Key in the number.

You will follow the instructions similar to filling out the members of the household for fields 164 to 167.

Fields 163 to 167 for the second roster for the other programs are spanned by:

- Other health insurance (Maxicare, Medicare, Intellicare, etc.)
- Health assistance
- Supplemental feeding
- Education/scholarship program
- Skills or livelihood training program
- Credit program
- Housing program
- Other programs
Introduction

This manual contains guidelines and instructions on the use of the CBMS StatSim Pro 6.0 designed and customized for the local government unit (LGU) partners of the CBMS-INCT. The software has been traditionally called StatSim. The appendages only refer to the version of the software and purely for nomenclature purposes.

StatSim is a MySQL application developed to simulate simple computations and tabulations usually done using statistical software or other tabulation applications, and to export indicators for use in dissemination such as tables and maps. Although this has the mentioned capability, this is not intended to replace the use of more sophisticated statistical software like SAS, Stata, or SPSS.

System Configuration

The following system configuration is required for better and faster processing:

- Processor: Intel i5 or AMD Phenom X2
- Memory: 2GB
- Hard disk: 500GB
- Graphics: 512MB memory (e.g., Integrated Intel HD graphics, NVIDIA 8600GT or ATI HD4850)
- Operating System: Windows 7 64-bit with MS Office (or OpenOffice)
- Essentials: Internet connection, Monitor, Keyboard, Mouse, Printer

Installation

The step-by-step installation procedure below will update the existing CBMS encoding system in the computer. Installation is quick and simple.

Steps in installing the software:

a) Insert the installation CD provided by the CBMS-INCT in the computer’s CD-ROM drive.
b) The setup menu will automatically pop up. If it does not, open Windows Explorer and double click the CD drive where the CD is located and run “manage.exe”.
c) The StatSim Pro 6.0 setup will prepare the Installation Wizard.
d) The Installation Wizard will start. Click “Next” to proceed with the installation.
e) The setup will require the user to accept the agreement upon using the software. After agreeing on the terms, click **Next**.

   ![Image of License Agreement]

f) A pop-up screen will appear asking for Customer Information. Enter the name of the user and the company/office name. Click **Next**.

   ![Image of Customer Information]

g) The user will be prompted to select a set-up type. Select **Complete** and click **Next**.

   ![Image of Setup Type]

h) Click **Install** to begin the installation.

   ![Image of Install Shield Wizard]

i) A pop-up screen will appear informing that the InstallShield Wizard has successfully installed CBMS StatSimPro 6.0. Click **Finish**.

   ![Image of InstallShield Wizard Complete]

**General Instructions**

a) Set up and maintain a computer that will serve as your data repository. This computer should store all encoded text files, vector (shapefiles or SHP) and raster files.

b) Before using StatSim for processing and consolidating your data, check first the accuracy and consistency of your text files.
If needed, perform concatenation procedure (refer to section on concatenation in the User’s Manual for the Computerized Data Encoding System) to merge encoded household data from the same barangays. This is crucial before simulation.

Check the matching of households in the encoded data and digitized spot map using the Household Identification Number. Complete matching of households for both data sets must be attained before processing to avoid repeating the steps.

The file path above refers to the folder containing the encoded data (041026019.hpq) of Barangay Pila (019), San Pascual (26) in Batangas (10) in Region IVA (04). The folder structure is the same in all computers used for encoding.

In the case of CBMS APP, the downloaded CAN file from the Portal can be usually found in

C:\Users\<username>\Downloads\<seriesno>.can

To ensure that the files are in the proper place, put the CAN file in your respective folder. For example, if your file is provincial (Batangas province), put the CAN file inside the provincial folder and rename it to your PSGC,

C:\CBMSDatabase\04\10\041000000.can

Through this, you can distinguish encoded CBMS Paper files (*.hpq) and CBMS App files (*.can) inside the same folder with similar file names but different extensions.

### Preparing Encoded Data for StatSim Processing

#### CBMS Database Structure

At this stage, the encoders and processors are familiar with the file structure of the CBMS Database. However, it must still be noted that the general file/folder structure of the CBMS database is C:\CBMS Database\<Region>\<Province>\<Municipality>\<Barangay>

The folder structure was designed so that the encoded data are stored by barangay. Thus, each barangay folder contains the text (ASCII) file where the household data are stored. Recall that the folder names make use of the Philippine Standard Geographic Codes (PSGC). For instance, if the encoded data of interest is Brgy. Pila, San Pascual, Batangas, the target file will be C:\CBMSDatabase\04\10\26\019\041026019.hpq
c) Click Start, click on All Programs, select CBMS Database, and click on StatSimPro 6.0

![StatSimPro 6.0 interface](image)

**Initializing the StatSim Database**

a) During the first run, you will encounter the following dialog. Simply ignore. This happens during the first run of StatSim.

![Dialog error message](image)

d) The following window pops up to prompt the user to select data dictionary, e.g., the Household Profile Questionnaire (HPQ) and the specific form ID. Although this is usually given, ask your supervisor for the specific ID of the form. Check the specific item and click OK.

![Login window](image)

e) StatSim is a menu- and dialog-driven application. Thus, the user only has to click and select from among the options to proceed and generate the desired outputs. StatSim is also a customized application for a specific CBMS questionnaire version and LGU using the said questionnaire version. Thus, all information contained in the questionnaire can be derived and processed for the LGU. Each questionnaire is differentiated by the HPQ version number.

f) Configuring the database means specifying the level to be municipal, provincial, or regional database. For this example, create a municipal database.

![Configuring database](image)

g) Click the button View selection. From the listed municipalities, double click on the name of the municipality and click OK. For this example, StatSim database for the Municipality of Ramon Magsaysay in Zamboanga Del Sur will be created.

![View selection](image)

StatSim Pro 6.0 interface will now open.
Note: When opening a configured database, procedures (b) to (e) are not needed.

1. **Application Button** – shows a menu of file-related commands such as New, Print, and etc.

2. **Quick Access Toolbar** – a customizable toolbar that displays the frequently used commands.

3. **Main Tabs** – display the main features and functions of the system. There are three main tabs:
   a) **Home** – under this tab, the user can import and export data, show or hide the status bar, and manage the report windows.
   b) **Data** – this tab is divided into two groups related to data management. Under this tab, the user can manage the created database, reprocess or update the imported data, match data with digitized households in QGIS, and edit thresholds to be used in processing.
   c) **Stats/Indicators** – enables the user to directly access the HPQ or BPQ crosstabs of CSPro, QGIS, Encoding System, and StatSim 4.0. Users can also create or customize reports other than the automatically generated reports using the execute SQL feature.

4. **Database Name** – displays the name of the database being accessed.

5. **Tree View** – shows the hierarchical view of the available reports generated by the system. There are three categories of automatically generated reports in the tree view, namely, CBMS Core Indicators, LGU Specific Indicators, and CBMS Composite Index. Each category can be expanded to reveal the sub-items.

6. **Status Bar** – found at the bottom of the user interface. It shows the progress of the importing and processing of data.

7. **Table View** – displays the reports selected in the tree view. In the first view, you can see the summary missing items in the database content.
Importing CBMS Data

This section will guide you through the process of importing your encoded data file into the StatSim. In the importing process, the StatSim transforms the encoded data into a database ready for further processing and tabulation.

a) To import an encoded barangay data, go to Home in the main tab, then select Import.

The user may import the encoded data in three ways: (1) select the text file through the **Specify path**; (2) **Auto selection of levels** in importing text files; and (3) **Select .can/.zip file** to load. Note that the third option is only available when the questionnaire has been developed for CBMS App. Consult your TWG regarding this.

1) **Specify Path**

The Specify Path option allows the user to manually select the encoded data, similar to opening files using Windows Explorer.

(a) In the window, click the button Add to open the browser.

(b) From the browser, select the text file. Usually, as instructed during the training, all the text files follow the PSGC folder structure. For example, in selecting the text file of Brgy. Abulalas, Hagonoy, Bulacan, select the text file 031409001.hpq from the folder C:\CBMSDatabase\03\14\09\001.
2) **Auto Selection of Levels**

The geopolitical levels are prespecified following the PSGC folder structure. In the example below, the selection starts from the region, next is the province, followed by the list of municipalities (viewed in the first box), and all barangays under each municipality. The list of barangays can be seen at the second box in the window. Selecting the barangays is easy as selection buttons are present between the second and third boxes. The third box contains barangays that have been selected from the second box.

3) **Select .can/.zip file**

After clicking the option, a dialog box prompting the user to select a CAN file will be shown. Select the CAN file desired. Make sure that this file is from the CBMS Portal. The name of the file will be shown in the switch/choose dialog; click **OK**. Wait until a message says that “<file path> has been loaded to the database,” then click **OK**.

*Note: Import using methods (1) and (2) accumulates inside the database. This is to enable users to import succeeding files, and hence, must be used with caution.*
(a) After selecting the text file/files using the three methods, users must click OK to start.

(b) After the selected files have been imported, a window will appear to ask if the user wants to import another set of data. Click Yes to add again using the same process or No if user is already done importing desired text files.

(c) Another window will appear, click Yes to start the processing.

(d) A window will appear to ask if the user wants to edit the purok names. Recall that in the CSPro-based encoding system, all purok names are encoded as codes to reduce mismatches in names.

(e) Double-click on the purok name or click Edit to change the names. After editing all the names, click OK.

(f) The user will now be prompted to select at what level the data will be processed. User can select from the label in the first box and click - button to specify the desired geopolitical levels.

This step is very crucial because the labels/names of the purok in this section must match their names in the NRDB or QGIS project files since matching of these files is both case and space sensitive.

Click Yes to edit the purok names.
Processing CBMS Data

13+1 Core Indicators

The user will be asked if he/she wants to process the CBMS Core Indicators. Click Yes to proceed.

While StatSim is processing, you will see the status of the processing activity at the lower left of the page. Please note that the length of time required in processing the data depends on the size of the file, the number of text files that the user is processing, and the number of selected levels (region, province, municipality, barangay, purok, and households). When done, the user will be notified that processing has been completed. Also, the status bar will now indicate ready or done.

Millennium Development Goals (MDG) Indicators

Localized MDG indicators can also be processed in the Statsim. To generate the table containing MDG indicators, go to Data and click Process/Update. Select Process Millennium Development Goals.

Then, select the levels to process and click OK.

Other Key Indicators

StatSim can also process and generate results on other key indicators that are related to programs, community participation, migration, senior citizens, persons with disability (PWDs), solo parents, and others. To process these indicators, go to Data and click Process/Update. Select Process Other Key Indicators.

Then, select the levels to process and click OK.
Climate Change–Related Indicators

The updated CBMS questionnaire includes climate change–related questions. All these data can also be processed using StatSim Pro 6.0. To process, go to Data and click Process/Update. Select Process Climate Change Related Indicators.

Displaying the CBMS Data

Core Indicators

To view the data, the StatSim contains the tree view of the report tables in the left side of the interface. To display the CBMS Core Indicators, click on the CBMS Core Indicators in the report view. Choose the level of the data you wish to view. If you choose to display the CBMS Core Indicators at the municipal level, then you will be able to view an output similar to the one displayed below:
If you choose to display the CBMS Core Indicators at the household level, below is the sample output:

Users can simultaneously display reports by clicking on the specific sector and indicator, then choose the level of data to view. Every time the user selects a report, a new window will open and display the selected report. For example, to view the prevalence of malnutrition at the barangay level, below is the output report that shows data for all barangays of Ramon Magsaysay, Zamboanga Del Sur.
Other Reports Automatically Computed by StatSim

Users can also view the following reports automatically computed by StatSim Pro:

**CBMS Composite Index**

Each household should meet 13 basic needs. The CBMS Composite Index (CCI) is the sum of all unmet needs of the households. For example, HH#1 have (1) income below poverty threshold; (2) have children who are malnourished; and (3) have no access to sanitary toilet facility. Thus, the CCI of HH#1 is 3. Below is a sample output. Note that the list is sorted according to the lowest to the highest CCI. This index is useful in targeting beneficiaries of programs. In terms of the 13 multidimensional indicators of poverty, the higher the number of CCI, the poorer the household is.

1 Instead of the two indicators on elementary (6-11 years old) and high school (12-15 years old) non-participation, school non-participation (6-15 years old) is used.

Other Key Indicators

Automatically generated reports are now available for selected key indicators found in the HPQ.
At the *purok* and higher geopolitical levels, the CCI is the average household scores at that level. An update in this version includes the minimum, maximum, and standard deviation of household scores. In the example below, the average unmet needs of the households in Brgy. Abulalas is 1. This number is useful in targeting barangays with the highest average unmet needs.

**Millennium Development Goals**
Comprehensive Development Plan

Customizing Tables

Aside from the automatically generated data, users can also create their own tables using all variables found in the HPQ. Kindly refer to the Manual on Executing SQL statements to generate CBMS data using StatSim.

Climate Change–Related Indicators

An addition to this version is the “Execute Command,” similar to that of Stata. Click the **Execute command** button under the Stats/Indicators tab and a dialog box prompting the user to enter a command will pop up.
The command executes on an existing table. By default, the table `hpq_mem` is the one active. All fields/variables under this table can be called to be tabulated. Users must know the variable names (short names) of their data dictionary in order to proceed. For instance, the command `tab civstat sex` outputs a cross-tabulation of civil status and sex.

StatSim outputs value labels instead of values. The command can also work using string variables. The command `tab msname sex` shows the surname of members tabulated according to sex.

StatSim outputs value labels instead of values. The command can also work using string variables. The command `use hpq_hh` shifts the focus of the command on `hpq_hh` table. Hence, the follow up command `tab cropind fshort` shows frequency of households who are engaged in crop farming and gardening whether they experienced hunger.
Another command is `fdt` which generates a frequency distribution table (fdt). For example, the command `fdt age_yr sex` generates a table of frequency distribution of age range by fives and by sex.

---

### Exporting Processed CBMS Data

#### Core Dataset from CBMS StatSimPro to QGIS

After processing the CBMS Core Indicators using the StatSim and ensuring that the household IDs in the encoded file and digitized spot map match, the processed data set can now be exported into the QGIS to map the CBMS indicators. The exported data are in comma-separated-values (CSV) for user's convenience.

1. From the **Home** menu, select **Export**.
   - **(1)** To export Core indicators, Select **Export Core to CSV/QGIS**.

2. Select the following levels to process (whichever is applicable): Municipality, Barangay, Purok, and Household.

Click **OK**. The following message box will appear:

Note that all outputs will go to the CSV files named `<geopolitical level>_coreind.csv` in the same path `C:\CBMSDatabase\System\Output`

You are now ready to map CBMS Core Indicators using the QGIS. Refer to the manual: *CBMS Poverty Mapping: A User’s Guide*, for the steps.

b) To export CCI, select **CBMS Composite Indicators**.

Click **OK**. The following message box will appear:
Note that all outputs will go to the CSV files named `<geopolitical level>_cci.csv` in the same path `C:\CBMSDatabase\System\Output`.

c) To export MDG data, select **Millennium Development Goals**.

Click **OK**. The following message box will appear:

Note that all outputs will go to the CSV files named `<geopolitical level>_mdg.csv` in the same path `C:\CBMSDatabase\System\Output`.

(d) Other Processed Tables

Other processed tables can also be exported and opened in MS Excel. From the **Home** menu, select **Export** then select the name of the desired table. The table will automatically open in Excel.

**Notes:**

1. Short names of variables are important because the system uses these to make tables. It is important to familiarize oneself with the variable names in the data dictionary.

2. Alphanumeric columns referring to occupation, programs, perception, etc. cannot be tabulated.

**Some commonly used abbreviations/acronyms** (please see data dictionary and list of variable names):

1. regn—Region code
2. prov—Province code
3. mun—Municipality code
4. brgy—Barangay code
5. purok—Purok code
6. hcn—household control number/ID
7. Prop—proportion
8. SWS—Safe water supply
9. STF—Sanitary toilet facility
10. Death04—Child death (0-4)
11. DeathPreg—Death due to pregnancy-related causes
12. Maln05—Malnutrition
13. Squat—Squatters
14. MSH—Makeshift housing
15. Povp—Poverty
16. Subp—Subsistence poverty
17. Fshort—Food shortage
18. Unempl15ab—Unemployment (15 years old and above)
19. Elem612—Elementary participation (6–12)
20. Elem611—Elementary participation (6–11)
21. HS1316—High school participation (13–16)
22. HS1215—High school participation (12–15)
23. Sch616—School participation (6–16)
24. Sch615—School participation (6–15)
25. VictCr—Victims of crime
### Basic Tables Readily Available from StatSim Replicable to all Geopolitical Units

<table>
<thead>
<tr>
<th>Internal Name</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>Population, Barangay</td>
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<td>Brgy_Demog</td>
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<td>Brgy_CoreInd</td>
<td>CBMS Core Indicators, Barangay</td>
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<td>Brgy_CCI</td>
<td>CBMS Composite Index (CCI), Barangay</td>
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<td>Prevalence of Malnutrition, Barangay</td>
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<td>Deaths due to pregnancy-related causes, Barangay</td>
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<td>Brgy_Squat</td>
<td>Informal settlers (squatters), Barangay</td>
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<td>Brgy_MSH</td>
<td>Households living in makeshift housing, Barangay</td>
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<td>Households without access to safe water supply</td>
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<td>Households with access to electricity</td>
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<tr>
<td>91</td>
<td>Brgy_elec_src</td>
<td>Source of electricity, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Source of electricity</td>
</tr>
<tr>
<td>92</td>
<td>Brgy_ent_act</td>
<td>Entrepreneurial activity, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Entrepreneurial activity of households</td>
</tr>
<tr>
<td>93</td>
<td>Brgy_croppred</td>
<td>Households engaged in agriculture, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households engaged in agriculture</td>
</tr>
<tr>
<td>94</td>
<td>Brgy_u_amt_fish</td>
<td>Households in agriculture with decreased fish catch, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households in agriculture with decreased fish catch</td>
</tr>
<tr>
<td>95</td>
<td>Brgy_u_low_fish</td>
<td>Reason for low fish catch, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reason for low fish catch</td>
</tr>
<tr>
<td>96</td>
<td>Brgy_poulprod</td>
<td>Households engaged in livestock raising, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households engaged in livestock raising</td>
</tr>
<tr>
<td>97</td>
<td>Brgy_u_amt_lve</td>
<td>Households in livestock raising with decreased livestock raised, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households in livestock raising with decreased livestock raised</td>
</tr>
<tr>
<td>98</td>
<td>Brgy_u_low_lve</td>
<td>Reason for low livestock raised, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reason for low livestock raised</td>
</tr>
<tr>
<td>99</td>
<td>Brgy_fishprod</td>
<td>Households engaged in fishing, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households engaged in fishing</td>
</tr>
<tr>
<td>100</td>
<td>Brgy_u_amt_fish</td>
<td>Households in fishing with decreased fish catch, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Households in fishing with decreased fish catch</td>
</tr>
<tr>
<td>101</td>
<td>Brgy_u_low_fish</td>
<td>Reason for low fish catch, Barangay</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reason for low fish catch</td>
</tr>
<tr>
<td>Brgy</td>
<td>Variable</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>102</td>
<td>Brgy_temp_humid</td>
<td>Households that experienced increase in temperature, Barangay</td>
</tr>
<tr>
<td>103</td>
<td>Brgy_elec_loss</td>
<td>Households that experienced more frequent brownouts, Barangay</td>
</tr>
<tr>
<td>104</td>
<td>Brgy_sea_lvl_rise</td>
<td>Households that experienced more frequent brownouts, Barangay</td>
</tr>
<tr>
<td>105</td>
<td>Brgy_wtr_supp_dec</td>
<td>Households who experienced decrease in water supply, Barangay</td>
</tr>
<tr>
<td>106</td>
<td>Brgy_flood_freq</td>
<td>Households who experienced more frequent flooding, Barangay</td>
</tr>
<tr>
<td>107</td>
<td>Brgy_drought</td>
<td>Households that experienced more frequent droughts, Barangay</td>
</tr>
<tr>
<td>108</td>
<td>Brgy_evac_mveout</td>
<td>Households that experienced moving out/leaving previous dwelling unit because of any calamity, Barangay</td>
</tr>
<tr>
<td>109</td>
<td>Brgy_disas_prep</td>
<td>Households that have disaster-preparedness kits, Barangay</td>
</tr>
<tr>
<td>110</td>
<td>Brgy_kit_type</td>
<td>Disaster-preparedness kit contents, Barangay</td>
</tr>
<tr>
<td>111</td>
<td>Brgy_ins_for</td>
<td>Purpose of insurance, Barangay</td>
</tr>
<tr>
<td>112</td>
<td>Brgy_calam_type</td>
<td>Type of calamity, Barangay</td>
</tr>
<tr>
<td>113</td>
<td>Brgy_MDG</td>
<td>Millennium Development Goals (MDGs), Barangay</td>
</tr>
<tr>
<td>114</td>
<td>Brgy_CDP21</td>
<td>Comprehensive Development Plan (CDP) Tables Session 2.1, Barangay</td>
</tr>
<tr>
<td>115</td>
<td>Brgy_CDP22</td>
<td>Comprehensive Development Plan (CDP) Tables Session 2.2, Barangay</td>
</tr>
<tr>
<td>116</td>
<td>Brgy_CDP23</td>
<td>Comprehensive Development Plan (CDP) Tables Session 2.3, Barangay</td>
</tr>
<tr>
<td>117</td>
<td>Brgy_CDP24</td>
<td>Comprehensive Development Plan (CDP) Tables Session 2.4, Barangay</td>
</tr>
<tr>
<td>118</td>
<td>Brgy_CDP25</td>
<td>Comprehensive Development Plan (CDP) Tables Session 2.5, Barangay</td>
</tr>
<tr>
<td>119</td>
<td>brgy_area</td>
<td>Land area, Barangay</td>
</tr>
<tr>
<td>120</td>
<td>brgy_hf_type</td>
<td>Types of health facilities, Barangay</td>
</tr>
<tr>
<td>121</td>
<td>brgy_sf_type</td>
<td>Types of service facilities, Barangay</td>
</tr>
<tr>
<td>122</td>
<td>brgy_ef_type</td>
<td>Types of educational facilities, Barangay</td>
</tr>
<tr>
<td>123</td>
<td>brgy_pt_type</td>
<td>Types of public transport, Barangay</td>
</tr>
<tr>
<td>124</td>
<td>brgy_road_length</td>
<td>Road length, Barangay</td>
</tr>
<tr>
<td>125</td>
<td>brgy_wf_type</td>
<td>Types of water facility, Barangay</td>
</tr>
<tr>
<td>126</td>
<td>brgy_sd_type</td>
<td>Types of garbage disposal facility, Barangay</td>
</tr>
<tr>
<td>127</td>
<td>brgy_es_type</td>
<td>Types of electricity services, Barangay</td>
</tr>
<tr>
<td>128</td>
<td>brgy_sig_events</td>
<td>Significant events, Barangay</td>
</tr>
<tr>
<td>129</td>
<td>brgy_de_type</td>
<td>Types of disaster equipment, Barangay</td>
</tr>
<tr>
<td>130</td>
<td>brgy_crime_type</td>
<td>Types of reported crimes, Barangay</td>
</tr>
</tbody>
</table>
CHAPTER 12
Managing Missing Values

Introduction to Missing Values

Every census or survey aims to completely capture all data. However, large data sets may contain missing data or missing values. Not considering these missing data will affect the interpretation of the generated results. A large amount of missing data can give misleading results. Thus, it is necessary to know how to manage and reduce the amount of missing data. This section will provide procedures on how to check and identify missing data using SQL syntax, and possible ways to correct, minimize, or better yet avoid missing data.

What are Missing Values?

Missing values occur when a certain case or observation has no data value for a given variable. With missing values, the whole data is regarded as “incomplete”. Data incompleteness can occur in varying extent. Incompleteness due to missing values might be present in one, two, or sometimes all variables for some or all observations. In commercial statistical softwares, missing values are indicated by “.” (dot), 99, or a blank space. StatSim, using SQL, assigns NULL as the missing data. NULL is defined as no value in the text field, or either no value or no designated value in a numeric field. For example, the name of the respondent or the highest educational attainment of one member was not encoded, StatSim processed data indicates it as NULL.

Types of Missing Values

The two types of missing values are as follows:

1. **User missing values** – data are missing as a result of improper editing or encoding of the questionnaire. However, there are possible reasons why data are missing. By knowing the reason, user missing data can be grouped into valid and invalid cases. For valid cases, the reason may be one of the following:
   (a) Data are missing because the question did not apply to the respondent. This also applies to skipping patterns in questionnaires.
   (b) Data are missing because a respondent refused to answer. This is called nonresponse.

On the other hand, invalid cases of missing values may be due to the following:
   (a) The data enumerators might have forgotten to gather information on some questions.
   (b) The data encoder missed to encode the responses.
   (c) The data encoder committed an error.

2 **System missing values** are automatically assigned by the program when no valid value can be produced, such as when an alphabetical character is encountered in the data for a numeric variable. For example, valid values for
the variable sex are 1 for male and 2 for female; sometimes encoded values are 0 (zero), a, or A.

For this section, we will focus on how to identify invalid user missing values and minimize or possibly correct these.

**Identifying/Checking for Missing Values using SQL**

In StatSim processed data, all user missing values are denoted by null. Hence, SQL syntax will be used to identify the missing data to classify valid and invalid cases. Identification variables (such as urbanity, region, province, municipality, barangay, purok, HH number, and member number) should all have valid values. The syntax below will list the cases with missing values for all identification variables.

**Household Record**

```sql
SELECT *
FROM hpq_hh
WHERE prov is NULL OR mun is NULL OR brgy is NULL OR purok is NULL OR hcn is NULL;
```

**Member Record**

```sql
SELECT *
FROM hpq_mem
WHERE msname is NULL OR mfname is NULL or age_yr is NULL OR sex is NULL;
```

**Malnutrition**

```sql
SELECT *
FROM hpq_mem
WHERE age_yr<=5 AND mnutind is NULL;
```

**Education**

```sql
SELECT *
FROM hpq_mem
WHERE (age_yr>=6 AND age_yr<=15) AND educind is NULL;
```

```sql
SELECT *
FROM hpq_mem
WHERE (age_yr>=6 AND age_yr<=15) AND educind =1 AND gradel is NULL;
```

**Employment**

```sql
SELECT *
FROM hpq_mem
WHERE age_yr>=15 AND jobind is NULL;
```

```sql
SELECT *
FROM hpq_mem
WHERE age_yr>=15 AND jobind=2 AND fjob is NULL;
```

```sql
SELECT *
FROM hpq_mem
WHERE age_yr>=15 AND jobind = 2 AND fjob=2 AND (lastlookjob is NULL OR ynotlookjob is NULL OR joppind is NULL or wtwind is NULL);
```

It is also crucial to check the missing values for variables used to generate core indicators. The syntaxes below will list the cases with missing data.

**Household Record**

```sql
SELECT *
FROM hpq_hh
WHERE roof is NULL OR wall is NULL OR tenur is NULL OR water is NULL OR toil is NULL OR totin is NULL OR fshort is NULL OR hsize is NULL;
```
**Death Record**

```
SELECT *
FROM hpq_death
WHERE mdeadage is NULL OR mdeady is NULL;
```

**How to Reduce Missing Values**

Now that a list of missing values in the data set is available using SQL, the next step is to distinguish the user valid and invalid missing data. Take a look at this case:

Households 6 and 348 have data on water, water_dist, toil and tenur but have missing data on variable fshort. To distinguish if these are nonresponses or incomplete data encoding, the questionnaire of said households should be checked. If those are nonresponse cases, then those should be tagged as valid user missing data. On the other hand, if the encoder missed those responses, then data encoding should be corrected.

For households 122, 208, and 652, all given variables are null. Again, the questionnaire should be checked to verify if these are nonresponses or incomplete data encoding. If after checking the encoded data, it was found out that said households have no data at all, then there is a need to verify whether these households (a) do not really exist, (b) were not in the barangay at the time of the census, (c) refused to be interviewed.

If data for these households cannot be recovered, delete these cases in the encoded file. Below is an example of an encoded questionnaire that has no data after the assessment field.
Introduction

One goal of the Community-Based Monitoring System (CBMS) is to provide accurate and reliable data to be used by local planners and policy makers. Inaccurate and unreliable information can give misleading results and false conclusions. Thus, to ensure accuracy of CBMS data, duplicate and inconsistent entries should be eliminated. In CBMS process, data duplicates and inconsistencies may occur in the encoding, processing, and digitizing stages. This section will provide procedures on how to address these entries in the existing database.

Checking for Duplicates and Data Inconsistencies

Duplicates occur when there are two or more same cases or observations in the database, resulting in data redundancy. In some cases, household IDs are the same but the information is different. Cases like these make the data inconsistent since these create conflicting versions of the data. Redundancy and inconsistency of data may occur in the following:

Data Encoding

A common error in encoding is duplication of household IDs in a barangay. This may be caused by the following:

- The same questionnaire was encoded in different computers.
- The same household ID was assigned to different households.

In addition, data inconsistencies can be one of the following:

- In one barangay text file, the encoded questionnaires have different barangay codes.
- There is no specified code for barangay, purok, or household.

The following examples presented will address the aforementioned problems.

Example 1

(a) For this example we will check the encoded data of Brgy Carino, Paniqui, Tarlac. Open the Encode folder of Paniqui, Tarlac in C:\ CBMSDatabase\03\69\10. Double click HPQ36910011 to view the encoded file.
(b) Brgy. Cariño has 1,142 encoded households. For easy viewing, sort the file in ascending order by barangay, purok, and household ID. Go to View and click Cases in Sort Order.

(c) Recall that codes at the righthand side correspond to the following:

(d) Browse the encoded households. Notice that the barangay text file for ____, Paniqui, Tarlac has five barangay codes—222, 311, 4, 1, and 11 (which should be the correct codes). Recall that ID items such as urbanity, region code, province code, municipality code, and barangay code are called Persistent items, where the codes are automatically assigned by the system. However, some encoders may have mistakenly modified the barangay code while encoding.

(e) Before correcting all these, check first if indeed all the households belong to barangay 11 or if these households were incorrectly encoded as barangay 11. Check the barangay master list to ensure correctness of the assigned household IDs. To correct the barangay code, open the first household questionnaire with an incorrect barangay code. Click on the purok field.

(f) Press F7 so that the cursor will go to barangay field. Then change the barangay code.

(g) To save the changes, go to the end of the questionnaire. Use arrow keys to go to the next page or Page Down key. The system will then verify the change in the case ID. Press F8 to accept the new case ID.
(h) For duplicate IDs, the system will automatically display a message notifying the user. Modification of the barangay code will not be accepted. Hence, check the master list and the hard copy of the questionnaire. If the duplicates refer to two different households, assign a new ID to one of the households.

(i) Suppose there are no duplicate IDs, the cursor will automatically go to the next page. If no other changes are to be made to the encoded data, then go to the end of the questionnaire by pressing Page Down.

(j) Press F12 to save the encoded questionnaire. The encoding system will again verify the case ID. Press F8 to clear.

(k) A message will prompt the user to accept the questionnaire. Click Yes.

(l) If there are no duplicate household IDs, all subsequent questionnaires with incorrect barangay codes will be modified.

Example 2

(a) Open the folder Encode of Concepcion, Tarlac in C:\CBMSDatabase\03\69\05. Double click HPQ36905040 to view the encoded file.

(b) To sort the encoded questionnaires, go to View and click Cases in Sort Order. Notice that the PSGC code of the first questionnaire lacks the purok code. Hence, the box for purok code is blank.
Look for household number 26 in the master list and obtain the assigned purok code for said household. For example, the assigned purok code is 1, then click on the purok field and type 1.

To save the changes made to the questionnaire, refer to Example 1 and do steps (c) to (g).

Example 3

For this example, we will use the barangay data of Datung-a-matas. Open the Encode of Concepcion, Tarlac in C:\CBMSDatabase\03\69\05. Double click HPQ36905012 to view the encoded file.

Sort the encoded questionnaires. Notice that the PSGC code of the first questionnaire lacks the barangay code.

A window will appear requesting for a purok code. Press Escape key.

Next, press F7 and edit the barangay code.

Again, refer to Example 1 and do steps (c) to (g) to save the modified questionnaire.
**Data Processing**

Some duplicate household IDs may not be detected during data encoding, thus affecting the processed data. Moreover, in processing the municipal data using StatSim, a barangay text file may be imported twice. This causes duplication of data and doubles the result. Checking for duplicates in the processed data will be presented using the examples below.

**Example 1**

(a) To check the duplicates, first open the CBMS StatSim database (For example, *tarlac_concepcion_40*) Go to *Stats/Indicators* tab. Select *Execute SQL*.

(b) Copy the SQL statement provided in the box below, and paste it in *Execute SQL* window.

```
SELECT mun, brgy, purok, _freq, count(hcn) as count
FROM (SELECT prov, mun, brgy, purok, hcn, count(hcn) as _freq
      FROM hpq_hh
      GROUP BY prov, mun, brgy, purok, hcn) as hpq_hh_count
GROUP BY mun, brgy, purok, _freq;
```

(c) A table will be displayed showing the number of households (*Count* column) by *purok*, barangay, and municipality. The *_freq* column shows the duplicate household IDs. The figure under the column *_freq* should be “1” to indicate that the household IDs are unique.

(d) In the table above, the *_freq* column indicates that in the imported data, one household ID in *Purok 5* was used twice. But the rest of the household IDs in barangay Santa Cruz are unique. Other inconsistencies are also shown such as *purok* code “null,” 52 and 65. To address the missing and incorrect *purok* codes, refer to examples 1 and 2 of the data encoding section. On the other hand, to identify the duplicate household ID, copy the syntax provided below, and paste it in *Execute SQL* window.

```
SELECT mun, brgy, purok, _freq, hcn
FROM (SELECT prov, mun, brgy, purok, hcn, count(hcn) as _freq
      FROM hpq_hh
      GROUP BY prov, mun, brgy, purok, hcn) as hpq_hh_count
WHERE brgy=40 AND purok=5 AND _freq=2
GROUP BY mun, brgy, purok, hcn;
```

(e) The result table shows that household ID 8745 is not unique. To correct this, check first if household information for both cases is the same. Also, verify the household ID using the master list. If indeed this is a duplication, delete one of the encoded data, and reprocess the text file using the corrected text file.

**Example 2**

(a) Open the database *tarlac_concepcion_8* and go to *Stats/Indicators* in the menu bar. Select *Execute SQL* or *Alt+X*.

(b) Copy the SQL statement provided in the box below, and paste it in the *Execute SQL* window.

```
SELECT mun, brgy, purok, _freq, count(hcn) as count
FROM (SELECT prov, mun, brgy, purok, hcn, count(hcn) as _freq
      FROM hpq_hh
      GROUP BY prov, mun, brgy, purok, hcn) as hpq_hh_count
GROUP BY mun, brgy, purok, _freq;
```

(c) The result table shows that household ID 8745 is not unique. To correct this, check first if household information for both cases is the same. Also, verify the household ID using the master list. If indeed this is a duplication, delete one of the encoded data, and reprocess the text file using the corrected text file.
(c) For this example, encoded questionnaires for Brgy. Castillo were imported twice as indicated in the frequency column of the table.

<table>
<thead>
<tr>
<th>mun</th>
<th>brgy</th>
<th>purok</th>
<th>freq</th>
<th>count</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>008</td>
<td>01</td>
<td>2</td>
<td>123</td>
</tr>
<tr>
<td>05</td>
<td>008</td>
<td>02</td>
<td>2</td>
<td>93</td>
</tr>
<tr>
<td>05</td>
<td>008</td>
<td>03</td>
<td>2</td>
<td>221</td>
</tr>
<tr>
<td>05</td>
<td>008</td>
<td>04</td>
<td>2</td>
<td>137</td>
</tr>
</tbody>
</table>

To delete the imported text file, go to the Data tab, select Clear HH and click Select Barangay.

A new window with a list of imported barangays will be displayed. Select Brgy. Castillo. The system will ask if the user is sure to delete the selected barangay. Click OK.

The processed data of Brgy. Castillo has been deleted from the database. A confirmation message such as below will appear. Just click OK.

(d) Go to Home tab and import again the barangay text file of Castillo, and reprocess the data.
Introduction to SQL Syntax

All programming languages such as SQL follow a set of guidelines called syntax. Syntax sets the procedures on how to create the structure of SQL queries. The basic structure is the statement. SQL statements consist of clauses and end with a semicolon (;). Semicolons are also used to separate multiple statements. There are many types of SQL statements but since we will do more of querying and viewing of databases, this session will focus only on one type, which is the SELECT statement.

Creating SQL Syntax

A SELECT statement is used to query data from different records in an existing database. The statement has the following clauses:

- SELECT – specifies the variables to be retrieved
- FROM – specifies the record to be accessed
- WHERE – specifies which observations/cases in the FROM record are to be used.

The basic SELECT statement has the following syntax:

```
SELECT variables
FROM records
[WHERE (condition)]
```

The WHERE clause is optional; if not specified, then all observations are used.

SELECT Clause

The SELECT clause is mandatory. It specifies a list of variables to be retrieved from the records in the FROM clause. It has the following general format:

```
SELECT [ALL or DISTINCT] variables
```

ALL and DISTINCT are optional. DISTINCT specifies that duplicate observations are discarded. A duplicate observation is when each corresponding variable has the same value. If not specified, then it will retain all duplicate observations. A comma is used to separate the variables in the list. In addition, the asterisk is used to display all variables in the records specified in the FROM clause. If the variables in the list are from different records, specify first the record (where the variable name is located), followed by the variable name separated by a dot (.)

Examples:

```
SELECT msname, mfname
SELECT *
SELECT hpq_mem.*, hsize
```

FROM Clause

The FROM clause is also mandatory, and always follows the SELECT clause. It lists records accessed by the query. The general format is:

```
SELECT variables
FROM records
```
When the FROM list contains multiple records, commas are used to separate the record names. Also, when the FROM list has multiple records, they must be joined. The JOIN condition will be discussed in detail later.

Examples:

```
SELECT msname, mfname
FROM hpq_mem
```

```
SELECT *
FROM hpq_mem
```

```
SELECT hpq_mem.*, hsize
FROM hpq_mem, hpq_hh
WHERE hpq_hh.hcn=hpq_mem.hcn
```

**WHERE Clause**

The WHERE clause is optional. When specified, it always follows the FROM clause. The WHERE clause filters the observations specified from the FROM clause. When no condition is specified then all observations are used. The WHERE keyword is followed by logical expressions. The general format is:

```
SELECT variables
FROM records
WHERE logical expression
```

Examples:

```
SELECT msname, mfname
FROM hpq_mem
WHERE reln=1;
```

```
SELECT *
FROM hpq_mem
WHERE reln=1;
```

```
SELECT hpq_mem.*, hsize
FROM hpq_mem, hpq_hh
WHERE hpq_hh.hcn=hpq_mem.hcn
```

**Logical Expression**

Logical expressions compare values against other values or perform arithmetic calculations. These are also used to refine search for specific observations. Logical expressions are composed of operators, and are grouped by parentheses. There are two types of operators:

(a) Comparison operators compare the contents of a variable with the specified value in the condition. The table below shows and describes common comparison operators.

<table>
<thead>
<tr>
<th>Comparison Operators</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>=</td>
<td>equal to</td>
</tr>
<tr>
<td>&lt;&gt; !=</td>
<td>is not equal to</td>
</tr>
<tr>
<td>&lt;</td>
<td>less than</td>
</tr>
<tr>
<td>&gt;</td>
<td>greater than</td>
</tr>
<tr>
<td>&gt;=</td>
<td>greater than or equal to</td>
</tr>
<tr>
<td>&lt;=</td>
<td>less than or equal to</td>
</tr>
</tbody>
</table>

Examples:

```
SELECT msname, mfname, age_yr
FROM hpq_mem
WHERE age_yr>=10;
```

```
SELECT *
FROM hpq_mem
WHERE age_yr<5;
```

(b) Logical operators compare two conditions at a time to determine whether the observations satisfy the conditions. The table below shows and describes common logical operators:

<table>
<thead>
<tr>
<th>Logical Operators</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AND</td>
<td>For an observation to be selected, all the specified conditions must be true.</td>
</tr>
<tr>
<td>OR</td>
<td>For an observation to be selected at least one of the conditions must be true.</td>
</tr>
<tr>
<td>NOT</td>
<td>For an observation to be selected the specified condition must be false.</td>
</tr>
</tbody>
</table>
Examples:

```
SELECT msname, mfname, age_yr
FROM hpq_mem
WHERE age_yr>=6 AND age_yr<=16;
```

```
SELECT msname, mfname, age_yr
FROM hpq_mem
WHERE age_yr<=5 AND ( mnutind=3 OR mnutind=4);
```

```
SELECT *
FROM hpq_mem
WHERE sex is NOT null
```

**JOIN Condition**

To display information from two more records, the JOIN condition is used. The JOIN condition is applied in the WHERE clause. Since the information is being retrieved from two tables, the common variable between the two records should be identified. This common variable will be used to merge the information from two or more records. If the variables being displayed (in the SELECT clause) are common in two records, it should be specified from what record the variables will be retrieved. The general format is:

```
SELECT record1.variable, record2.variable
FROM record1, record2
WHERE record1.commonvariable=record2.commonvariable
```

Examples:

```
SELECT msname, mfname, hsize
FROM hpq_mem, hpq_hh
WHERE hpq_hh.hcn=hpq_mem.hcn AND reln=1;
```

```
SELECT DISTINCT hpq_mem.brgy, hpq_mem.hcn, hpq_mem.purok, hpq_mem.hcn, msname, mfname, hsize
FROM hpq_hh, hpq_mem
WHERE hpq_mem.hcn=hpq_hh.hcn AND reln=1;
```
Before executing an SQL syntax in the StatSim, the text files must be imported and processed first (the steps as specified in the StatSim manual). To execute an SQL statement, click **Stats/Indicators** in the main menu and select **Execute SQL**.

![StatSim Execute SQL window](image)

When the StatSim Execute SQL window appears, copy and paste a syntax and click the button **Run** and if the syntax is correct, the desired table will appear. Note that if the syntax is wrong, the StatSim will close. Revise the syntax, open the StatSim and try again.

Before executing SQL commands, familiarize with the variable names used in the system (refer to the annex in StatSim manual for HPQ vn 01201101. For other HPQ versions, refer to the data dictionary in your CSPro encoding system in the folder C:\CBMSDatabase\System\Encode\Core_HPO.pdf)

Here are basic SQL commands for the CBMS core-related indicators and some other additional syntax.

### Demography

**/displaying all variable and data from a table ex. hpq_mem**

```
SELECT *
FROM hpq_mem;
```

**/displaying basic variables and data from a table ex. hpq_mem**

```
SELECT brgy, purok, hcn, msname, mfname, mmname, sex, age_yr, civstat
FROM hpq_mem;
```

**/displaying masterlist of households for panel data**

```
SELECT distinct hpq_mem.brgy, hpq_mem.purok, hpq_mem.hcn, hpq_mem.street, hpq_mem.hnum, hpq_mem.house_type, hpq_mem.house_type_o, hpq_mem.msname, hpq_mem.mfname, hpq_mem.mfname, hpq_mem.nucfam, hpq_mem.reln, hpq_mem.respondent
```
FROM hpq_mem inner join hpq_hh on hpq_mem.brgy=hpq_hh.brgy
WHERE hpq_mem.purok=hpq_hh.purok and hpq_mem.hcn=hpq_hh.hcn

Core Indicators

Health and nutrition

/List of children 0-4 years old who died
SELECT brgy, purok, hcn, deadsn, deadfn, mdeadx, mdeadage, mdeady
FROM hpq_death
WHERE mdeadage<=4;

/List of households with children 0-4 years old who died
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_wdeath04”

/List of women who died due to pregnancy-related causes (statsim included deaths of women >5)
SELECT brgy, purok, hcn, deadsn, deadfn, mdeadx, mdeadage, mdeady
FROM hpq_death
WHERE mdeady=8 and mdeadage>10;

/List of households with women who died due to pregnancy-related causes
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open Excel and paste. Sort table by variable “hh_wdeathpreg”

/List of malnourished children 0-5 years old
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE mnutind>=3 and age_yr<=5
ORDER by sex;

/Housing

/List of households with malnourished children 0-5 years old
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_wmaln05”

/Housing

/List of households living in makeshift housing
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_msh”

/List of households who are informal settlers
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open Excel and paste. Sort table by variable “hh_squat”

/Water and sanitation

/List of households without access to safe water supply
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_ntsws”

/List of households without access to sanitary toilet facilities
Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_ntstf”

/Education and basic literacy

/List of children ages 6-11 not attending elementary school
SELECT distinct hpq_mem.brgy, hpq_mem.purok, hpq_mem.hcn, hpq_mem.msname, hpq_mem.mfname, hpq_mem.mmmname, hpq_mem.age_yr, hpq_mem.educind, hpq_mem.gradel, hpq_mem.sex
FROM hpq_mem inner join mem_ind on hpq_mem.brgy=mem_ind.brgy
WHERE hpq_mem.purok=mem_ind.purok and hpq_mem.hcn=mem_ind.hcn and hpq_mem.memno=mem_ind.memno and mem_ind.mem611=1 and mem_ind.ntelem611=1
ORDER by hpq_mem.educind, hpq_mem.gradel;

/List of households with children ages 6-11 not attending elementary school
   Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_wntelem611”

/List of children ages 12-15 not attending secondary school
SELECT distinct hpq_mem.brgy, hpq_mem.purok, hpq_mem.hcn, msname, mfname, hpq_mem.age_yr, hpq_mem.educind, hpq_mem.gradel, hpq_mem.sex
FROM hpq_mem inner join mem_ind on hpq_mem.brgy=mem_ind.brgy
WHERE (hpq_mem.purok=mem_ind.purok and hpq_mem.hcn=mem_ind.hcn and hpq_mem.memno=mem_ind.memno and mem_ind.mem1215=1 and mem_ind.nths1215=1)
ORDER by sex;

/List of households with children ages 6-16 not attending secondary school
   Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and past. Sort table by variable “hh_wntsch615”

/List of households with children ages 6-16 not attending secondary school
SELECT distinct hpq_mem.brgy, hpq_mem.purok, hpq_mem.hcn, msname, mfname, hpq_mem.age_yr, hpq_mem.sex
FROM hpq_mem inner join mem_ind on hpq_mem.brgy=mem_ind.brgy
WHERE (hpq_mem.purok=mem_ind.purok and hpq_mem.hcn=mem_ind.hcn and hpq_mem.memno=mem_ind.memno and mem_ind.mem616=1 and mem_ind.ntsch616=1)
ORDER by sex;

/List of households with illiterate members
   Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and past. Sort table by variable “hh_wntliter10ab”

/List of illiterate members
SELECT purok, hcn, msname, mfname, sex, age_yr, educ
FROM hpq_mem
WHERE literind=2;
Income and employment

/List of households with income below poverty threshold
- Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_povp”

/List of households with income below food threshold
- Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_subp”

/List of households who experienced food shortage
- Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_fshort”

/List of unemployed members of the labor force
SELECT distinct brgy, purok, hcn, msname, mfname, age_yr, sex
FROM hpq_mem
WHERE age_yr>=15 and (jobind=2 and fjob=1)
or (jobind=2 and fjob=2 and ynotlookjob>=2
and ynotlookjob<=5 and joppind=1 and wtwind=1)
or (jobind=2 and fjob=2 and ynotlookjob=1 and lastlookjob<=2
and joppind=1 and wtwind=1))
ORDER by sex;

/List of households with unemployed members
- Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_wunempl15ab”

Peace and order

/List of households with victims of crimes
- Go to Report tab, click CBMS Core Indicators, Household. In the table, right click and click select all, then select copy. Open excel and paste. Sort table by variable “hh_wvicr”

OTHER CBMS DATA

Demography

/Number of member by civil status
SELECT brgy, civstat, count(memno)
FROM hpq_mem
GROUP by brgy, civstat
ORDER by brgy;

/Number of member by ethnic group, by brgy
SELECT brgy, ethgrp, count(memno)
FROM hpq_mem
GROUP by brgy, ipgrp
ORDER by brgy;

Education and literacy

/Number of members attending school by grade level
SELECT brgy, gradel, count(memno)
FROM hpq_mem
WHERE gradel is not NULL
GROUP by brgy, gradel;

/Number of members attending school by grade level
by school classification
SELECT ______________
FROM ______________
WHERE ______________
GROUP by ______________

/Number of members not attending school by reason
SELECT ______________
FROM ______________
WHERE ______________
GROUP by ______________

/List of persons by educational attainment
SELECT brgy, purok, hcn, msname, mfname, age_yr, educal
FROM hpq_mem
WHERE age_yr>=5 and educal is not NULL
ORDER by age_yr, educal;
/Literacy
SELECT brgy, purok, literind, count(memno)
from hpq_mem
WHERE literind is not NULL
GROUP by brgy, purok, literind
ORDER by literind;

/List of persons who are graduates of Bachelor of Science in Nursing
SELECT brgy, purok, hcn, msname, mfname, mmname, age_yr, sex
FROM hpq_mem
WHERE educal=35 AND psced7=5721201

/List of single male members from poor households attending college
SELECT brgy, purok, hpq_mem.hcn, msname, mfname, age_yr, sex
FROM hpq_mem INNER JOIN hh_coreind ON
hpq_mem.hcn=hh_coreind.hcn
WHERE educind=1 and gradel>=31 and gradel
<=34 and civstat=1 and sex=1 and povp=1

Registered voters
/Number of registered voters
SELECT brgy, purok, regvotind, count(memno)
FROM hpq_mem
WHERE regvotind is not NULL
GROUP by brgy, purok, regvotind
ORDER by regvotind;

/List of voters who voted in the last election
SELECT 
FROM 
WHERE 

Employment
/List of all persons who are working
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE jobind=1;
ORDER by brgy, purok, hcn, age_yr;

/List of children aged less than 15 years old who are working, sorted by age
SELECT 
FROM 
WHERE 
ORDER by 

Members of SSS
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE sss_ind=1;

Members of GSIS
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE sss_ind=2;

Members of SSS and GSIS
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE sss_ind=3;

OFW
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE ofw=1

Single parents
SELECT brgy, purok, hcn, msname, mfname, sex, age_yr, solo_parent_r
FROM hpq_mem
WHERE solo_parent=1
ORDER by solo_parent_r;
Persons with disabilities

SELECT brgy, purok, hcn, msname, mfname, sex, age_yr, pwd_type, pwd_o, pwd_id
FROM hpq_mem
WHERE pwd_ind=1
ORDER by pwd_type;

Senior citizens

SELECT brgy, purok, hcn, msname, mfname, sex, age_yr, scid_ind
FROM hpq_mem
WHERE age_yr>=60
ORDER by age_yr;

Previous household members

– Detailed info from table hpq_death

/Number of persons who died, by brgy, by purok

SELECT brgy, purok, count(hcn)
FROM hpq_death
GROUP by brgy, purok;

Access to electricity

/Number of households with access to electricity, by brgy, by purok

SELECT brgy, purok, welec, count(hcn)
FROM hpq_hh
WHERE welec=1
GROUP by brgy, purok;

/Average income of households by access to electricity

SELECT welec, count(hcn), avg(totin)
FROM hpq_hh
GROUP by welec
ORDER by welec;

/Average income of households by purok and by access to electricity

SELECT brgy, welec, count(hcn), avg(totin)
FROM hpq_hh
GROUP by brgy, welec;

Access to household durables (TV)

/Number of households with tv, by brgy, by purok

SELECT brgy, tv, count(hcn)
FROM hpq_owned_asset
GROUP by brgy, tv;

Households engaged in crop farming

/List of households engaged in crop farming

SELECT distinct hh.purok, hh.hcn, hh.hhhead
FROM hh join hpq_hh
WHERE hpq_hh.hcn=hh.hcn and cropind=1;

Income

/List of poor households and their per capita income (compared to poverty threshold)

SELECT hh_coreind.hhid, hh_coreind.hhhead, hh_totin, hsize, hh_pci
FROM hh_ind join hh_coreind
WHERE hh_coreind.povp=1 and hh_coreind.hhid=hh_ind.hhid
ORDER by hh_pci;

/List of poor households (compared to food threshold)

SELECT hh_coreind.hhid, hh_coreind.hhhead, hh_totin, hsize, hh_pci
FROM hh_ind join hh_coreind
WHERE hh_coreind.subp=1 and hh_coreind.hhid=hh_ind.hhid
ORDER by hh_pci;

List of poor households by name of household head and spouse

SELECT distinct hpq_mem.brgy, hpq_mem.purok, hpq_mem.hcn, hh_ind.hh_povp, hpq_mem.reln, hpq_mem.msname, hpq_mem.mfname
FROM hpq_mem inner join hh_ind on hpq_mem.brgy=hh_ind.brgy
WHERE hpq_mem.purok=hh_ind.purok and hh_ind.hcn=hpq_mem.hcn and hh_ind.hh_povp=1 and (hpq_mem.reln=1 or hpq_mem.reln=2);
/List of poor households engaged in crop farming
SELECT  
FROM  
WHERE  

Agricultural equipment
- Detailed info from table hpq_agriequip

List of households with agricultural equipment (beast of burden=code 1) by ownership
SELECT brgy, purok, hcn, agriequipType, agriequipind, agriequip_owned
FROM hpq_agriequip
WHERE agriequipType=1
ORDER by brgy, purok;

Aquatic equipment
- Detailed info from table hpq_aquaequip

List of households with aquatic equipment (fish net=code 1) by ownership
SELECT brgy, purok, hcn, aquaequipType, aquaequipind, aquaequip_owned
FROM hpq_aquaequip
WHERE aquaequipType =1
ORDER by brgy, purok;

Fish caught/cultured
- Detailed info from table hpq_aquani

Crop harvested
- Detailed info from table hpq_crop

Climate change
/Number of households engaged in crop-farming who experienced decrease in harvested crops in the past 3 years
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE u_amt_harv=1;

/Number of households engaged in livestock raising who experienced decrease in production in the past 3 years
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE u_amt_lve=1;

/Number of households engaged in fishing who experienced decrease in harvested fish in the past 3 years
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE u_amt_fish=1;

/Number of households who experienced increase in temperature
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE temp_humid=1;

/Number of households who experienced frequent electricity loss
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE elec_loss=1;

/Number of households who observed sea level rise
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE sea_level=1;

/Number of households who experienced decrease in water supply
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE water_supply=1;

/Number of households who experienced more frequent floods
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE flood_freq=1;
/Number of households who experienced drought
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE drought=1;

/Number of households who moved-out from previous dwelling unit
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE evac_mveout=1;

/Number of households who experienced temporary evacuation
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE evac_trans=1;

/Number of households who have disaster preparedness kit
SELECT brgy, purok, count(hcn)
FROM hpq_hh
WHERE disas_prep=1;

Working children

/Number of working children, by brgy
SELECT brgy, count(memno)
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
GROUP BY brgy

/Number of working children, by age
SELECT age_yr, count(memno)
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
GROUP BY age_yr

/List of working children
SELECT mun, brgy, purok, hcn, msname, mfname
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1

/List of working children, by age
SELECT mun, brgy, purok, hcn, msname, mfname, mmname, age_yr, sex
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
ORDER by age_yr

/List of working children, by sex
SELECT mun, brgy, purok, hcn, msname, mfname, mmname, age_yr, sex
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
ORDER by sex

/List of working children, by occupation and occupational code
SELECT mun, brgy, purok, hcn, msname, mfname, mmname, age_yr, sex, occup, psoc4
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
ORDER by g_occ

/List of working children, by industry and industry code
SELECT mun, brgy, purok, hcn, msname, mfname, mmname, age_yr, sex, indust, psic4
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
ORDER by sector

/List of working children, by school attendance
SELECT mun, brgy, purok, hcn, msname, mfname, age_yr, sex, educind
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1
ORDER by educind
/List of working children who are not attending school
SELECT mun, brgy, purok, hcn, msname, mfname, age_yr, sex
FROM hpq_mem
WHERE age_yr>=5 and age_yr<=17 and jobind=1 and educind=2
ORDER by educind

/List of working children, by literacy
SELECT mun, brgy, purok, hcn, msname, mfname, age_yr, sex, literind
FROM hpq_mem
WHERE age_yr>=10 and age_yr<=17 and jobind=1
ORDER by literind

Answer Key
/Number of members attending school by grade level by school classification
SELECT brgy, purok, sch_type, gradel, count(memno)
FROM hpq_mem
WHERE ylen_resid<999 and gradel is not NULL
GROUP by brgy, purok, sch_type;

/Number of members not attending school by reason
SELECT brgy, purok, ynotsch, count(memno)
FROM hpq_mem
GROUP by brgy, purok, ynotsch;

/List of voters who voted in the last election
SELECT brgy, purok, hcn, msname, mfname, mmname, regvotind, voted_last_election
FROM hpq_mem
WHERE regvotind=1 is not NULL and voted_last_election=1;

/List of children aged 15 years old and below who are working, sorted by age
SELECT purok, hcn, msname, mfname, sex, age_yr
FROM hpq_mem
WHERE jobind=1 and age_yr<=15
ORDER by age_yr desc;

/List of poor households engaged in crop farming
SELECT distinct hh_coreind.barangay, hh_coreind.purokname, hh_coreind.hcn, hh_coreind.hhhead
FROM hh_coreind inner join hpq_hh on hh_coreind.hcn=hpq_hh.hcn
WHERE hpq_hh.cropind=1 and hh_coreind.povp=1;

The validation of census results is a vital component in the implementation of a community-based monitoring system (CBMS). It is important to ensure that local leaders and all community members are informed of the results of the census. Furthermore, validation provides an avenue for verifying the accuracy of the results by facilitating discussion on the possible reasons behind the findings. All CBMS focal persons, community and/or sector leaders, and volunteers participate in the validation process, which is undertaken at all geopolitical levels (barangay, municipality, city, and province).

**Expected Outputs**

1. Validated CBMS Data
2. Documentation of Proceedings of the Validation Workshop


**Duration**

Half day

**Preparatory Phase**

1. The municipal CBMS Technical Working Group together with the concerned barangay officials should meet at least one week before the scheduled community validation workshop to plan and discuss the following:
   - Call for a barangay assembly
   - Invitations to key participants
   - Logistical requirements of the workshop
   - Preparation of needed materials and documents
2. As a team, they should review and familiarize themselves with the scheduled activities to facilitate the flow of the event.
Conducting the Validation of Barangay Level CBMS Results

Minimum Requirements

1. CBMS Census Results
   - Indicator tables with purok and sex disaggregation (printouts from StatSim)
   - Table summary of CBMS core indicators
   - Maps of CBMS results
   - Additional customized tables of local government unit (LGU) specific indicators
   - Additional figures and charts (optional)

2. Completed Barangay Profile Questionnaire

3. List and Description of Existing Barangay Projects and Programs

4. Other Relevant Administrative Reports and/or Documents

5. Pen and Paper

Key Participants

1. Barangay Development Council Members
2. Barangay Health Workers
3. Barangay Nutrition Scholars
4. Designated CBMS Enumerators
5. Designated CBMS Field Supervisors
6. Municipal Planning and Development Coordinator
7. Local CBMS Coordinator
8. Other Community Representatives (teachers, Indigenous Peoples/Natives, among others)

Suggested Process Flow of the Community Validation

Proposed Moderator: Local CBMS Coordinator/MPDO

Proposed Presenter of CBMS Results: Barangay Captain/ CBMS Team Leader in the Community

The basic program for the validation workshop is as follows:

1. Overview of the CBMS Census
   a. Give a brief background about what the census: what it is about, how and when it was conducted, its coverage, and the key persons from the community who have administered and facilitated the census operation and the processing of the data.
   b. Emphasize that the information gathered from the census is intended to be used as inputs to the annual development/investment plan and to further enrich the preparation of the socioeconomic profile of the community.

2. Presentation of CBMS Results
   a. Talk about the development status of the community based on the pre-identified core set of indicators in the form of tables and digitized maps. Other LGU-specific indicators should also be presented.
   b. Before presenting the census findings, it is important to carefully explain the operational definition of each indicator and the color-coding scheme used in the maps.
   c. The presenter must immediately obtain feedback from participants on the possible reasons for the barangay’s good or poor rating for each particular indicator.

   The CBMS Technical Working Group should record any questions relating to the accuracy of the results and implement the necessary post-validation actions (see instructions in making an enforcement action on page 70).

Example 1. Low Elementary School Participation Rate

Low school participation rate in certain communities may indicate any of the following:

1. No elementary school in the community

---

1. One form of enforcement action is changing the data and saving a conformant version instead of the original version.
2. The nearest elementary school is too far from the purok/barangay
3. Parents lack money to send their children to school
4. Children already working to help the family earn additional income
5. Parents simply do not want to send their children to school
6. Cultural reasons, e.g., case of Indigenous Peoples
7. Others

Sample Guide Questions:

1. What are some possible reasons why children in these areas are not in elementary school?
2. How far is the nearest school in the community?
3. Are there beneficiaries in the community of existing elementary scholarship programs? If so, where are these beneficiaries located?
4. How does the barangay data for this indicator compare with the national average? What is the ideal or desired situation?

3. Identification of Major Problem Areas and/or Action Planning

After a thorough discussion of the problem areas based on the census results, the moderator highlights the top unmet needs of the community, and facilitates a brainstorming session on the possible interventions to address the needs.

4. Recommendation from the Development Council Members

At this point, obtain feedback from these officials on how they intend to deal with the major problems and take action on the interventions validated and prioritized by the community.

5. End of the Workshop

To conclude the activity, the moderator runs through the outputs produced during this workshop and informs the participants of the next group of activities where these outputs will be used (e.g., preparation of the Barangay Socioeconomic Profile and Development Plan).

Suggested Outline of the Workshop Documentation Report

Background

- Summarize the objectives of the workshop.
- Provide details on when and where the community validation took place.
- List the key people present.

Opening the Workshop

- Highlight the key messages of the local officials.
- Record the commitments made.

Summary of Deliberations

- Feedback from the Community
  Write workshop participants’ feedback for each indicator presented.
- Qualitative Explanations on Both Positive and Negative Findings of the CBMS Census
  Document the participants’ explanations on why their community fared well or poorly on each indicator.
- Major Problem Areas and Proposed Interventions
  Record the priorities given by the participants and highlight the interventions which they agreed to be most suitable for each identified problem.

The report documents the proceedings of the validation activity. The document may not be a final synthesized report but should always strive to capture the output of the workshop as a base for shaping the community’s socioeconomic profile and barangay development plan.

See page 305 for a form that will help summarize this section.
Recommendation from the Development Council Members

- Summarize the recommended plan of action of the local officials and the members of the development council.
- List the officials’ feedback on how they intend to deal with the major problems and the necessary interventions in their planning process.

Annex

- List of Participants
- Agenda and Timetable of Workshop
- Workshop Photos (if available)

Changing the Data and Saving a Conformant Version Instead of the Original Version: An Instructional Guide

The Situation

Based on the answers of respondents, only 10 percent or 10 out of 100 households residing in Barangay Maligaya are informal settlers. However, during the validation of CBMS results, the City Settlement Office informed the CBMS Technical Working Group that all households in that barangay should have been classified as informal settlers since they occupy a government-owned property to which they have no legal claim.

The Solution

The CBMS Technical Working Group can implement the following post-validation actions:

Step 1. Identify the 90 households who were earlier identified as formal settlers.

Step 2. Retrieve the Household Profile Questionnaires of these 90 households and correct the entry on Item 62 on page 7. The correct entry based on the feedback from the City Settlement Office should be Code 5: Own house, rent-free lot without consent of owner.

Step 3. Once the corrections have been implemented, the CBMS Technical Working Group can then retrieve the records of these households from the encoded data of Barangay Maligaya and revise the entry for this question in the CBMS Encoding System.

Step 4. The data for Barangay Maligaya should then be reprocessed using the CBMS Statistics Simulator (StatSim) before exporting the data to QGIS for mapping.
# VALIDATION OF CBMS RESULTS

Barangay: ___________________  Municipality: ___________________  Date: ___________________

<table>
<thead>
<tr>
<th>Area</th>
<th>Indicator</th>
<th>Community Feedback</th>
<th>Explanations and/or Reasons</th>
<th>Possible Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>Proportion of child deaths aged 0 to less than 5 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of women deaths due to pregnancy-related causes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition</td>
<td>Proportion of malnourished children aged 0–5 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelter</td>
<td>Proportion of households living in makeshift housing</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Proportion of households classified as informal settlers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water and Sanitation</td>
<td>Proportion of households without access to safe water supply</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Proportion of households without access to sanitary toilet facilities</td>
<td></td>
<td></td>
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<tr>
<td>Education</td>
<td>Proportion of children aged 6–12 years not in elementary school</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Proportion of children aged 13–16 years not in secondary school</td>
<td></td>
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<tr>
<td>Inco</td>
<td>Proportion of households with income below the poverty threshold</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Proportion of households with income below the food threshold</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Proportion of households who experienced hunger due to food shortage</td>
<td></td>
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</tr>
<tr>
<td>Employment</td>
<td>Proportion of persons in the labor force who are unemployed</td>
<td></td>
<td></td>
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<tr>
<td>Peace and Order</td>
<td>Proportion of persons who are victims of crime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LGU specific indicators</td>
<td><em>Ex. Proportion of households without access to electricity</em></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name of Process Documenter: ______________________

Signature: ___________________________
Part 4
Poverty Mapping
Introduction

This manual contains guidelines and instructions on using Quantum Geographic Information System (QGIS) in digitizing spot maps for the CBMS database.¹

The Community-Based Monitoring System (CBMS) database contains encoded, processed, and compiled CBMS datasets gathered by local government units (LGUs). In addition to the usual tables and reports generated, LGUs are provided training on using the geographic information system (GIS) software to generate CBMS poverty maps. From 2004 to 2012, the CBMS International Network Coordinating Team (CBMS-INCT) used the Natural Resources Database (NRDB) for this purpose. However, the development and availability of different open-source software have led the CBMS-INCT to adopt the QGIS software to respond to the LGUs’ ever-changing needs.

The QGIS manual in the QGIS website, http://www.qgis.org/en/docs/index.html, contains an extensive discussion on the basic functions of QGIS Dufour. This manual focuses on topics relevant to generating CBMS poverty maps. The CBMS-INCT customizes project files, which are given to LGUs together with other files necessary for producing CBMS poverty maps.

Working with QGIS

QGIS is a user-friendly open source geographic information system (GIS) software licensed under the GNU General Public License. QGIS is an official project of the Open Source Geospatial Foundation (OSGeo). It runs on Linux, Unix, Mac OS X, or Windows.

Installing QGIS

The CBMS-INCT provides a QGIS installer, which is the QGIS application file for Windows. Users of other compatible platforms such as Mac OS X, Linux, BSD, and Android may download this installer from the QGIS website: http://www.qgis.org/en/site/forusers/download.html

The QGIS Standalone Installer Version 2.0.1 (recommended for new users) was used to prepare the examples in this manual. The installer file name for QGIS Dufour version 2.0.1 is QGIS-OSGeo4W-2.0.1-3-Setup-x86_64.exe.

To install, first download the installer file and double click on it. In the window initiating the setup, click Next >. Read and review the license terms and click I Agree (Figure 1).

If desired, choose the location from which QGIS will install. Otherwise, the default folder is C:\Program Files\QGIS Dufour (see Figure 2). Click Next > to proceed.

¹ Customized by the Community-Based Monitoring System (CBMS) International Network Coordinating Team of the Angelo King Institute of the De La Salle University, October 2013.
In addition to the basic QGIS Dufour program, additional sample datasets may be installed for reference when using other QGIS functions that are not discussed in the manuals shared by the CBMS-INCT. The standard QGIS Dufour version requires 784.8MB of space. Click **Install**.

Wait until all the component files are installed. Installation time depends on the selected components to be installed and specifications of the computer being used.

Click **Finish** to complete the installation (Figure 3). QGIS Dufour 2.0.1 is now ready for use.

**FIGURE 1**

![Figure 1](image1)

**FIGURE 2**

![Figure 2](image2)

**FIGURE 3**

![Figure 3](image3)
QGIS Start-Up

Select any of these ways to launch QGIS Dufour:

1. Click Start, All Programs, QGIS Dufour, and select QGIS Desktop 2.0.1 (Figure 4).

   ![Figure 4](image1)

   **FIGURE 4**

2. Double click on the QGIS application link (or shortcut) on the desktop or in the application menu (Figure 5).

   ![Figure 5](image2)

   **FIGURE 5**

3. Double click on a QGIS project file with extension .qgs (Figure 6).

   ![Figure 6](image3)

   **FIGURE 6**

QGIS Graphic User Interface

Figure 7 shows a snapshot of the QGIS graphic user interface (GUI) screen.

![Figure 7](image4)

**FIGURE 7**
As default, the QGIS screen shows user tips. To turn this option off, click the box beside “I’ve had enough tips, don’t show this on start up any more!” at the bottom of the page. Click OK.

“The QGIS GUI is divided into five areas:
(i) Menu Bar
(ii) Tool Bar
(iii) Map Legend
(iv) Map View
(v) Status Bar

The menu bar provides access to various QGIS features using a standard hierarchical menu. The QGIS manual gives more information on menu options, shortcuts, references, and related toolbars.

The toolbar provides access to most of the same functions as the menu bar and additional tools for designing an interactive map. Each toolbar item has a popup help feature. Hold the mouse and point the cursor over a toolbar item without clicking, and a brief description of the tool’s function will show. There are 14 toolbars, each with different icons and functions.

The map legend lists all the layers in the project. Clicking on the checkbox beside each legend entry shows or hides the layer. A layer can be selected and dragged up or down the legend list to change the z-order. The z-order is the order of overlapping objects, which means that layers nearer the top of the legend list are drawn over the layers near the lower or bottom of the legend list.

The map view is the “business end” of QGIS. Maps are displayed in this area. The attributes of a map viewed in this window will depend on the selected vector and raster layers. The map view can be panned (shifting the focus of the map display to another region or area) and/or zoomed in and out. As described under toolbar above, various other actions can be performed on the map. The map view and legend are tightly bound to each other and the maps reflect the changes made in the legend area.

The status bar shows the cursor’s current position in map coordinates (e.g., meters or decimal degrees) as the mouse pointer is moved across the map view. To the left of the coordinate display in the status bar is a small button that toggles between showing coordinate position and/or the extent of the map viewed as you pan across and/or zoom in and out.”

**Projections**

“QGIS allows users to define a global and project-wide coordinate reference system (CRS) for layers without a predefined CRS. It also allows users to define custom coordinate reference systems, and supports on-the-fly (OTF) projection of vector and raster layers. These features allow layers with different CRSs to display and overlay properly. QGIS supports approximately 2,700 known CRSs. Definitions for each of these CRSs are stored in an SQLite database that is installed with QGIS.”

When using shapefiles created from other sources, the same projections MUST be used for all layers.


**Geospatial Data**

There are two types of geospatial data: **Vector** and **Raster**.

The fundamental concept of vector GIS is that all geographic features in the real world can be represented either as points or dots (nodes) such as trees, poles, fire plugs, airports, cities; lines (arcs): streams, streets, sewers and; and areas (polygons): land parcels, cities, counties, forest, rock type.

**Points** are entered either as latitude, longitude values, or as **Cartesian coordinates** (x, y). **Polylines** and **polygons**, on the other hand, are both a series of coordinates that are open and closed arcs.

QGIS is compatible with many data formats using the OGR Simple Features Library to read and write vector data formats such as ESRI Shapefiles, MapInfo, Microstation file formats, and many more.

---

3 Ibid, QGIS User Guide [57].
“**Raster data** in GIS are matrices of discrete cells that represent features on, above, or below the earth’s surface. Each cell in the **raster grid** is the same size, and cells are usually rectangular (in QGIS, cells are always rectangular). Typical raster datasets include remote sensing data such as aerial photography or satellite imagery and modeled data such as an elevation matrix. Unlike **vector data**, **raster data** typically do not have an associated database record for each cell. These are geocoded by pixel resolution and the x/y coordinate of a corner pixel of the raster layer, which allows QGIS to position the data correctly on the map canvas.”

Users do not need to digitize shapefiles when using geospatial data from other sources. In this case, it is a redundant activity that may result in different versions of the same map. Existing shapefiles can be imported into QGIS.

**Viewing Existing Spatial Data**

**GPS Data from the CBMS SCAN Application**

The CBMS SCAN application now enables enumerators to tag a location with the CBMS data. Using the built-in GPS in Android devices, GPS coordinates are taken before the start of the CBMS Household Profile Questionnaire (HPQ).

To load the GPS coordinates as a layer in QGIS, follow these steps:

a. In the **Layer** menu, select **Add Delimited Text Layer** or select the shortcut icon on the left side of the screen (Figure 8).

b. In the **delimited text** dialog box, click **Browse** beside the **File Name** field and select the file to be imported. Open the file **main.csv**, which was previously saved in C:\CBMSDatabase\13\76\02\CBMS-QGIS\MBDCS Output (Figure 9).

c. In the dialog box, select **CSV** as file format and **Point coordinates** in **Geometry definition**. Ensure that the X and Y fields are correct, then click **OK** (Figure 10).

---

d. If data are missing in the columns for the X and Y coordinates, the user will encounter the message shown in Figure 11. If all the data in the columns are properly entered, the message will not appear. By clicking Close, the resulting layer will discard the records with missing geometry definitions.

**FIGURE 11**

![Image of Close button and message on screen]

By clicking Close, the resulting layer will discard the records with missing geometry definitions.

e. Then, as instructed, select the Coordinate Reference System. Make sure to specify WGS84 with Authority ID EPSG:4326. Click OK. See Figure 12.

**FIGURE 12**

![Image of Coordinate Reference System Selector dialog box]

Then, as instructed, select the Coordinate Reference System. Make sure to specify WGS84 with Authority ID EPSG:4326. Click OK.

The layer is then added in the map legend, and the coordinates become visible in Map View. To check if the data were loaded properly, right click on the layer Main and select Open Attribute Table.

### Other Spatial Data

QGIS is compatible with many data formats using the OGR library (Figure 13). Use the Manage Layer toolbar to select the type of data you would like to work with.

**FIGURE 13**

![Image of Manage Layer toolbar]

There are many OGR-supported Vector layers. Figure 14 gives examples.

**FIGURE 14**

![Image of various Vector layers]

There are many OGR-supported Vector layers. Figure 14 gives examples.

### Creating and Editing New Shapes

If the required shapefiles are not available from existing data sources, the shapefiles need to be created (e.g., purok boundaries, location of household, and other infrastructure found in the barangay). This action merely translates the information from the paper spot map to the computerized map.

### Digitizing and Editing Polygons

To create a new polygon, add the layer of the desired feature to be digitized by clicking on the New Shapefile Layer icon in the Map Layers toolbar.

Select Polygon as the type of shapefile to be created. Define the CRS. The default CRS for this example is EPSG:4326 – WGS 84. To ensure that layers fit correctly, the same CRS should be used for all layers in the current project. By default, the Attribute
list contains the ID attribute of type Integer and a width of 10. To add a new attribute, type the name of the attribute, select the corresponding type, and specify the desired width. The example in Figure 15 shows the new attribute Purok to be added. Click Add to attribute list to include this in the attribute list. To remove an added attribute, highlight the attribute to be deleted and click Remove attribute. Once all attributes are added, click OK.

![FIGURE 15](image)

Type the desired file name. Ensure that the file is saved in the correct folder. For easy reference and file management, save all new shapefiles in the folder C:\CBMSSDatabase\Regioncode\Provincialcode\LGUcode\CBMS-QGIS\Shapefiles. Click Save (Figure 16).

![FIGURE 16](image)

To ensure the alignment of the CRS, right click on the shapefile and select Set Layer CRS. Highlight WGS 84 as the CRS and EPSG: 4326 as the Authority ID. Click OK (Figure 17).

![FIGURE 17](image)

To start digitizing, click in the Digitizing toolbar to enable the other icons (Figure 18).

![FIGURE 18](image)

Click to start adding a new feature to the newly created shapefile. You may start tracing the lines of the feature you want to add.

When working on a feature that is dependent on another layer (e.g., a higher administrative level), ensure that the boundaries you are working are aligned with the existing higher administrative feature. QGIS provides snapping options to ensure alignment. In the main menu, click Settings and select Snapping Options (Figure 19).
Users may select the following options: snap to vertex, to segment, or to both vertex and segment. For polygons, it is better to snap to both vertex and segment to ensure that the boundaries of the higher administrative level are the same as the combined boundaries of the next administrative level (Figure 20).

In the Tolerance column, revise the number to 0.00100 to snap the purok feature to the higher administrative feature. Then click OK (Figure 21).

Note that a different-colored plus (+) sign appears near 0.001 map units from the nearest node/segment (Figure 22). Use this as a guide in ensuring that the nodes coincide. Left click on all the desired nodes to form the polygon.

When done tracing the desired feature, right click to finish. Specify the ID and name of the feature (in this case, Purok1) and click OK (Figure 23).

Click and Save the newly added feature (Figure 24).

To edit an existing polygon, click . To add a new node in between two existing nodes, double click anywhere on the line between the different-colored nodes (Figure 25).
To move a node, simply drag the node to the desired location.

To remove a node, click the Del key on the keyboard.

To add rings and parts, open the Advance Digitizing toolbar. Click View, Toolbars and mark X on the box beside Advance Digitizing (Figure 26).

**Adding rings**

Use the icon in the toolbar to create ring polygons. This allows you to digitize further polygons inside an existing area, which will appear as a “hole,” so that only the area between the boundaries of the outer and inner polygons remains as a ring polygon.5

Click and start adding nodes to the ring inside the polygon. When done, right click and click the icon to save.

**Adding parts**

You can add parts to an existing polygon to create a multipolygon. The new part polygon has to be digitized outside the selected multipolygon.6

Click and start adding nodes to a new part outside the polygon. When done, right click to finish. Click the icon to save.

**Digitizing Polylines**

*Polylines* are series of coordinates and/or notes. To digitize a new polyline, add the layer of the desired feature to be digitized by clicking New Shapefile Layer in the Map Layers toolbar.

Select *Polyline* as the type of shapefile to be created. Define the CRS (the default CRS for this example is EPSG:4326 – WGS 84). By default, the Attribute list contains the ID attribute of type Integer and width of 10.

Add a new attribute by typing the name of the attribute. Select the corresponding type and specify the desired width. The example in Figure 27 shows the new attribute *Municipal Road* to be added.

Click Add to attribute list to include this in the attribute list. To remove an added attribute, highlight the attribute to be deleted and click Remove attribute. When all attributes are added, click OK.

---

Type the desired file name. Ensure that the file is saved in the correct folder. For easy reference and file management, save all new shapefiles in the folder C:\CBMSDatabase\Regioncode\Provincecode\LGUcode\CBMS-QGIS\Shapefiles. Click Save (Figure 28).

To ensure that the CRS will align, right click on the shapefile and select Set Layer CRS and highlight WGS 84 as the CRS and EPSG: 4326 as the Authority ID. Click OK.

To start digitizing, click in the Digitizing toolbar. This enables the other icons.

Click to start adding a new feature to the newly created shapefile. You may start tracing the lines of the feature you want to add.

If you are working on a feature that will depend on another layer (e.g., a higher administrative level), ensure that the boundaries you are working on are aligned to the existing higher administrative feature. QGIS provides snapping options to ensure alignment. In the main menu, click Settings and select Snapping Options (Figure 29).

In the Tolerance column, revise the number to 0.0100 to snap the Purok feature to the higher administrative feature (Figure 30). You have the option to snap to the vertex. Then click OK.

Note that a different-colored plus (+) sign appears near the 0.001 map units from the nearest node and/or segment. This guides the user in ensuring that the nodes coincide. Left click on all the desired nodes to form the polyline (Figure 31).
When done tracing the desired feature, right click to finish. Specify the ID and name of the feature (in this case, MunRoad1) and click OK (Figure 32).

To move a node, simply drag the node to the desired location.
To remove a node, click the Del key on the keyboard.

Digitizing Coordinates

To create a new shapefile for location of infrastructure, add the layer of the desired feature to be digitized by clicking New Shapefile Layer in the Map Layers toolbar.

Select Point as the type of shapefile to be created. Define the CRS (the default CRS for this example is EPSG:4326 – WGS 84). By default, the Attribute list contains ID attribute of type Integer and width of 10. Add a new attribute by typing the name of the attribute and select the corresponding type. Specify the desired width. The example in Figure 35 shows the new attribute School to be added. Click Add to attribute list to include this in the attribute list.

To remove an added attribute, highlight the attribute to be deleted and click Remove attribute.
When all attributes have been added, click OK.
Type the desired file name. Ensure that the file is saved in the correct folder. For easy reference and file management, save the files in the folder `C:\CBMSSDatabase\Regioncode\Provinciocode\LGUcode\CBMS-QGIS\Shapefiles` (Figure 36). Click **Save**.

![Figure 35](image)

To start digitizing, click the **Digitizing** toolbar. Click **Add** to start adding a new feature to the newly created shapefile. You may click on the location of the school in the map. Specify the ID, name, and type of the feature (in this case, **school**) and click **OK** (Figure 37).

![Figure 36](image)

![Figure 37](image)

Click **Save** to save the newly added feature (Figure 38).

![Figure 38](image)

To edit already existing points, click the **Digitizing** toolbar. To move a point, simply click on the point and drag to the desired location. To remove a node, click in the **Digitizing** toolbar.

**Overlaying Images**

When rasters such as scanned maps with georeferences are available, the Georeferencer Plugin...
aids in digitizing and editing maps. The Georeferencer Plugin is a tool used to generate world files for rasters. It allows you to reference rasters to geographic or projected coordinate systems by creating a new GeoTiff file or by adding a world file to the existing image. The basic approach to georeferencing a raster is to locate points on the raster by which you can accurately determine their coordinates.7

Load the Georeferencer Plugin. Click Plugins and select Manage and Install Plugins.

On the new window, make sure to mark an X on the box beside Georeferencer GDAL (Figure 39).

![Image]

FIGURE 39

To start using the Georeferencer, click Raster, and select Georeferencer, Georeferencer (Figure 40).

![Image]

FIGURE 40

On the Georeferencer window, click the icon to open the raster. Select the particular raster or picture file from your directory. It is best to copy the file into the folder \CBMS-QGIS for easy file management. Once the picture has been loaded, you are now ready to add points /coordinates.

Click to add a new coordinate. Click the button to select a georeferenced map from those already loaded in the QGIS map canvas (Figure 41).

FIGURE 41

Continue entering points. Enter at least four points, but with more coordinates, you get a better result. Additional tools on the Plugin dialog box allow you to zoom and pan on the working area to locate a relevant set of ground control points (GCP). The points added to the map are stored in a separate text file ([filename].points) usually together with the raster image. This allows you to reopen the Georeferencer Plugin at a later date, and add new points or delete existing ones to optimize the result. The points file contains values in the format map X, map Y, pixel X, pixel Y. You can use the Load GCP Points and Save GCP Points to manage the files (Figure 42).8

FIGURE 42

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7 Ibid, QGIS User’s Guide [231].

Click to start georeferencing. When asked to set the transformation type, select Linear.

Select an Output raster. Save it in the folder CBMS-QGIS.

When done, mark X on the box beside Load in QGIS (Figure 43).

Click OK.

Select the CRS to WGS 84 with Authority ID EPSG:4326. The image is now visible on map view (Figure 44).

Saving Project Files

To save the project along with all the prepared layers, go the Main menu and click Project, then Save (Figure 45).

Type the desired file name. For easy reference and file management, save the files in the folder C:\CBMSDatabase\Regioncode\Provincecode\LGUcode\CBMS-QGIS\Projects for ease in file management. Click Save (Figure 46).
Poverty Mapping

Poverty mapping is the spatial representation and analysis of well-being and poverty indicators. Poverty maps are powerful tools for presenting complex information in a visual format that can be easily understood by policy makers and stakeholders. As part of the Community-Based Monitoring System (CBMS), local government units (LGUs) are able to prepare poverty maps of CBMS data using the Quantum Geographic Information System (QGIS). These maps show detailed data pertaining to the welfare of individuals in provinces, municipalities, villages, and even the location of poor households.

Importing Data from the StatSim into QGIS

The CBMS StatSim generates different tables that are ready for importing into a mapping software such as the QGIS. The tables contain CBMS data that have been processed and consolidated at all available geopolitical levels. When exported from StatSim 6, separate tables in comma-separated format (.csv) are created for each geopolitical level. The exported data containing the core indicators are stored automatically in `C:\CBMSDatabase\System\Output`. See sample exported data in `mun_coreind.csv`, `brgy_coreind.csv`, `purok_coreind.csv` and `hh_coreind.csv`.

For easy file management, all data to be imported into QGIS should be saved in the data folder `CBMS-QGIS` found under the municipal or provincial folder following the Philippine Standard Geographic Codes (PSGC).

To transfer the processed data from CBMS StatSim into the CBMS-QGIS folder, follow these steps:

1. Export the data. Go to `C:\CBMSDatabase\System\Output` and copy the exported core indicators data. See screen view sample in Figure 1.

   ![Figure 1](image1.png)

2. Go to the municipal folder for El Nido, Palawan. Following the PSGC, the file path would be `C:\CBMSDatabase\17\53\12\CBMS-QGIS`. Paste the core indicators data under the folder `Data`. Figure 2 shows a screen view sample:

   ![Figure 2](image2.png)
Load the CBMS data as a layer in QGIS by following these steps:

3. In the Layer menu, select Add Delimited Text Layer or click the shortcut icon on the left side of the screen (Figure 3).

4. In the Delimited text dialog box, click Browse beside the File Name field and select the file to be imported. Open the core indicators data for El Nido, Palawan in C:\CBMSDatabase\17\53\12\CBMS-QGIS\Data. For example, see Figure 4 to open the barangay level core indicator data with file name brgy_coreind.csv.

5. In the dialog box, select CSV as file format and No geometry (attribute table only) under Geometry definition, then click OK (Figure 5).

6. Note that the layer has been added to the map. The delimited text file now behaves like any other map layer in QGIS. To check that data were loaded properly, right click on the brgy_coreind layer and select Open Attribute Table. Ensure that all data in the brgy_coreind.csv are found in the attribute table. Follow steps 1 to 4 when importing data for other geopolitical levels such as mun_coreind.csv or purok_coreind.csv. Figure 6 shows a sample screen view.

7. Follow Steps 1 and 2. Open the household-level core indicator data for Barangay 76 in Pasay City with file name hh_coreind.csv located in C:\CBMSDatabase\13\76\05\CBMS-QGIS. See sample screen view in Figure 7.

For LGUs using the CBMS APP track, global positioning system (GPS) data such as location of households are included in the household-level data exported from Statsim 6. To import or load CBMS data with geopoints into QGIS, follow these steps:
8. In the dialog box, select CSV as file format. Under Geometry definition, select Point coordinates. Note that the X and Y fields are defined automatically. Click OK. See Figure 8.

9. In the Coordinate Reference System (CRS) Selector window, select WGS 84 (the most commonly used) from the list of CRS supported by QGIS. Click OK. See Figure 9.

10. Note that the layer is added to the list of layers and household locations are displayed in the map (Figure 10).

Loading Shapefiles

After loading the barangay core data, load the shapefile of all barangays in El Nido, Palawan by following these steps:

1. Click Layer and select Add Vector Layer, or click on the icon on the right side of the screen (Figure 11).
2. In the Add Vector Layer dialog box, select File and click Browse. Open the barangay shapefile for El Nido, Palawan in C:\CBMSDatabase\17\53\12\CBMS-QGIS\Shapefiles. See Figure 12.

3. Click Open to load the shapefile into QGIS (Figure 13).

4. In the Coordinate Reference System (CRS) Selector window, select WGS 84 (the commonly used system) from the list of CRS supported by QGIS. Click OK. Note that the barangay shapefile for El Nido, Palawan shows in the map (Figure 14).

**Joining Layers**

At this stage, two layers have been loaded: one layer contains the CBMS data in tabular form and the other layer is a shapefile containing the barangay boundaries. To generate the poverty maps, the CBMS data need to be merged with the shapefile containing the barangay boundaries using the Join Layer feature in QGIS. Before joining the layers, ensure that both the data and the shapefile share a field or column with matching values (in the same format such as a string or integer). This could be a name or a code, and should be unique (one row per name or ID). In the example in Figure 15, the unique identifier is the Barangay ID or Barangay PSGC. To join the layers, follow these steps:
1. Right click on the barangay shapefile layer and select Properties to open the Layer Properties dialog box (Figure 15).

2. Go to the Joins tab and click + to add a join (Figure 16).

3. In the Add Vector Join dialog box, define the following as key columns:
   - Join Layer – the layer to be linked with the target layer
   - Join Field – the unique identifier from the tabular data
   - Target Field – the unique identifier that will link the tabular data to the shapefile

   In the example (see Figure 17), the Join Layer is brgy_coreind. The Join Field is brgyid and the Target field is BrgyPSGC. Click OK to accept the settings, then OK to create the Join.

4. Open the Shapefile attribute table to check that the two layers have been properly joined. Notice that the table now contains additional fields (Figure 18). Join works by adding fields from the data table to the shapefile’s attribute table based on matching values found in the key columns.

5. Note that this join is temporary. To permanently save the joined shapefile, right
Click on the joined shapefile and click **Save As** (Figure 19).

**FIGURE 19**

6. In the **Save Vector Layer** dialog box, select **ESRI shapefile** in the **Format** field, and **Layer CRS** in the **CRS** field. Click **Browse** beside **Save As**. Select the folder where the new shapefile will be saved. Enter the file name and click **Save**. Click **OK**. See screen view in Figure 20.

**FIGURE 20**

- a) know the regional, provincial, municipal, or barangay data;
- b) sort the data from lowest to highest; and
- c) use the formula (Figure 21) to determine the cut-off points used.

**FIGURE 21**

<table>
<thead>
<tr>
<th>Range</th>
<th>Formula</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>A:0 B:{Municipal Data-min/2}+min</td>
</tr>
<tr>
<td>2nd</td>
<td>C:B+.01 D:Municipal Data</td>
</tr>
<tr>
<td>3rd</td>
<td>E:D+.01 F:{Max-Municipal Data/2}+Municipal Data</td>
</tr>
<tr>
<td>4th</td>
<td>G:F+.01 H:100</td>
</tr>
</tbody>
</table>

Notes:

a. The minimum for the first range is always zero (0) while the maximum for the fourth range is always 100.

b. Municipal data is the municipal data for the specific indicator, which could be regional, provincial, or barangay data depending on the geopolitical level to be mapped.

c. Min and Max refer to the lowest and highest data.

**Color Scheme**

Regional, provincial, municipal, and barangay maps use the Green and Red color scheme.

- **Green** represents data that are **above** the regional, provincial, or municipal data.

- **Light green** represents data that are **just above** the regional, provincial, or municipal data.

- **Dark green** is for data that are **significantly above** the regional, provincial, or municipal data.

- **Pink** and **Red** indicate data that are **below** and **significantly below** data.

  1st range: Green
  2nd range: Light green
  3rd range: Pink
  4th range: Red
Purok (subvillage) level

Shades of blue are used in mapping indicators at the purok (subvillage) level. Four shades of blue differentiate data at this level. The darker the shade of blue, the better the purok’s performance.

For all ranges, Hue is 240 and Value is 255. Only the saturation varies per range. Below are the saturation values:

1st range: 255  
2nd range: 160  
3rd range: 80  
4th range: White

Household level

Household dots or coordinates use Green and Red. Green represents positive response to a particular indicator while Red denotes the negative.

Layer Properties in QGIS

Layer Properties provides information on the layer, the different options in styling layers, and labeling. The QGIS 2.0 User’s Guide gives more detailed information on Style, available in http://www.qgis.org/en/docs/user_manual/working_with_vector/vector_properties.html#style-menu

Style Menu

The Style menu gives options for different renders that can be applied on vector data. The renderer is responsible for drawing a feature together with the correct symbol.

To go to the Style menu, right click on the Barangay shapefile layer and select Properties. In the Layer Properties dialog box, select Style (see Figure 22).

(i) Single Symbol

Selecting Single Symbol styles all features in the layer the same way. Different colors and outline types are available. The Symbol Layers dialog box (Figure 24, left side) shows
the current style. To change this, click on the first level in the Symbol Layers dialog box and change the settings for Unit, Transparency, Color, and Rotation. More symbols are available in the Symbol Manager.

(ii) Categorized
Selecting Categorized rendering displays the layer features in different colors based on the values in the selected attribute field or column (Figure 26).

(iii) Graduated
Under Graduated rendering, data may be broken down into classes and a different style applied for each class (Figure 27).

Use the Style tab (see Figure 28) to select Attribute (under the Column listbox), Symbol (under the Symbol Properties), and Color ramp (under the Color Ramp list).

Select Classes to specify the number of classes, and Mode to select the preferred classification style for each class (Figure 29). The following Modes are available: Equal Interval, Quantile, Natural Breaks (Jenks), Standard Deviation, and Pretty Breaks.
The listbox in the center of the Style menu lists the classes to be rendered, their ranges, labels, and symbols (Figure 29).

CBMS poverty mapping uses a standard color range and scheme, which can be applied under Graduated rendering. To create a color ramp for barangay-level poverty maps, follow these steps:

a) In the Color ramp field, select New.

b) In the Color Ramp Type dialog box, select Gradient. In the Gradient Color Ramp dialog box, click Change and select Green in the Color 1 field (Figure 30).

c) In Color 2 field, click Change to select and change the color to Pink. In the Type pull-down menu, select Discrete, then click Multiple steps. As shown in Figure 31, there are now two colors (Green and Pink) in the color ramp.

d) To add Light Green, click on Add stop and select Light Green under Basic colors. Click OK.
e. Set the offset value of the new stop to 25, since Light Green is the color assigned to the 2nd range. Click OK. See Figure 32.

f. To add the color Red, click Add stop again. Select Red from Basic colors, and click OK. Set the offset value of the new stop to 75, indicating Red is the color assigned to the 4th range. Click OK.

Notice that all four colors are displayed in preview (Figure 33). Click OK again.

g. In the Color Ramp Name dialog box, enter a name for the newly created color ramp. For example, enter Barangay Color as the name, and click OK. Note that the new color ramp is added to the list of color ramps (Figure 34).
The same process applies in creating a color ramp for purok-level color schemes. However, instead of choosing colors from the available Basic colors, the value for saturation is specified. To create a color ramp for purok-level color scheme, follow these steps:

a) In the Color Ramp field, select New to create a new color ramp.

b) Under Color Ramp type, select Gradient. In the Gradient Color Ramp dialog box, change the color in the Color 1 field to Blue. Change the second color into a lighter shade of Blue by selecting Blue and changing the saturation to 80. Click OK. See Figure 35.

c) Add another color by clicking the Add stop and selecting Blue. Enter the value 160 for saturation. Enter the value 25 as offset of the new stop, and click OK (Figure 36).
d) Add the last color by clicking **Add stop** and selecting White. Enter the value 75 as offset of the new stop, and click **OK**. Check the preview of the color ramp on the bottom. Then click **OK** (Figure 37).

e) Name the new color ramp “Purok Color.” Note that the new color ramp is added to the list. See Figure 38.

**Labels Menu**


Labels can be added to a map to give information about an object. Labels can be assigned to any vector layer. The content of these labels rely on the attribute data of a layer. A number of features are available in labeling vector layers. To activate the options for labeling the layer, follow these steps:

1. Right click on the **Layer** and select **Properties**. Go to the **Labels** tab. First, check the box to activate labeling for the selected layer. On the pull-down list, select the desired attribute column to use for labeling (Figure 39).
Creating CBMS Poverty Maps Using QGIS 2.0

This section creates a sample poverty map using QGIS. To generate a map showing poverty incidence in the Municipality of El Nido in Palawan, follow these steps:

Barangay-Level Map

1. Load the barangay core indicators data and barangay shapefile (refer to instructions on page 15).
2. Merge the two layers (refer to instructions on page 18).
3. Go to Properties and select the Style tab (refer to instructions on page 21).
4. Select Graduated renderer on the pull-down list.
5. In the Column field, select the indicator to be mapped. For this example, select the column `brgy_coreind_brgy_povp_prop`. This column contains data on the proportion of households living below the poverty threshold.
6. Enter the number 4 as the number of classes for the four-color ranges.

Figure 41 shows a sample map with barangay labels.
7. Select the color ramp that was created for barangay-level color scheme (refer to instructions on page 23). See sample screen view in Figure 42.

8. Set the ranges for the four-color ranges using the formula in Figure 21. The color ranges are:
   - 1st range: 0 – 38.90
   - 2nd range: 38.91 – 64.60
   - 3rd range: 64.61 – 72.10
   - 4th range: 72.11 – 100.0

9. Enter the minimum and maximum values per range by double clicking on the Value column per range (Figure 43).

10. Change the label for each range (Figure 44). This will serve as the legend for the created map.

11. After entering the values and label for the four color ranges, click **Apply**.

12. To use the created style for creating other maps, click **Save Style** and select **QGIS Layer Style File** in the list. The layer properties is saved as the style file (Figure 45).

13. Save the file in C:\CBMSSDatabase\17\53\12\CBMS-QGIS\Projects and name the file Brgy_style. Click **Save**. Load this style when creating other maps (Figure 46).

14. Go back to the Style dialog box and click on the **Labels** tab. Activate the labeling options by checking **Label this layer with**. Select the attribute/column Barangay to show the barangay names. Click **OK**. See Figure 47.
15. For easy reference, rename the layer to **Prop of income poor hhs, El Nido**. To do this, right click on the layer and select **Rename** (Figure 48).

**Figure 48**

![Rename Layer](image)

Figure 49 shows the sample map for barangay-level.

**Figure 49**

![Barcode Sample Map](image)

**Purok-Level Map**

1. Load the purok core indicators data for Barangay Aberawan in El Nido and its purok shapefile. The purok-level data is located in **C:\CBMSDatabase\17\53\12\CBM-GIS\Data**, and the purok shapefile is found in **C:\CBMSDatabase\17\53\12\CBM-GIS\Shapefiles**.

2. Merge the two layers using the key columns shown in Figure 50. Click **OK**.

**Figure 50**

![Merge Layers](image)

3. Go to **Properties** and select the **Style** tab.

4. Select **Graduated** renderer from the pull-down list.

5. In the column field, select the indicator to be mapped. For this example, the column **purok_coreind_purok_povp_prop** is selected. This column contains data on proportion of households living below the poverty threshold in Barangay Aberawan.

6. Enter the number **4** as the number of classes for the four-color ranges.

7. Select the **Color ramp** created for purok-level color scheme (refer to instructions on page 21). See Figure 51 for a sample screen view.

**Figure 51**

![Color Ramp](image)
8. Set the intervals for the four-color ranges using the formula in Figure 21. The color ranges are:
   - 1st range: 0 – 74.80
   - 2nd range: 74.81 – 78.40
   - 3rd range: 78.41 – 81.10
   - 4th range: 81.11 – 100.0

Enter the minimum and maximum values per range by double clicking the Value column for each range (Figure 52).

9. Change the label for each range (Figure 53). This will serve as the legend of the created map.

10. After entering the values and label for the four color ranges, click Apply.

11. To use the created style for creating other maps, click Save Style.

12. Click Labels to activate the labeling options. Check Label this layer with and select the attribute/column Purok to show the purok names (Figure 54). Click OK.

13. For easy reference, rename the layer to Prop of income poor hhs, Brgy Aberawan. To do this, right click on the layer and select Rename. Figure 55 shows the map indicating households living below the poverty threshold in Barangay Aberawan, El Nido.
Note:

LGUs using the mobile data capture system should skip this step since the household location data are already merged in the exported household data from StatSim.

3. Go to Properties and select the Style tab.

4. Select Categorized renderer on the pull-down list.

5. In the Column field, select the indicator to be mapped. For this example, the column hh_coreind_hh_povp is selected. This column contains the data on classification of poor and non-poor households based on income. Click Classify (Figure 57).

6. Change the color and symbol by double clicking on the dot beside Non-poor or Poor. Select the color Green to represent non-poor households, and Red to represent poor households. If desired, change the type and size of the symbol from the list of symbols (Figure 58). Click OK when done customizing the symbols and color.
7. Figure 59 shows the sample maps.

![Figure 59]

8. For easy reference and file management, save the poverty maps as projects in C:\CBMSDatabase\17\53\12\CBMS-QGIS\Projects (Figure 60).

![Figure 60]

**Presentation of Maps Using Print Composer**

The **Print Composer** offers various layout and printing capabilities, which allows the addition of elements such as the QGIS map canvas, text labels, images, legends, scalebars, basic shapes, arrows, attribute tables, and HTML frames. Each element can be sized, grouped, aligned, and positioned. Properties can be adjusted to create the layout, which can then be printed or exported to image formats such as Postscript, PDF, or SVG. The layout can be saved as a template and loaded again for another session.


To use the **Print Composer**, follow these steps:

1. In the **Project** menu, click **New Print Composer**.
2. Enter a title for the print composer (Figure 61).

![Figure 61]

The open Print Composer window provides a blank canvas in which the map, text labels, legends, and scalebars, among others, can be added. The **Menu** and toolbar for various map elements and controls are found on top, and a **Command History** window is on the upper right. On the lower right is a panel with three tabs: **Composition**, **Item Properties**, and **Atlas Generation** (Figure 62).
3. To add a map, click **Add new map**. Hold the left mouse button and draw a box in the desired space to insert the map. The map then shows in the box window (Figure 63).

4. To add the map legend, click the **Add new legend** icon. The legend for all layers will appear. Click **Item Properties** and remove unwanted layers from the legend by clicking on “−” (Figure 64).
5. To add a map title, click the Add new label icon. Click on the map and draw a box on the desired space for the label. Type the title of the map in Item Properties. Click Font to adjust the size or font style of the text (Figure 65).

6. The map can then be exported as an image, a PDF, or SVG using the icon in the tool bar menu. Export the map as an image. The exported image can then be inserted in Microsoft PowerPoint and/or Word (Figure 66).
Appendices
**Introduction and Objectives**

Training on data collection covers a general orientation on the background and rationale for CBMS, lectures and hands-on exercises on how to conduct census and field operations, and how to administer the census forms. At the end of the module, the participants are expected to:

1. Know the concepts and definitions in the household and barangay profile questionnaires.
2. Learn how to properly accomplish household and barangay profile questionnaires.
3. Learn how to recognize inconsistent entries, and evaluate and field-edit answers.

**Training Details**

CBMS Orientation and Training of Trainers on CBMS data collection (three-day training)

Minimum Qualifications of a Trainer:

1. Is a regular staff of the local government unit for the duration of the project
2. Must have capability to train enumerators in the barangay
3. Must be involved in CBMS implementation in the city

Minimum Qualifications of an Enumerator:

1. Should be a resident of the barangay
2. May be a barangay health worker, nutrition scholar, teacher, student, or barangay official
3. Should be able to read, write, and do simple computations.

**Preparatory Activities**

1. Set schedule of training for the municipalities/cities.
2. Identify number of enumerators in each barangay.
3. Mobilize participants for the training. Below is an example of how to estimate the number of enumerators needed to conduct the survey operation in the barangay for one month.

\[ \text{Number of enumerators} = \frac{\text{number of households}}{10 \text{ (questionnaires per day)}} \times \frac{1}{22 \text{ (working days)}} \]

4. Identify number of batches of training. The ideal number of participants is 50 persons per batch.
5. Prepare training program (see attached program). Assign topics of discussion to each trainer.
6. Prepare venue for training, including equipment for the training (computers and LCD).
7. Prepare materials for the training. Reproduce manuals and program.

**For each enumerator:**
- one copy of the Enumerators’ Manual
- one copy of the Field Editing Manual
- three copies of the Household Profile Questionnaire (Form 1) (two for classroom exercises and one for the field exercise)
- pencils
- envelopes
- papers

8. Prepare barangay spot maps for the training.
9. Prepare questionnaires to be used for the census.

**Printing of questionnaire**
It is recommended that the Household Profile Questionnaire should be printed in newsletter form. This way enumerators would find it easier to ask questions in reference to the names of the household members on the questionnaire pages.

<table>
<thead>
<tr>
<th>Survey Operations</th>
<th>Suggested timeframe of survey operation: one month Set deadline of submission of accomplished barangay and household questionnaires, and spot maps</th>
</tr>
</thead>
</table>

**Training Program**

**Day 1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 am–9:00 am</td>
<td>A. Opening program</td>
</tr>
<tr>
<td>9:00 am–9:30 am</td>
<td>B. CBMS overview</td>
</tr>
<tr>
<td>9:30 am–10:15 am</td>
<td>C. CBMS BPQ</td>
</tr>
<tr>
<td>10:15 am–10:30 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:30 am–12:00 noon</td>
<td>Continuation of CBMS BPQ</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>D. CBMS HPQ</td>
</tr>
<tr>
<td></td>
<td>Page 1 (Identification, Housing Characteristics and Characteristics of the Household)</td>
</tr>
<tr>
<td></td>
<td>Page 2 (Demography)</td>
</tr>
<tr>
<td></td>
<td>Page 3 (Education and Literacy and Political Participation)</td>
</tr>
</tbody>
</table>
### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Pages/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>3:15 pm–4:30 pm</td>
<td>Pages 4–5 (Economic Activity)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Page 6 (Health, Crime, and Nutrition)</td>
<td></td>
</tr>
<tr>
<td>4:30 pm–5:00 pm</td>
<td>Practice interview using paper questionnaire (pages 1–6)</td>
<td></td>
</tr>
</tbody>
</table>

### Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Pages/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review</td>
<td></td>
</tr>
<tr>
<td>9:00 am–10:00 am</td>
<td>Page 7 (Water and Sanitation, Housing and Waste Management)</td>
<td></td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>10:15 am–11:00 am</td>
<td>Page 8 (Sources of Income)</td>
<td></td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>Page 9 (Agricultural Activities and Climate Change)</td>
<td></td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>Pages 10 (Climate Change)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pages 11–12 (Climate Change, Hunger, Household Members who Died and Access to Programs)</td>
<td></td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>3:15 pm–5:00 pm</td>
<td>Practice interview using paper questionnaire (pages 7–12)</td>
<td></td>
</tr>
</tbody>
</table>

### Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Pages/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>E. Classroom exercise</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Evaluation of classroom exercise</td>
<td></td>
</tr>
<tr>
<td>9:00 am–10:30 am</td>
<td>F. Field exercise</td>
<td></td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>G. Field-editing procedures</td>
<td></td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
<td></td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>H. Using same household IDs used in previous census (panel households)</td>
<td></td>
</tr>
<tr>
<td>2:00 pm–3:00 pm</td>
<td>I. Other forms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Distribution form</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Callback form</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Monitoring form</td>
<td></td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
<td></td>
</tr>
<tr>
<td>3:15 pm–4:30 pm</td>
<td>J. Field operation guides</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Roles of CBMS census volunteers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>a. Enumerators, field editors, coordinators, and monitors/Technical Working Group</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b. Duties and responsibilities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. General field operations procedures</td>
<td></td>
</tr>
<tr>
<td>4:30 pm–5:00 pm</td>
<td>Closing program</td>
<td></td>
</tr>
</tbody>
</table>
Training on data collection for the CBMS Accelerated Poverty Profiling (APP) Module 1 covers a general orientation on the background and rationale for CBMS, lectures and hands-on exercises on how to conduct census and field operations, and how to administer the survey forms. The training is led by the provincial and/or municipal/city CBMS focal persons and/or trainers.

Objectives

At the end of the module, the participants are expected to:

1. Know the concepts and definitions in the Household Profile Questionnaire (HPQ) and the Barangay Profile Questionnaire (BPQ).
2. Learn how to properly accomplish HPQs and BPQs using Android gadgets.
3. Learn how to recognize inconsistent entries, and evaluate and field-edit answers.

Participants

Standard Training Module

Day 1: Local Government Unit Monitors/Technical Working Group (TWG)

Two to three staff who will handle the CBMS database should be

1. a regular staff of the LGU for the duration of the project
2. computer literate
3. capable to assist/supervise enumerators during data collection

Days 2–5: LGU Monitors, Field Coordinators, Field Editors, Enumerators

Qualifications of field coordinators, field editors, enumerators:

1. a regular staff of the LGU during data collection
2. high school graduate
3. computer literate

Preparatory Activities

1. Forging of memorandum of agreement among the CBMS International Network Coordinating Team, the Department of the Interior and Local Government-Bureau of Local Government Development (DILG-BLGD), DILG Region, and the LGU
2. Preparation of timetable and budgetary requirements
3. Planning and estimation of training

a. Manpower requirements: TWG, field coordinators, field editors, enumerators

b. Equipment requirements:
   i. computer and LCD for training

1 Ideal number of participants per training is 50 persons per batch
2 Ideal ratio of TWG staff to field coordinator is 1:5
3 Ideal ratio of field coordinator to enumerator is 1:10
4 Ideal ratio of field editor to enumerator is 1:4
5 Enumerators are estimated to accomplish 10 questionnaires per day
ii. procurement/rental of Android gadgets for field editors/coordinators and enumerators

c. Participant’s kit (TWG)
   i. one copy of the Enumerators’ Manual
   ii. two copies of the HPQ (Form 1) (one each for classroom and field exercises)
   iii. two copies of the HPQ (Form 1) (one each for classroom and field exercises)
   iv. pencils
   v. other forms (callback, distribution, and monitoring forms)
   vi. one copy of the BPQ (Form 2)

d. Participant’s kit (Enumerators)
   i. one copy of the Enumerators’ Manual
   ii. two copies of the HPQ (Form 1) (one each for classroom and field exercises)
   iii. two copies of the HPQ (Form 1) (one each for classroom and field exercises)
   iv. pencils
   v. other forms (callback, distribution, and monitoring forms)

4. Request for available shape files from national government agencies

Data Collection Activities

1. Data collection should start immediately after conduct of training to ensure that the enumerators retain the concepts.
2. Ideal time frame of survey operation is one month.

Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session A: Overview of CBMS and CBMS APP</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>A. Overview of CBMS and CBMS APP</td>
</tr>
<tr>
<td>9:00 am–10:30 am</td>
<td>B. CBMS Portal</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>C. Setting up accounts</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>1. Getting started with CBMS Portal</td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>2. Familiarizing with CBMS Portal</td>
</tr>
<tr>
<td>2:00 pm–4:00 pm</td>
<td>A. CBMS Scan</td>
</tr>
</tbody>
</table>

The questionnaire is set inside CBMS Scan. Using tablets, the CBMS software dubbed as CBMS Scan is expected to fast-track data collection and processing by encoding data while interview of household respondents is ongoing. Location of households will also be taken at the same time by getting the GPS data using Android tablets. It also features security measures to maintain confidentiality of information while facilitating census management.
<table>
<thead>
<tr>
<th>Time</th>
<th>Overview of the tablet and CBMS Scan</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:00 pm–4:15 pm</td>
<td>Installation and opening the CBMS Scan</td>
</tr>
<tr>
<td>4:15 pm–5:00 pm</td>
<td>Menu of CBMS APP</td>
</tr>
<tr>
<td></td>
<td>Registering mobile devices</td>
</tr>
</tbody>
</table>

**Day 2 (for LGU Monitors, Field Coordinators, Field editors, and Enumerators)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 am–9:00 am</td>
<td>Opening Program</td>
</tr>
<tr>
<td>9:00 am–9:30 am</td>
<td>Overview of CBMS and CBMS APP</td>
</tr>
</tbody>
</table>
| 9:30 am–10:30 am | E. CBMS HPQ  
|                | Page 1 (Identification, Housing Characteristics, and Characteristics of the Household) |
| 10:30 am–10:45 am | Coffee break                                                            |
| 10:45 am–12:00 noon | Page 2 (Demography)  
|                | Page 3 (Education and Literacy and Political Participation)             |
| 12:00 noon–1:00 pm | Lunch break                                                             |
| 1:00 pm–3:00 pm | Pages 4–5 (Economic Activity)                                            |
| 3:00 pm–3:15 pm | Coffee break                                                             |
| 3:15 pm–4:00 pm | Page 6 (Health, Crime, and Nutrition)                                    |
| 4:00 pm–5:00 pm | Practice interview using paper questionnaire                             |

**Day 3**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>F. Evaluation and review</td>
</tr>
<tr>
<td>9:00 am–10:00 am</td>
<td>Page 7 (Water and Sanitation, Housing and Waste Management)</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–11:00 am</td>
<td>Page 8 (Sources of Income)</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>Page 9 (Agricultural Activities and Climate Change)</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>Pages 10, 11, and 12 (Climate Change, Hunger, Household Members who Died, and Access to Programs)</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–5:00 pm</td>
<td>G. Practice interview using paper questionnaire</td>
</tr>
</tbody>
</table>
### Day 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–10:00 am</td>
<td>H. CBMS SCAN</td>
</tr>
<tr>
<td></td>
<td>1. Overview of the Tablet and CBMS Scan for HPQ</td>
</tr>
<tr>
<td></td>
<td>2. Menu</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–10:45 am</td>
<td>I. Codebook for CBMS HPQ</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>J. CBMS HPQ</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:30 pm</td>
<td>K. Field exercise (Practice interview using Tablets)</td>
</tr>
<tr>
<td>3:30 pm–3:45 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:45 pm–5:00 pm</td>
<td>L. Sharing/Sending Form Data</td>
</tr>
</tbody>
</table>

### Day 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–10:30 am</td>
<td>M. Field Operation Guides</td>
</tr>
<tr>
<td></td>
<td>1. Roles of CBMS census volunteers</td>
</tr>
<tr>
<td></td>
<td>a. Enumerators, field editors, coordinators, and monitors/TWG</td>
</tr>
<tr>
<td></td>
<td>b. Duties and responsibilities</td>
</tr>
<tr>
<td></td>
<td>2. General field operations procedures</td>
</tr>
<tr>
<td></td>
<td>a. Form operation</td>
</tr>
<tr>
<td></td>
<td>b. Copying form data to hard drive</td>
</tr>
<tr>
<td></td>
<td>c. Tablet-personnel assignment</td>
</tr>
<tr>
<td></td>
<td>d. Device operation</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>N. Other forms</td>
</tr>
<tr>
<td></td>
<td>1. Distribution form</td>
</tr>
<tr>
<td></td>
<td>2. Callback form</td>
</tr>
<tr>
<td></td>
<td>3. Monitoring form</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>O. Using same HH Ds in previous CBMS census (Generating Panel Data)</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–4:30 pm</td>
<td>P. Planning for next set of activities</td>
</tr>
<tr>
<td>4:30 pm–5:00 pm</td>
<td>Q. Closing program</td>
</tr>
</tbody>
</table>
Training on CBMS PAPER Module 2 involves encoding of collected data from the CBMS census conducted by local government units (LGUs). Encoding accomplished questionnaires use CSPro-based encoding system and digitizing maps use CBMS-QGIS. The software is shared by the CBMS Network to LGUs for free. Training is conducted for data processors at the provincial/city/municipal/barangay levels.

Objectives

At the end of this training, the participants are expected to:

1. be able to understand the basics in file management and encoding and database operations;
2. be familiar with the software used in encoding and digitizing;
3. be knowledgeable on how to properly encode accomplished Household Profile Questionnaires (HPQs) and Barangay Profile Questionnaires (BPQs), learn how to recognize inconsistent entries, and be able to troubleshoot errors encountered;
4. know how to digitize shape files and manage own database; and
5. be mindful of matching survey data from questionnaires with map data.

Participants

At least two participants per LGU who
1. are computer literate,
2. must have attended the previous CBMS PAPER Module 1,
3. must be a regular staff or under contract with the LGU during the CBMS implementation, and
4. must have the capability to train the other members of the data processing team.

Note: The same set or a subset of participants are expected to attend both CBMS PAPER Module 2 and 3 trainings.

Preparatory Activities

1. Planning and estimation of training
   a. Manpower requirements: Encoders, Coordinators/ TWG
   n. Equipment requirements:
      i. computer and LCD for training
      ii. computer/s for encoding and digitizing
   c. Participant’s kit (Technical Working Group)
      i. Encoding manual (for encoders)
      ii. Digitizing manual (for digitizer)

1 Ideal number of participants per training is 20–25 persons per batch.
# Training Program

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 am–9:00 am</td>
<td>Opening program</td>
</tr>
<tr>
<td>9:00 am–9:30 am</td>
<td>A. CBMS overview (CBMS_OVERVIEW Prezi)</td>
</tr>
<tr>
<td>9:30 am–10:00 am</td>
<td>B. File management (File Management_2014.pdf)</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:30 am–11:00 am</td>
<td>C. Matching survey data and spot maps (Matching of CBMS survey data and spotmaps_2014_1.pdf)</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>D. Introduction to the CBMS Encoding System and discussion on the transfer of data from the accomplished questionnaires to computerized system 1. Barangay Profile Questionnaire</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>Continuation of D.</td>
</tr>
<tr>
<td>2:00 pm–4:00 pm</td>
<td>2. Household Profile Questionnaire (HPQ) (with a 15-minute break)</td>
</tr>
<tr>
<td>4:00 pm–5:00 pm</td>
<td>E. Diagnostic exercise (participants must encode at least 10 HPQs)</td>
</tr>
</tbody>
</table>

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–9:00 am</td>
<td>A. Evaluation and review of Day 1 sessions</td>
</tr>
<tr>
<td>8:30 am–9:30 am</td>
<td>B. Continuation of diagnostic exercise</td>
</tr>
<tr>
<td>9:30 am–10:00 am</td>
<td>C. Common mistakes in encoding (common mistakes encountered in encoding CBMS data_2014.pdf)</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:15 am–11:00 am</td>
<td>D. Managing and concatenation of encoded files (Concatenation_2014.pdf)</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>E. Crosstabs using CSPro (Crosstabulation using CSPro Crosstabs_2014.pdf)</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>Continuation of crosstabs</td>
</tr>
<tr>
<td>2:00 pm–2:30 pm</td>
<td>F. Introduction to CBMS-QGIS: Spatial database and digitizing concepts</td>
</tr>
<tr>
<td>2:30 pm–3:30 pm</td>
<td>G. Hands-on and interactive training</td>
</tr>
<tr>
<td>3:30 pm–3:45 pm</td>
<td>Break</td>
</tr>
<tr>
<td>3:45 pm–4:45 pm</td>
<td>2. Mapping household coordinates encoded in the CSPro encoding system**</td>
</tr>
<tr>
<td>4:45 pm–5:00 pm</td>
<td>H. Evaluation of hands-on activity</td>
</tr>
</tbody>
</table>

*for LGUs implementing for the 2nd, 3rd, or nth round

**for LGUs who have encoded coordinates in the CSPro encoding system
Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>A. Evaluation and review of Day 2</td>
</tr>
<tr>
<td>8:30 am–10:30 am</td>
<td>B. Hands-on and interactive training</td>
</tr>
<tr>
<td></td>
<td>1. Digitizing polygons</td>
</tr>
<tr>
<td></td>
<td>2. Digitizing polylines</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Break</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>3. Digitizing coordinates</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–1:30 pm</td>
<td>C. Evaluation of hands-on exercise on digitizing</td>
</tr>
<tr>
<td>1:30 pm–3:00 pm</td>
<td>D. Matching encoded and digitized data (Matching of CBMS survey data and spotmaps_2014_2.pdf)</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Break</td>
</tr>
<tr>
<td>3:15 pm–3:45 pm</td>
<td>E. Common mistakes in digitizing</td>
</tr>
<tr>
<td>3:45 pm–4:30 pm</td>
<td>F. Discussion of next set of activities and action planning (ActionPlan_2014.pdf)</td>
</tr>
<tr>
<td>4:30 pm–5:00 pm</td>
<td>G. Closing program</td>
</tr>
</tbody>
</table>
### APPENDIX D

#### Training of Trainers on CBMS PAPER

**Module 3: Processing Encoded Data, Poverty Mapping, and Building the CBMS Database**

| Introduction and Objectives | Training on computerized data processing involves the processing of data collected from the CBMS census conducted by the local government units (LGUs). Training on CDPS Module 3 uses three freeware (CSPro crosstabs, StatSim, and QGIS) shared by the CBMS Network to LGUs. Training is conducted for data processors at the provincial and/or city/municipal CBMS focal persons and/or barangay data processors. At the end of Module 3, the participants are expected to:  
1. be accustomed with the CBMS StatSim software and the crosstab application of CSPro,
2. know how to properly process encoded data (encoded using CSPro) using the CBMS StatSim and CSPro Crosstabs, and to interpret data results,
3. be able to import the processed data into the CBMS database using QGIS,
4. be able to produce the poverty maps using CBMS data and know how to interpret them using QGIS. |
| Trainee Qualifications | 1. Must be computer literate, specifically on  
   a. Windows Explorer,  
   b. MS Excel or any spreadsheet application, and  
   c. MS Word or any word processors  
2. Must have attended the previous CBMS training modules  
3. Must be a regular staff or is under contract during CBMS implementation  
4. Must have the capability to train the other members of the data processing team  

*Note: The same set or a subset of participants are expected to attend both Module 2 and 3 trainings.* |
| Expected Outputs | 1. Processed barangay CBMS demography, core, and other indicators  
2. Built the CBMS database containing household-level dots, purok boundaries, and barangay boundaries with data  
3. Produced tables and poverty maps of the barangay |
### Training Program

#### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Registration</td>
</tr>
<tr>
<td>8:30 am–9:00 am</td>
<td>Opening Program&lt;br&gt;Invocation&lt;br&gt;National Anthem&lt;br&gt;Introduction of participants&lt;br&gt;Welcome remarks</td>
</tr>
<tr>
<td>9:00 am–9:30 am</td>
<td>Overview of the CBMS database</td>
</tr>
<tr>
<td>9:30 am–10:15 am</td>
<td>Review on file management</td>
</tr>
<tr>
<td>10:15 am–10:30 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:30 am–11:00 am</td>
<td>Review of concepts on encoding and digitizing</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>Checking for duplicates and inconsistent entries in encoded data</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–1:30 pm</td>
<td>Concatenation</td>
</tr>
<tr>
<td>1:30 pm–2:30 pm</td>
<td>Available information from the CBMS Household Profile Questionnaire and Barangay Profile Questionnaire</td>
</tr>
<tr>
<td>2:30 pm–3:00 pm</td>
<td>Module 3 Installer set-up</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–4:00 pm</td>
<td>Overview of CBMS StatSim 5.0</td>
</tr>
<tr>
<td>4:00 pm–4:30 pm</td>
<td>Importing and processing of CBMS data at the household, purok, barangay, and municipal levels</td>
</tr>
<tr>
<td>4:30 pm–5:30 pm</td>
<td>CBMS core indicators&lt;br&gt;Other key indicators&lt;br&gt;CBMS Composite Index (CCI)&lt;br&gt;Millennium Development Goals (MDGs)&lt;br&gt;Comprehensive Development Plan (CDP) tables&lt;br&gt;Climate Change Related (CCR) indicators&lt;br&gt;Barangay Profile Questionnaire (BPQ) tables</td>
</tr>
</tbody>
</table>

#### Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Evaluation and review of Day 1</td>
</tr>
<tr>
<td>8:30 am–10:00 am</td>
<td>Creating Basic SQL syntax</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–11:00 am</td>
<td>Checking for duplicates and inconsistent entries in processed data</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>Managing missing values</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–2:30 pm</td>
<td>Matching of StatSim data outputs and digitizing maps</td>
</tr>
<tr>
<td>2:00 pm–3:30 pm</td>
<td>Checking for duplicates and inconsistent entries in digitized maps</td>
</tr>
<tr>
<td>3:30 pm–3:45 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:45 pm–5:30 pm</td>
<td>Executing SQL Statements to generate CBMS data using Statsim</td>
</tr>
</tbody>
</table>
Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Evaluation and review of Day 2</td>
</tr>
<tr>
<td>8:30 am–10:30 am</td>
<td>Executing SQL Statements to generate CBMS data using StatSim (cont.)</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td>Exercise</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>Exporting CBMS core indicators from StatSim</td>
</tr>
<tr>
<td>2:00 pm–3:00 pm</td>
<td>Linking StatSim output in the CBMS database into QGIS file</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–5:30 pm</td>
<td>Poverty mapping using the CBMS database</td>
</tr>
<tr>
<td></td>
<td>a. Map layers, properties and basic color scheme</td>
</tr>
<tr>
<td></td>
<td>1. Provincial</td>
</tr>
<tr>
<td></td>
<td>2. Municipal</td>
</tr>
<tr>
<td></td>
<td>3. Barangay</td>
</tr>
<tr>
<td></td>
<td>4. Purok</td>
</tr>
<tr>
<td></td>
<td>5. Household</td>
</tr>
<tr>
<td></td>
<td>b. Saving of poverty map projects</td>
</tr>
<tr>
<td></td>
<td>c. Transferring generated maps to other software (PowerPoint, Word, etc.)</td>
</tr>
</tbody>
</table>

Day 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Evaluation and review of Day 3 sessions</td>
</tr>
<tr>
<td>8:30 am–10:00 am</td>
<td>Poverty mapping using the CBMS Database</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–12:00 noon</td>
<td>Presentation of poverty maps generated per LGU with analysis</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>Enriching the CBMS Database</td>
</tr>
<tr>
<td></td>
<td>1. Using other features</td>
</tr>
<tr>
<td></td>
<td>2. Linking other generated CBMS data using SQL</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:30 pm–3:45 pm</td>
<td>Discussion of validation activities</td>
</tr>
<tr>
<td>3:45 pm–4:15 pm</td>
<td>Discussion of next set of activities and action planning</td>
</tr>
<tr>
<td>4:15 pm–5:00 pm</td>
<td>Closing activities</td>
</tr>
</tbody>
</table>
The CBMS Accelerated Poverty Profiling (APP) Module 2 focuses on processing data collected through CBMS Scan and shared via CBMS Portal as well as digitizing location of infrastructure and poverty mapping. The whole exercise leads to the development of the CBMS database. This training uses the latest versions of CBMS StatSim and QGIS.

**Objectives**

At the end of the module, the participants are expected to

1. be familiar with the CBMS StatSim and QGIS software,
2. know how to properly process the data collected using CBMS StatSim and interpret the data results, and
3. know how to prepare poverty maps and generate the CBMS database.

**Participants**

At least two personnel will be involved in APP Module 2 who

1. are a regular staff of the LGU for the duration of the project,
2. are computer literate, and
3. must have attended the CBMS Accelerated Poverty Profiling (APP) Module 1 training.

**Preparatory Activities**

1. Planning and estimation of training¹
   a. Manpower requirements: At least two members of the Technical Working Group
   b. Equipment requirements:
      i. computer and LCD for training
      ii. one computer for each participant
   c. Participant’s kit (Technical Working Group)
      i. CD/USB for installers
      ii. pencils and notepads
2. Request for available shape files from National Government Agencies

¹ Ideal number of participants per training is 20–25 persons per batch.
# Training Program

## Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>A. Opening program</td>
</tr>
<tr>
<td>9:00 am–9:30 am</td>
<td>B. Overview of CBMS and CBMS APP</td>
</tr>
<tr>
<td>9:30 am–10:00 am</td>
<td>C. File management</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–12:00 noon</td>
<td>D. Overview of QGIS&lt;br&gt;Installation&lt;br&gt;Familiarization with QGIS environment&lt;br&gt;Adding shapefiles</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–2:00 pm</td>
<td>E. Viewing household location generated from CBMS Scan</td>
</tr>
<tr>
<td>2:00 pm–5:00 pm</td>
<td>F. Editing and digitizing location of infrastructure and barangay boundaries&lt;br&gt;Getting shape files from CBMS-NRDB</td>
</tr>
</tbody>
</table>

## Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation of Day 1 topics</td>
</tr>
<tr>
<td>9:00 am–12:00 noon</td>
<td>G. Installation of StatSim&lt;br&gt;H. Producing core indicators using StatSim&lt;br&gt;a. Getting inside StatSim – Familiarizing with the StatSim environment&lt;br&gt;b. Importing CBMS Data&lt;br&gt;   i. auto selection/selecting path&lt;br&gt;   ii. purok editor&lt;br&gt;c. Processing CBMS data&lt;br&gt;d. Displaying automatically generated indicators–data/report view</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>I. Exporting CBMS core indicators data from StatSim</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–5:00 pm</td>
<td>J. Poverty mapping&lt;br&gt;a. General properties&lt;br&gt;b. Opening data from the StatSim into QGIS&lt;br&gt;c. Loading shape files&lt;br&gt;d. Joins</td>
</tr>
</tbody>
</table>
### Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review</td>
</tr>
<tr>
<td>9:00 am–10:00 am</td>
<td>K. Style properties</td>
</tr>
<tr>
<td></td>
<td>a. Color range and color scheme</td>
</tr>
<tr>
<td></td>
<td>b. Labels</td>
</tr>
<tr>
<td>10:00 am–10:15 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:15 am–11:00 am</td>
<td>L. Creating CBMS poverty maps using QGIS</td>
</tr>
<tr>
<td>11:00 am–12:00 noon</td>
<td>Exercises on generating CBMS poverty maps</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:00 pm</td>
<td>M. Print composer</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–5:00 pm</td>
<td>Exercise on interpreting CBMS poverty maps</td>
</tr>
</tbody>
</table>

### Day 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review</td>
</tr>
<tr>
<td>8:30 am–12:00 noon</td>
<td>N. Generating poverty maps for all CBMS core indicators</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–5:00 pm</td>
<td>O. Processing other CBMS data using the SQL syntax</td>
</tr>
</tbody>
</table>

### Day 5

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review</td>
</tr>
<tr>
<td>8:30 am–12:00 noon</td>
<td>P. Exercises on generating tables using SQL syntax</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–3:30 pm</td>
<td>Q. Mapping other CBMS data</td>
</tr>
<tr>
<td>3:30 pm–4:00 pm</td>
<td>Data Validation Guidelines</td>
</tr>
<tr>
<td>4:00 pm–4:30 pm</td>
<td>Planning for next set of activities</td>
</tr>
<tr>
<td>4:30 pm–5:00 pm</td>
<td>Closing program</td>
</tr>
</tbody>
</table>
This four-day writeshop focuses on the strategic use of CBMS data to improve the empirical basis of local planning and budgeting. Workshop participants are expected to mainstream or integrate their evidence-based local situational analysis by incorporating relevant policy or program responses in their local development plans and budgets.

**Objectives**

The training aims to provide a satisfactory level of knowledge to workshop participants/local government unit (LGU) collaborators on why poverty reduction should be an inherent bias of local development plans and how they can base these plans on needs and resources. Special emphasis is also given on how focused targeting of eligible beneficiaries in terms of geographic areas and basic sectors can be done. It also highlights the need to treat local development plans as policy rather than technical documents, which have influence on project implementation.

**Participants**

At least three participants per municipality/city with the following qualifications:

1. a technical staff from the city/municipal planning and development office or any member agency of the CBMS Technical Working Group,
2. actively involved in CBMS implementation,
3. in charge of consolidating barangay development plans and in preparing their city/municipal development plan,
4. a regular staff member or under contract with the LGU for the duration of the CBMS project,
5. capable and willing to train members of the Sangguniang Barangay or Barangay Development Council in preparing their socioeconomic profiles and development plans.

**Preparatory Activities**

**Training Equipment/Materials**

(Please see list of detailed data requirements per write shop session below)

1. Printout of validated CBMS survey results (tables and maps) of at least one barangay
2. Accomplished BDP Template
   
   (Note: Tables and maps from the CBMS StatSim and CBMS-QGIS, respectively, should be copied and pasted on the appropriate section/s in the BDP Template. This should be done before the training to save time. See list of tables and the corresponding maps in Item C below.)
3. Documentation of validation workshop in the same barangay mentioned in item 1 above
4. Completed Barangay Profile Questionnaire
5. List and description of existing projects and programs in the barangay
6. List of proposed projects for the barangay in response to the top problems identified during the CBMS validation workshop
7. Other relevant administrative reports/documents
8. At least one computer unit per LGU where its CBMS database is stored
   (Note: The BDP Template should be saved as a document template (save as BDP.dot) in the computers that will be used during the training. This should be done before the start of the training.)
9. Printer (optional)

Data Requirements per Write Shop Session

W1  Historical records of the barangay

W2  Accomplished Barangay Profile Questionnaire
    1. Land use, by area
    2. Number of barangay personnel, by sex
    3. Barangay facilities by type (e.g., health, service, educational)
    4. Public transportation by type
    5. Garbage disposal facilities
    6. Peace and order
    7. Development programs, projects, and activities

W3  Memorandum of Agreement between the provincial/municipality and CBMS Network Coordinating Team, municipal and barangay ordinances on CBMS implementation, etc.

W4  1. Summary table of CBMS indicators by barangay
    2. Summary table of CBMS indicators by purok

W5  Processed and validated CBMS survey results (demography), documentation of community validation workshop, CBMS maps, etc.
    1. Magnitude and proportion of households and population and average household size, by purok
    2. Population, by sex, sex ratio, and purok
    3. Population, by civil status and purok
    4. Population, by ethnicity and purok
    5. Age–sex distribution, by barangay
    6. Age dependency ratio, by barangay

W6  Processed and validated CBMS survey results (health and nutrition, water and sanitation, housing, education, peace and order); documentation of community validation workshop; CBMS maps; etc.

Health and Nutrition (StatSim tables and corresponding maps)
    1. Magnitude and proportion of malnourished children 0–5 years old, by sex, by purok
    2. Magnitude and proportion of children under 5 years old who died, by sex, by purok
    3. Cause of death, by sex, by purok
    4. Magnitude and proportion of women deaths due to pregnancy-related causes, by purok

Water and Sanitation (StatSim tables and corresponding maps)
    1. Magnitude and proportion of households without access to improved water source, by purok
    2. Magnitude and proportion of households by source of drinking water, by purok
    3. Magnitude and proportion of households without access to sanitary toilet facility, by purok
    4. Type of toilet facility, by barangay
Housing (StatSim tables and corresponding maps)

1. Magnitude and proportion of households living in makeshift housing, by purok
2. Magnitude and proportion of households by type of construction materials used for walls, by purok
3. Magnitude and proportion of households by type of construction materials used for roof, by purok
4. Magnitude and proportion of households who are informal settlers, by purok
5. Magnitude and proportion of households by tenure status, by purok

Education (StatSim tables and corresponding maps)

1. Magnitude and proportion of children 6–11 years old not attending elementary school by sex, by purok
2. Magnitude and proportion of children 12–15 years old not attending high school by sex, by purok
3. Magnitude and proportion of children 6–15 years old not attending school by sex, by purok

Peace and Order (StatSim tables and corresponding maps)

1. Victims of crime, by barangay
2. Victims of crime, by purok
3. Type of crime, by barangay

W7 Processed and validated CBMS census results (income and livelihood, employment); documentation of community validation workshop; CBMS maps; etc.

Employment (StatSim tables and corresponding maps)

1. Unemployment by sex, by purok
2. Type of occupation, by purok
3. Type of business/industry, by purok
4. Class of worker, by purok
5. Nature of employment, by purok
6. Reason of unemployment, by purok
7. Underemployed workers, by purok

W8 1. Annual Investment Plan/list of programs implemented in the barangay during the past 12 months including information on household beneficiaries

2. Magnitude and proportion of households who benefited from any type of government program, by purok

W9 LGU has an option to discuss in this section other relevant development indicators (e.g., CDP and MDG tables generated from the StatSim)

W10 Current barangay mission and vision statements

W11 1. Budget forms of the barangay for the past three years

2. Documentation of validation workshop (e.g., primary needs and concerns of the barangay residents, suggested programs and interventions)
## Training Program

### Day 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 am–8:30 am</td>
<td>Registration</td>
</tr>
</tbody>
</table>
| 8:30 am–9:00 am | Opening program<br>
|                 | Invocation<br>
|                 | National Anthem<br>
|                 | Introduction of participants<br>
|                 | Welcome remarks                                                                            |
| 9:00 am–9:30 am | Leveling of expectations and course overview<br>
|                 | [PowerPoint Presentation: Training Overview_CBMS Module 3.ppt]                           |
| 9:30 am–10:15 am| Overview of the Community-Based Monitoring System (CBMS)<br>
|                 | [PowerPoint Presentation: CBMSOverview.ppt]                                                |
| 10:15 am–10:30 am| Coffee break                                                                              |
| 10:30 am–10:45 am| Working with tables and maps<br>
|                 | [PowerPoint Presentation: Understanding Tables and Maps.ppt]                             |
| 10:45 am–12:00 noon| Identifying development problems using CBMS data<br>
|                 | [PowerPoint Presentation: IdentifyingDevtProbsUsingCBMS.ppt]                             |
|                 | - Expanding benchmarking beyond the barangay<br>
|                 | - Enriching situation analysis and strategy formulation using analytical frameworks<br>
|                 | - Enriching situation analysis and strategy formulation using disaggregation by socioeconomic classes, groups, and gender |
| 12:00 noon–1:00 pm| Lunch break                                                                               |
| 1:00 pm–1:15 pm | Encoding writeshop outputs using the BDP Template<br>
|                 | [PowerPoint Presentation: Encoding your BDP Using the BDP Template.ppt]                  |
| 1:15 pm–2:15 pm | Write Shop 1<br>
|                 | History of the barangay<br>
|                 | [PowerPoint Presentation: Writeshop1.ppt]                                                  |
| 2:15 pm–2:30 pm | Sharing of learning                                                                        |
| 2:30 pm–3:30 pm | Write Shop 2<br>
|                 | Barangay profile<br>
|                 | [PowerPoint Presentation: Writeshop2.ppt]                                                  |
| 3:30 pm–3:15 pm | Sharing of learning                                                                        |
| 3:15 pm–3:30 pm | Coffee break                                                                               |
| 3:30 pm–4:30 pm | Write Shop 3<br>
|                 | Implementation of CBMS in the barangay<br>
|                 | [PowerPoint Presentation: Writeshop3.ppt]                                                  |
| 4:30 pm–5:00 pm | Sharing of learning                                                                        |
### Day 2

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review of Day 1</td>
</tr>
<tr>
<td>9:00 am–10:15 am</td>
<td><strong>Write Shop 4</strong>&lt;br&gt;CBMS survey results: An executive summary&lt;br&gt;[PowerPoint Presentation: Writeshop4.ppt]&lt;br&gt;- CBMS core indicators&lt;br&gt;- CBMS composite indicator</td>
</tr>
<tr>
<td>10:15 am–10:30 am</td>
<td>Sharing of learning</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td><strong>Write Shop 5</strong>&lt;br&gt;Demography&lt;br&gt;[PowerPoint Presentation: Writeshop5.ppt]</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 pm–1:15 pm</td>
<td>Sharing of learning</td>
</tr>
<tr>
<td>1:15 pm–3:00 pm</td>
<td><strong>Write Shop 6</strong>&lt;br&gt;Human development&lt;br&gt;[PowerPoint Presentation: Writeshop6.ppt]</td>
</tr>
<tr>
<td>3:00 pm–3:15 pm</td>
<td>Coffee break</td>
</tr>
<tr>
<td>3:15 pm–4:45 pm</td>
<td><strong>Write Shop 7</strong>&lt;br&gt;Economic development&lt;br&gt;[PowerPoint Presentation: Writeshop7.ppt]</td>
</tr>
<tr>
<td>4:45 pm–5:00 pm</td>
<td>Sharing of learning</td>
</tr>
</tbody>
</table>

### Day 3

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review of Day 2</td>
</tr>
<tr>
<td>9:00 am–10:30 am</td>
<td><strong>Write Shop 8</strong>&lt;br&gt;Programs implemented in the barangay&lt;br&gt;[PowerPoint Presentation: Writeshop8.ppt]</td>
</tr>
<tr>
<td>10:30 am–10:45 am</td>
<td>Coffee break</td>
</tr>
<tr>
<td>10:45 am–11:00 am</td>
<td>Sharing of learning</td>
</tr>
<tr>
<td>10:45 am–12:00 noon</td>
<td><strong>Write Shop 9</strong>&lt;br&gt;LGU-specific indicators&lt;br&gt;[PowerPoint Presentation: Writeshop9.ppt]</td>
</tr>
<tr>
<td>12:00 noon–1:00 pm</td>
<td>Lunch break</td>
</tr>
<tr>
<td>1:00 am–1:15 pm</td>
<td>Sharing of learning</td>
</tr>
<tr>
<td>1:15 pm–2:45 pm</td>
<td><strong>Write Shop 10</strong>&lt;br&gt;LGU vision, mission, objectives, and goals&lt;br&gt;[PowerPoint Presentation: Writeshop10.ppt]</td>
</tr>
<tr>
<td>2:45 pm–3:00 pm</td>
<td>Sharing of learning</td>
</tr>
<tr>
<td>3:15 pm–3:45 pm</td>
<td><strong>Lecture/Discussion</strong>&lt;br&gt;Overview: Budgeting and CBMS&lt;br&gt;[PowerPoint Presentation: Budgeting Cycle and CBMS.ppt]</td>
</tr>
</tbody>
</table>
### 3:45 pm–5:00 pm

**Lecture/Discussion**
Identifying programs, projects, and activities  
[PowerPoint Presentation: Budgeting Cycle and CBMS.ppt]

- Key activities in budget preparation
- Use of CBMS results for budget preparation, particularly to determine program structure
- Use of CBMS results for budget authorization and review
- Making local budgets more MDG responsive

### Day 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30 am–9:00 am</td>
<td>Evaluation and review of Day 3</td>
</tr>
</tbody>
</table>
| 9:00 am–10:00 am| **Lecture/Discussion**  
Budgeting the PPAs – Introduction of the Barangay Budget Worksheet  
[PowerPoint Presentation: Budgeting Cycle and CBMS.ppt] |
| 10:00 am–10:15 am| Coffee break                                                            |
| 10:15 am–10:30 am| Sharing of learning/open forum                                           |
| 10:30 am–12:00 noon| **Write Shop 11**  
Barangay budget  
[PowerPoint Presentation: Writeshop11.ppt] |
| 12:00 noon–1:00 pm| Lunch break                                                             |
| 1:00 pm–2:00 pm| **Write Shop 11**  
Barangay budget (continuation)  
[PowerPoint Presentation: CBMS as a tool for targeting poverty interventions. ppt] |
| 2:00 pm–3:00 pm| Consolidation of write shop outputs                                     |
| 3:00 pm–3:15 pm| Coffee break                                                             |
| 3:15 pm–4:15 pm| Presentation and critiquing of draft BDPs and budgets                    |
| 4:15 pm–4:30 pm| Approval and packaging of plans  
[PowerPoint Presentation: Approval of Plans.ppt] |
| 4:30 pm–4:45 pm| Next steps  
[PowerPoint Presentation: Next Steps.ppt] |
| 4:45 pm–5:00 pm| Closing program                                                          |
This work was carried out by the CBMS International Network Coordinating Team with financial support from the Government of Canada through the International Development Research Centre (IDRC), and the Government of the United Kingdom through the Department for International Development (DFID).

CBMS International Network Coordinating Team
Angelo King Institute for Economic and Business Studies
De La Salle University-Manila
10th Floor, Angelo King International Center
Estrada corner Arellano Avenue, Malate, Manila, Philippines

EMAIL  celia.reyes@benilde.edu.ph, cbms.network@gmail.com
WEBSITE  www.pep-net.org  TEL (632) 5262067, (632) 2305100 local 2461
FAX  (632) 5262067

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