

# **LESOTHO CENSUS OF AGRICULTURE 2019/2020**

## **PES Enumerators Instruction Manual**

**OCTOBER, 2020**

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## 1.1 Introduction

Census of agriculture is a statistical operation for collecting, processing and disseminating data on the structure of agriculture, covering the whole or a significant part of a country. Typical structural data collected in a census of agriculture are size of holding, land tenure, land use, crop areas, irrigation, livestock numbers, labour and other agricultural inputs. In an agricultural census, data are collected at the holding level and some community-level data will be collected.

The 2019/20 Agricultural Census (AC) will be conducted as part of FAO World Programme for the Census of Agriculture 2020 (WCA 2020). According to WCA 2020, census of agriculture is a statistical operation for collecting, processing and disseminating data on the structure of agriculture, covering the whole or a significant part of a country. Typical structural data collected in a census of agriculture are household information, land use, input use, irrigation, livestock, extension services, farm investment, farm labour and agricultural services (like credit and extension services). These data will be collected at the holding level.

Lesotho has been undertaking Agricultural Census since 1949/50 under the Ministry of Agriculture. The 1959/60 Agricultural Census was the second to be conducted in Lesotho by the Ministry of Agriculture. After the establishment of the Bureau of Statistics (BOS) in 1965, decennial Agriculture Censuses have been conducted. The 1969/70 Agricultural Census and subsequent ones have been conducted by the Bureau of Statistics under the mandate of Statistics Act of 1965, which was later repealed and replaced by Statistics Act of 2001. In between the censuses, BOS conducts annual Agriculture Production Survey (APS) to provide updates on the key agricultural variables that change frequently. The last Agricultural Census was conducted in 2009/10 as part of the Food and Agriculture Organization of the United Nations (FAO) 2010 World Census of Agriculture. The 2019/20 census will be conducted in 2020 as part of FAO WCA 2020 round of agriculture censuses.

The 1999/00 and 2009/10 censuses were different from the first five in that the last two included urban areas. However, the 2019/20 census will cover rural areas and commercial farming in line with the Strategic Objectives of the National Strategic Development Plan (NSDP II) while emphasizing on the synergies of the “Global Strategy to Improve Agricultural and Rural Statistics” (2010).

## 1.2. Objectives of the PES

The overall goal of the PES is to assess the quality of the census data collected through the field operation by measuring the magnitude of non-sampling errors in terms of:

- i) coverage errors
- ii) content errors.

The PES has the following specific objectives:

- (a) **Under-coverage** which may arise due to omissions of some units of interest;
- (b) **Over-coverage** due to duplications and erroneous inclusions of some units that do not have the characteristics necessary to be part of the population of interest but are wrongly included or misclassified in the frame; and

- (c) **Content errors (response errors):** which emanate from **Under reporting:** due to fear of taxation, imposition of land tenure changes or reduction of subsidies, improper keeping of records by some holders (memory recall problems) or **non-agreement** of responses to questions on selected characteristics, such as relationship, sex, age, marital status to reference person or head of household.

### 1.3. Legal Basis

The Statistics Act of 2001 authorizes the Bureau of Statistics (BOS) to collect information in relation to Agricultural Census as directed by the Ministry of Development Planning. According to the act, every person shall to the best of his/her knowledge and belief answer, when so required, all questions asked. The Statistics Act therefore provides the legal authority for the agricultural census. The Act also provides penalties in a form of fine, imprisonment or both for failure to perform the duties in the provision of agricultural statistics by either the enumerator or members of the public

### 1.4. Confidentiality

All information obtained from persons and households will be in strict confidence as required by the law (Statistics Act, 2001). All information will be used and made available to other persons in the aggregate form only. No individual information (Or questionnaire) will be released to anyone except to the personnel of the Bureau of Statistics for the compilation of the required statistics.

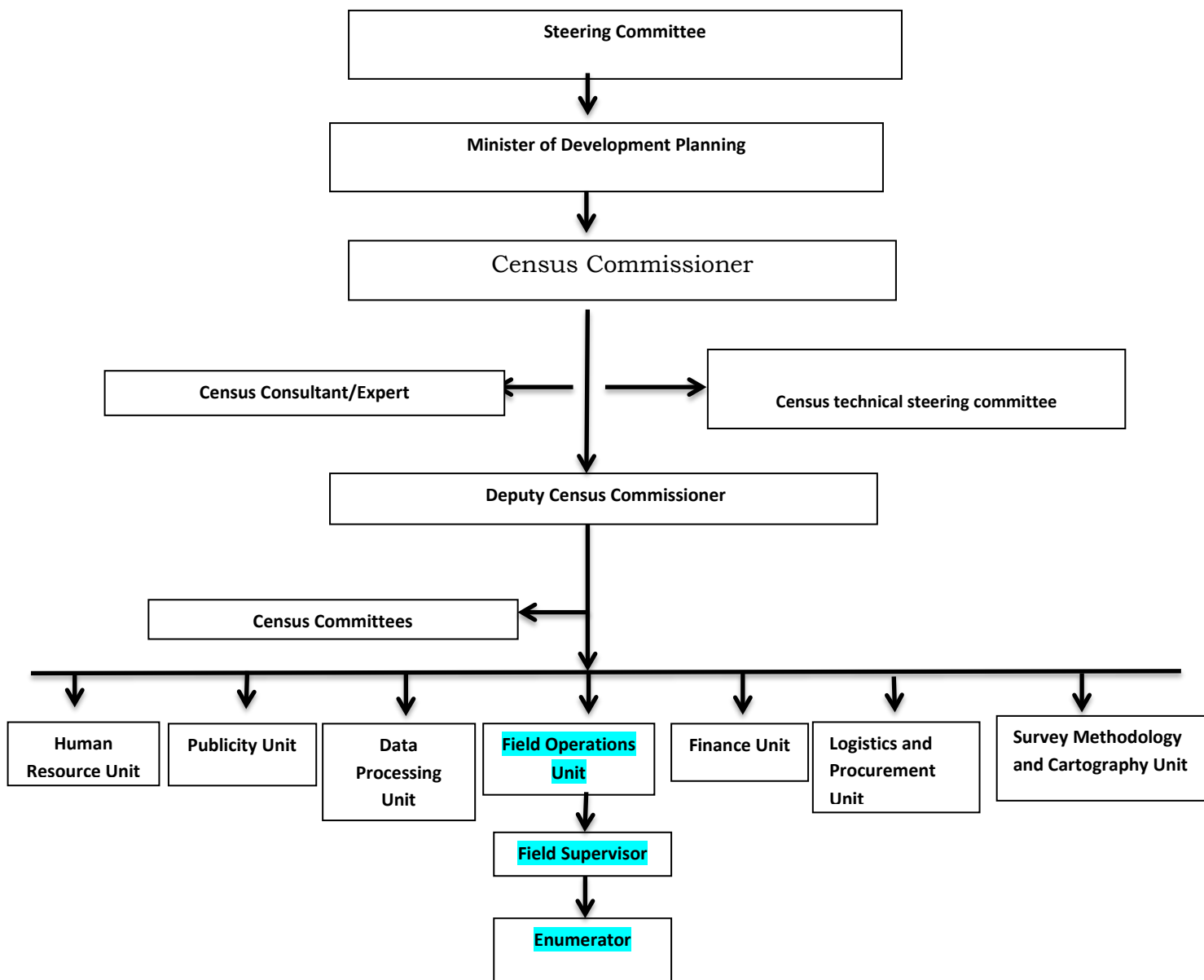
Staff is not permitted to discuss information obtained, or show records to anyone who is not an authorized officer in the census organization. They are also not to leave their census tools lying around where an unauthorized person may have access to it.

### 1.5. Scope and Coverage

The PES will cover only the agriculture household sector which was covered in the main census. Information on: agriculture household demographic characteristics, land use (number of fields holding area), livestock numbers (specifically cattle, sheep, sheep and poultry) will be collected. However, production and disposal, agricultural practices, irrigation, equipment, labour, other livestock, non-household sector and community profile would be excluded from the PES.

### 1.6. The Census Organization

The Director of the Bureau of Statistics who is the Census Commissioner is responsible to the Lesotho Government for undertaking censuses.



You are one of several field staff recruited to collect the PES data. The organizational structure of the field work is as follows: Central Office Staff, Teams Supervisors and Field Enumerators.

There will be 50 teams. Each team will be made up of:

Team Supervisor	1
Enumerators	5
Total	6

## 1.7. Data Collection Method

A total of 30 days will be used for the data collection exercise - 10 days for the listing exercise, 16 days for the field work and four days set aside as travel time. Just like the main census, the CAPI technology will be applied.

## 1.8. PES Period

To minimize memory recall which can lead to matching difficulties related to changes in the composition of the household between the census and PES dates, the PES is scheduled to take place from mid-March to mid-April 2021 and will be preceded by a ten-day training workshop for the Supervisors and Enumerators.

## 1.9. Content of Questionnaire

The questionnaire is categorized into 4 main sections:

SECTION 1: IDENTIFICATION

SECTION 2: DEMOGRAPHIC AND SOCIAL CHARACTERISTICS (THEME 1 and THEME 8)

SECTION 3: LAND USE AND CROPS (THEME 2 AND THEME 4)

SECTION K: LIVESTOCK (THEME 5) (Holding Level)

## CHAPTER 2: FIELD OPERATIONS

### GENERAL INSTRUCTIONS

#### 2.1. Conditions of Service

1. You will be trained for a period of three weeks.
2. You will also be working irregular hours starting your interviews very early in the morning. Remember it is you who has to find the household members at their homes at those times, which are convenient to them. They have no obligation to await your arrival. **DURING THE FIELDWORK, YOU WILL BE EXPECTED TO WORK EVERYDAY INCLUDING SATURDAYS, SUNDAYS AND HOLIDAYS. IT IS IMPORTANT TO UNDERSTAND THIS, AS THERE WILL BE NO EXCEPTIONS.**
3. If your area of work is necessarily far, transport will in all cases be provided by the Bureau of Statistics Office. In hard-to-reach areas, your supervisor will authorize you to hire horses to take you to your areas whenever this should be necessary. However, as soon as you reach your area of work, you will have to travel on foot from village to village, household to household and so forth.
4. On reaching your area of work, you have to seek and find your own accommodation in one of the villages, preferably one that is centrally situated within the area. In this connection you will find most village headmen very helpful.

5. You have to provide your own food and clothing.

## 2.2. TRAINING

1. You have been recruited as enumerators for the 2019/20 AC. Before you actually go out to the field you will undergo an intensive three-weeks training.
2. The training will include reading of the manual paragraph by paragraph, citing examples, discussions, tests and practicals.
3. Engagement will be offered to those who satisfy the standards set at the training course in both theoretical as well as practical work.

## 2.3. Role of Enumerator

**Your job is to ENUMERATE EVERY HOUSEHOLD IN A PSU.**

It is to ask questions and to record the answers that are required. It is the most important single job in the census. You must make an effort to obtain complete and accurate answers and to record them correctly. Do not think that few households that are not counted will be of no importance. If each enumerator does think the same, a few omitted by all the enumerators individually could sum up to a considerable number.

The success of the census depends mainly on good enumeration. Bad enumeration may only mean that lot of resources would have been spent on worthless information, which can only lead to wrong decisions making.

## 2.4. Safety and Security Precautions

Your personal safety and security are extremely important. Remember:

1. Do not go into an area and /or buildings/house if you have not been given a permission to enter.
2. Be very careful of dogs
3. Wear comfortable walking shoes
4. Wear decent clothing preferably the survey t-shirt
5. Wear your survey identification card where it will be clearly visible. Under no circumstances should a survey official carry firearms or weapons of any kind while conducting the survey.
6. When entering unsafe areas, inform your supervisor who will make arrangements for the police to escort you into these areas.

## 2.5. Identification

1. Wear your ID card at all times. The ID has some security features that will help the public to be sure that you are a genuine employee of MAFS.
2. Always present your ID card for inspection by households and relevant authorities (in particular, be sure to give elderly people ample time to examine it)



3. The ID card is a matter of personal responsibility. Employees are responsible for any damage or loss to their cards. If you lose your ID card you must report it at once to your supervisors.
4. You will be issued with a survey t-shirt, cap and a bag. Please wear them at all times while on duty. These will further help to identify you as a fieldworker in the field.
5. Return your ID card to your supervisor upon completion of fieldwork.

## 2.6. Interviewing Techniques

1. Initially, when approaching a household for an interview, gain the confidence of the respondent to secure his/her willingness to answer your questions.
2. The first impression and the first things you do or say are of vital importance in gaining the cooperation and confidence of the respondent. Start by introducing yourself, stating your name (if you are not known to the respondent) that you are an employee of the Bureau of Statistics and state the purpose of your visit . The following example may be followed:

**“Good morning. I am (your name) working**

**for the Bureau of Statistics. My visit today is**

**part of the nation-wide census...”**

3. The questions on individuals should be answered by the person; that is himself/herself. Emphasize the confidentiality of the data being sought and explain to them that no individual’s or information pooled will be made public only in the form of statistical aggregates.
4. It is important that you remain absolutely neutral as you administer the questionnaire. Do not lead the respondents to certain answers; do not act surprised, approve the responses by your tone of voice or facial expression.
5. Ask questions correctly. Don’t paraphrase using your own words.
6. Listen carefully to what the respondent is saying.
7. During the interview let the respondents take their time, never put answers in their mouths. It may happen that the respondent’s answer to a question is incomplete or irrelevant, or that he/she has not been able to understand the question. If that happens, you will need to obtain complete or relevant answers by asking some additional questions. This is called **probing**. It may take the form of repeating or explaining the question. **But** again, make sure that you do not suggest answers to the respondent.

### Examples of Probing

#### Bad Probe

Interviewer: All together how many acres of farmland have you planted?

Holder: Oh, I don’t know

Interviewer: You must have planted about two acres. Is that right?

Holder: Yes, I guess so.

## Good Probe

Interviewer: All together how many acres of farmland have you planted?

Holder: Oh, I don't know.

Interviewer: Could you give me description of the boundaries and how the total areas compare with the cleared areas of your field?

Holder: Yes, my field planting areas cover about one-half of the cleared areas.

In the “bad probe” example, the interviewer suggests an amount, which the respondent accepts, but in the “good probe” example, the respondent stated in his own words that, the size of the areas he thought was in his planted land areas. A good probe is non-directive and if made in a pleasant way will usually cause the respondent to give a carefully thought out answer. Enumerators frequently use bad probing because they want to help the respondent by putting words in his mouth.

8. Review your work before leaving the household.
9. When leaving the household and or village remember to thank the people for their cooperation.

## 2.7. Refusal and Difficult Cases

1. Should you come across someone who refuses to answer questions, continue to be courteous? Point out the importance of the census to national development. Inform him/her that the operation is not being undertaken in connection with the political activities, such as elections or for tax collection purposes. Also, information about individual persons will be treated with utmost confidentiality. Should the person still be uncooperative, report the matter to the village headman first and, if still necessary, to your supervisor.
2. Inform the respondents that the individual names listed on the questionnaire are purely to make sure that every household member's information relates to that particular person. It also helps to ensure complete coverage and good quality information, and that it will never appear anywhere again in an individual form.
3. Should it also happen that an entire village refuses to cooperate, you must report this matter to the headman and your supervisor at the earliest opportunity, either on his next visit or when you have completed the enumeration of the other villages in the PSU, despite the refusal of the former .

## 2.8. Logistics

When you have completed your training, you will be supplied with a bag containing the following:(a) Questionnaires

(b) Hand held devices, solar chargers and accessories

(i) *Tablet*

- (c) PSU Map
- (d) Enumerators' Manual
- (e) Calendar of events
- (f) Identity cards
- (g) Letters of introduction
- (h) Pen
- (i) Household stickers
- (j) Village lists
- (k) Pencil
- (l) Pencil sharpener
- (m) Eraser
- (n) Literacy card

**The enumerator must bear in mind that if an equipment is lost or damaged, he/she will have the cost deducted from his/her salary.**

## **2.9. Careful Handling of Materials**

1. When you receive your field material you have to check the equipment and make sure that it is complete before you sign for it. You are solely responsible for an equipment until you have completed the assignment and handed everything to your supervisor who will in turn record the number of items received.
2. In the case where a paper questionnaire has been used, capture the questionnaire as soon as possible.
3. You should handle the census documents and other materials carefully. You should never destroy any document. At the completion of your work, all census documents unused or canceled questionnaires should be returned to your supervisor.

## **2.10. Primary Sampling Unit (PSU)**

1. You will be allocated a PSU, and you are required to visit every dwelling unit in the area and complete the questionnaire relating to all persons in each unit.
2. PSU is a well-defined boundary and may be an enumeration area or a group of enumeration areas.
3. You will be provided with a PSU boundary description and a list of villages within your PSU. Your supervisor will accompany you to your PSU and show you its boundaries. Make sure that you are familiar with your PSU and its boundaries before you record particulars of the households.
4. You are expected to complete your work within an allocated time. This will be possible if you work conscientiously every day of the week of enumeration. You should however not stop work in the area until all households have been covered. If you realize that you may not be able to complete

the work within an allocated time, you should inform your supervisor as soon as such an eminent delay is apparent.

5. All PSU's have been assigned a numerical code with 7 digits. The first two specify the district, the second two show the constituency, the third digit indicates the zone and the last two digit indicates the PSU number.
6. This PSU code is very important for identifying the location of any cluster of villages; it is the principal guide for the office in directing all enumerators to their respective areas of work.
7. On reaching their PSU's there is a possibility that enumerators may find that in a few cases names of villages have been mis-spelt or village names misplaced. It is therefore very important that, on reaching their respective areas, all enumerators should ascertain that the villages listed for each PSU are actually located in the area. Check with the village headman and make the necessary corrections.
8. Should it happen that a listed village is not known in the neighborhood, or existing village has not been listed, the enumerator must report this to his/her supervisor during the first visit.

## **2.11. Preparation of Itinerary**

1. Once you are familiar with your PSU and its boundaries, prepare an itinerary in an orderly fashion.
2. You should use whatever means at your disposal to advise and warn villagers about the approximate time you should expect to enumerate their villages. This will greatly facilitate your work in a large number of cases.

## **2.12. Enumeration Documents**

All information required during the census is to be recorded in the soft copy (PDA) or hard copy of the questionnaire.

## **2.13. Enumerators Record of Visits (Enumerators Control Form)**

1. At the end of village enumeration, before you move to the next village, complete the control form.
2. Write the District, PSU number; village name, relevant page numbers of that village and whether enumeration was completed, and if it was not completed give reasons (DESIGN CONTROL FORM).

## **2.14. Retrieval and Delivery Forms**

For all material supplied, the enumerator has to acknowledge the receipt with signature. Similarly, when he/she returns the material after completing the assignment, the enumerator has to make sure that the receipt is acknowledged with signature by the supervisor.

## **2.15. Eligibility for Interview**

Remember that the households you visit and interview must be only those selected. Never should another household be substituted for the one selected for the interview.

## 2.16. Consistency of answers

It is very important during an interview to make sure that the answers given to various questions are consistent with each other. This applies in particular to the information on ages. If inconsistent answers are produced, it is very difficult after you have left the household to find out which, if any, of these is correct. You should check **during the interview itself** that the information you are getting is consistent. This requires a thorough familiarity with the questionnaires. It also requires presence of mind during the interview.

## 2.17. Dealing with Non-response

Non-response means failure to obtain a complete interview. This could happen in different ways. Some common ways are that the selected household refuses to participate in the survey or temporarily gone somewhere.

In the case of refusing households, you should try to convince the household about the importance of taking part in the survey. If they still refuse then bring it to the attention of the team supervisor (TS). Team supervisor should visit the household and try to convince them. If she / he also fails then the matter needs to be taken to the District supervisor. The District supervisor will in turn engage the assistance of the traditional authorities, councilors and District governors. Head office through the project manager also needs to be informed. Such cases need to be tackled carefully since the tendency is there for it to spread to other households if one case is allowed without taking any action.

If the selected household has gone somewhere temporarily after the listing and cannot be contacted (non-contact) then you need to follow it up at regular intervals (call backs) until such time that you have completed all other tasks of the PSUs. When you are ready to leave to the next selected PSUs and this household is still not there then you need to consider it as a non-responding household (non-contact). When your team is in the next sampled PSUs, you may still follow this up if the distance allows it.

## 2.18. Call Backs

Each time you come to a household where no one is home or the head of household is not available or there has been a refusal, you must plan to make a callback. That is, you must make a return visit to obtain the required information within the days you are in the enumeration areas. It is very important that every household selected be counted. Your work will not be considered finished until you have completed all call-backs. A notebook has been provided to help you in recording all call-backs. Make them as soon as possible after your first visit, on the same day or the next day.

Work on call-backs everyday along with your regular work while you are in the same areas. All call-backs must be completed by keeping them up-to-date, you will save time and avoid unnecessary travel. In your oath of office as a survey employee, you promised that you will “well and faithfully discharge the duties of your office” Keeping up with all call-backs and obtaining the names of all heads of households are two of your most important duties.

## CHAPTER 3: CONCEPTS AND DEFINITIONS

Agricultural censuses are mainly concerned with data on the basic organizational structure of agricultural holdings, such as size of holding, land tenure, land use, crop areas, irrigation, livestock numbers, labour, use of machinery and other agricultural inputs.

Historically, the census of agriculture has aimed to provide data on the structure of agricultural holdings, with attention given to providing data for small administrative units. Agricultural censuses have also been used to provide benchmarks to improve current crop and livestock statistics and to provide sampling frames for follow-up agricultural sample surveys. Previous agricultural censuses have focused on the activities of agricultural production units – that is, holdings or other units operating land or keeping livestock.

For WCA 2020, the objectives of the agricultural census are:

- To provide data on the structure of agriculture, especially for small administrative units, and to enable detailed cross-tabulations;
- To provide data to use as benchmarks for and reconciliation of current agricultural statistics;
- To provide frames for agricultural sample surveys.

### **1. What is a census of agriculture?**

A census of agriculture is a statistical operation for collecting, processing and disseminating data on the structure of agriculture, covering the whole or a significant part of a country. Typical structural data collected in a census of agriculture are size of holding, land tenure, land use, crop areas, irrigation, livestock numbers, labour and other agricultural inputs. In an agricultural census, data are collected at the holding level, but some community-level data may also be collected.

### **2. Primary Sampling Unit (PSU)**

This is an element or group of elements of a population, which is convenient for selecting samples. A sampling unit can be a group of persons, households or administrative are PSUs. The PSUs are sampled from a frame of agricultural PSUs. The boundaries of the PSUs are defined on a map. A description of the boundary of the PSUs and a locality list will be supplied as far as they are available.

You will be responsible for visiting every household in your PSUs and recording the particulars of all persons in those PSUs. Do not miss out any household nor count any person or household twice.

### **3. Locality**

A *locality* is any place with one or more dwellings, either a compact settlement or scattered houses.

### **4. Household**

“The concept of household is based on the arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living. A household may be either (a) a one-person household, that is to say, a person who makes provision for his or her own food or other essentials for living without combining with any other person to form part of a multi-person household, or (b) a multi-person household, that is to say, a group of two or more persons living together who make common provision for food or other essentials for living. The persons in the group may pool their resources and may have a common budget; they may be related or unrelated persons, or constitute a combination of persons both related and unrelated” (UN, 2015b, paragraph 2.33). A person who lives alone and caters for himself/herself forms a one-person household.

### **5. Household Head**

Person who is considered by the household to take full responsibility in the household, such a person does not necessarily need to be an elderly person in the household.

## 6. Statistical unit

The statistical unit for a data collection is the basic unit for which data are collected. In previous agricultural census programmes, the statistical unit used has been the agricultural holding and this is used again in WCA 2020.

## 7. Agricultural holding

“An **agricultural holding** is an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size. Single management may be exercised by an individual or household, jointly by two or more individuals or households, by a clan or tribe, or by a juridical person such as a corporation, cooperative or government agency. The holding’s land may consist of one or more parcels, located in one or more separate areas or in one or more territorial or administrative divisions, providing the parcels share the same production means, such as labour, farm buildings, machinery or draught animals.”

## 8. Agricultural holder

The agricultural holder is defined as the civil or juridical person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation. The agricultural holder has technical and economic responsibility for the holding and may undertake all responsibilities directly, or delegate responsibilities related to day-to-day work management to a hired manager.

By definition, the agricultural holding is under single management, and therefore there cannot be more than one agricultural holder for an agricultural holding. *However, there may be more than one joint holder in a holding.*

The agricultural holder in the household sector is often, but not always, the household head. The agricultural holder may do other work in addition to being a holder; being a “farmer” may not even be his/her main occupation. A distinction should be made between an agricultural holder and a hired manager. The ***hired manager*** of the holding is the person who manages an agricultural holding on behalf of the agricultural holder and is responsible for the normal daily financial and production routines of running the holding. The hired manager is a paid employee.

“For the household sector, there is usually a one-to-one correspondence between an agricultural holding and a household with ***own-account agricultural production*** activities (either for sale or for own use); in other words, all the own-account agricultural production activities by members of a given household are usually undertaken under single management. Managing agricultural production activities usually goes hand-in-hand with making common arrangements for food and other essentials, pooling incomes, and having a common budget. It is unusual for different household members to operate agricultural land or livestock completely independently, but to pool their incomes. It is also unusual for household members to operate land or livestock as a single unit, but to have independent household budgets. Even if there is a degree of independence in the agricultural activities of individual household members, the income or produce generated by different household members is usually pooled. Often, different members of the same household own land, but usually the agricultural operations in the household are carried out as a single unit” (WCA2020).

Usually, there is little difference between an agricultural holding and a household with own-account agricultural production. Countries see several benefits to equating the agricultural holding and household units.

## 9. Field: An area of land used for cultivating crops.

**Area fallow:** Agricultural land that was uncultivated with crops during the census period

**FARM**—A continuous piece of land on which a unique crop or a mixture of crops is grown, under a uniform, consistent crop management system. It must be continuous and should not be split by an obstruction (eg. River or Path etc.) of more than one meter in width. Farm boundaries are defined according to crops grown and the operator.

**Economic Activity:** economic activities undertaken by the household linked to the premises of the agricultural holding or in close vicinity other than agricultural production on the holding.

**Wooded Land:** natural non-productive trees at the holding including shrubs and roads between trees respective of canopy and height

**Aquaculture:** fish farming at household level.

**Irrigation:** an action of purposely providing land with water other rain.

**Extension services:** provision of agricultural advice and information to crops and livestock producers.

### **1. Land Use**

Land use refers to activities – such as growing crops, raising livestock or cultivating fish – carried out on the land making up the holding with the intention of obtaining products and /or benefits.

### **2. Areas of holding according to land use types**

Land use refers to activities – such as growing crops, raising livestock or cultivating fish – carried out on the land making up the holding with the intention of obtaining products and/or benefits.

Land use should be distinguished from “land cover”, which describes the physical characteristics of the land, such as grassland or forest. In the agricultural survey, the areas of the holding is classified according to its main land use.

Land under temporary meadows and pastures include land temporarily cultivated with herbaceous forage crops for mowing or pasture. A period of less than five years is used to differentiate between temporary and permanent meadows.

### **3. Land under temporary fallow**

Land temporarily fallow is arable land at prolonged rest before re-cultivation. This may be part of the holding’s crop rotation system or because the normal crop cannot be planted because of flood damage, lack of water, unavailability of inputs, or other reasons.



Land is not considered temporarily fallow unless it has been, or is expected to be, kept at rest for at least one agricultural year.

Fallow land temporarily used for grazing should be classified as “fallow” if the land is normally used for growing temporary crops.

#### **4. Land under permanent crops**

Land under permanent crops refers to: land cultivated with long-term crops which do not have to be replanted for several years; land under trees and shrubs producing flowers, such as roses and jasmine; and nurseries (except those for forest trees, which should be classified under “forest or other wooded land”). Permanent meadows and pastures are excluded.

This group includes the growing of perennial crops – i.e., plants that last for more than two growing seasons, either dying back after each season or growing continuously. Included is the growing of these plants for the purpose of seed production. The group consists of:

- ❖ Growing of grapes;
- ❖ Growing of tropical and sub-tropical fruits;
- ❖ Growing of citrus fruits;
- ❖ Growing of pome fruits and stone fruits;
- ❖ Growing of other tree and bush fruits and nuts;
- ❖ Growing of oleaginous fruits;
- ❖ Growing of beverage crops;
- ❖ Growing of spices, aromatic, drug and pharmaceutical crops;
- ❖ Growing of other perennial crops.

#### **5. Land under temporary crops**

This includes all land used for crops with less than one year growing cycle; that is, they must be newly sown or planted for further production after the harvest. In fact, this includes growing non-perennial crops – i.e. plants that do not last more than two growing seasons. Included is the growing of these plants for the purpose of seed production. For instance, crops that remain in the field for more than one year may also be considered as temporary crops. It consists of:

- ❖ Growing of cereals (except rice), leguminous crops and oil seeds;
- ❖ Growing of rice;
- ❖ Growing of vegetables and melons, roots and tubers;
- ❖ Growing of sugar cane;
- ❖ Growing of tobacco;
- ❖ Growing of fiber crops;
- ❖ Growing of other non-perennial crops; and also
  
- ❖ Growing of mushrooms and truffles;
- ❖ Growing of flowers, including production of cut flowers and flower buds;
- ❖ Growing of flower seeds.

(WCA2020, p.158).

**In-mover:** An in-mover is one who moved into the household or house/compound after the Census enumeration date.

**Match:** A person is classified as a match if the name and other characteristics are the same on both the PES and Census questionnaires. In other words, if there is no doubt that the person in the PES questionnaire is the same person as in the Census questionnaire.

**Matched population:** Matched non-movers and matched out-movers

**Non-match:** A person is considered as a “Non-Match” if he/she was not enumerated in the Census when he/she should have been. This means that he/she was not found in any Census questionnaire but there is a record from the PES enumeration.

**Non-mover:** A non-mover refers to a household member enumerated in the PES and was present on Census Night.

**Out-mover:** Residents who left the household or died during the interim period between the census and the PES.

**Out-of-scope:** A person is considered as out-of-scope if he/she was born after Census Night or if there is insufficient information for matching.

**Possible match:** This is the situation where the name recorded on the Census questionnaire is not exactly the same as that on the PES questionnaire or there is a significant difference in age or some other attributes.

## **6. Temporary crops**

Temporary crops are those with a less than one year growing cycle. Some countries may wish to include only the major crops; however, it should be borne in mind that, because it is based on complete enumeration, the core survey module may provide the only means of getting reliable data for the minor crops.

## **7. Permanent crops**

Permanent crops are crops with a more than one year growing cycle. Permanent crops may be grown in a compact plantation or as scattered trees/plants and both should be included.

## **8. Arable land**

Arable land is land that is used in most years for growing temporary crops. It includes land used for growing temporary crops in a twelve month reference period, as well as land that would normally be so used but is lying fallow or has not been sown due to unforeseen circumstances.

## **9. Cropland**

Cropland is the total of arable land and land under permanent crops.

## **10. Agricultural land**

Agricultural land is the total of cropland and permanent meadows and pastures.

## **11. Land under temporary pastures**

Land under Temporal pastures includes land temporarily cultivated with herbaceous forage crops for mowing or pastures. A period of less than five years is used to differentiate between temporally and permanent meadows.

## **12. Land under permanent pastures**

Land under Permanent Pastures include land used permanently (for five years or more) to grow herbaceous forage crops, through cultivation or natural (wild prairie or grazing land).

## **13. Forest land**

Forest Land refers to land with crown cover of more than 10 percent trees able to reach a mature height of 5 metres or more. It includes natural plantation forest areas that are temporarily not under trees but are expected to revert to forest are included.

#### **14. Wooded land**

Wooded Land refers to land with crown cover of 5-10 percent for trees able to reach a mature height of 5 metres or more at maturity; or crown that cover of more than 10 percent for trees not able to reach a height of 5 metres at maturity or bush cover of more than 10 percent.

#### **15. Total areas of holding**

Total areas of holding is the areas of all the land making up the agricultural holding. It includes all land operated by the holding without regard to title or legal form. Thus, land owned by members of a household but rented to others should not be included in the areas of the holding.

Conversely, land not owned by members of a household but rented from others for agricultural production purposes should be included in the holding areas.

The areas of holding may be zero, such as where the holding keeps livestock but has no land; this is called a landless holding.

#### **16. Mixed or Associated Cropping.**

Mixed cropping, also called *associated and inter-planted cropping*, refers to the situation when two or more different temporary or permanent crops are grown simultaneously on the same field or plot. This way of cultivation is widely used, particularly in developing countries, not only for temporary crops such as beans and maize but also for permanent crops, e.g., apples/pasture, grapes/beans, bananas/citrus, coconuts/pasture, bananas/cocoa/nutmeg.

It can happen that the area covered by crops grown in association with others is reported to be about the same as if the crops were sown alone.

In this case the entire areas of the plot could be attributed to each of the crops grown in association. Otherwise, it is recommended that areas for each one of the associated crops be estimated in such a way that figures relate to that part of the areas the particular crop would have covered if it had been grown alone.

The criteria for areas allocation to specific crops in mixed cropping are, inter alia, quantities of seed used, plant density, yield obtained, eye estimates. When this allocation is not possible, it was suggested that countries should report separately for crops grown alone and for crops grown associated with others.

## **CHAPTER 4 INSTRUCTIONS FOR COMPLETING THE VARIOUS INSTRUMENTS**

### **PART I: AGRICULTURAL CENSUS LISTING FORM**

This form is used for listing all households within the selected PSU. The main purpose of the form is to enable the second stage of sampling (i.e. selection of households, which are to be the Agricultural Census target).

***NOTE: Enumerators should list completely all structures in the selected PSU.***

#### **Listing**

On entering a PSU, listing of households will be carried out by the Enumerator under the guidance of the supervisor. She / he (Supervisor) will also be responsible to locate the selected sample agricultural

households for the enumerators during the main census field work.

## Identifying Agricultural Households

- First, ask questions about crops and livestock needed to identify all agricultural production units, regardless of size. Collect some basic information for those units.
- Second, ask some additional questions to identify those agricultural production units above the minimum size limit. Proceed to ask the more detailed questions for those units.

The census has two main reference periods – namely, the *census reference year* and the *census reference day*. The *census reference year* is a period of twelve months, usually either a calendar year or an agricultural year, generally encompassing the various time reference dates or periods of data collection for individual census items. Use of the agricultural year has the advantage that respondents often think of their activities in seasonal terms and thus find recall easier for this reference period. *The census reference day* is a point in time used for livestock numbers and other inventory items.

From the listed households *in the PSU*, the list of agricultural households (*Column 22*) which were covered in the census will be compiled by the Office, *these will be the ones which will be covered by the PES team in the PSU during PES Data collection.*

Identification particulars: fill in as explained below.

**Identification Information:** Write down the name of the District, Constituency, Community Council, Zone and their codes, together with PSU code as supplied by the supervisor.

**Staff Details:** Write down your name in full as an enumerator and date of interview.

**Column 1-1\_1: Village name and Village Code:** Write down the name of the village supplied by the household and the Village code, if it is the first village you are enumerating, write the code as 01. For the second Village record 02 etc.

**Column 2. Chief/Headman:** Write the name of the Village Chief/Headman.

**Column 3: Structure Number (PES STR. No.):** Structure refers to buildings in the holding compound be it residential or non-residential. Write down the structure number of each structure/building. If a household has an optaka, a hut and a temporary structure, it has 3 structures. The structure PES numbers will be numbered 01, the second 02, the third 03 in two digits.

**Column 4: Household Number (PES HH No.):** write down the household number of each household in the order they are visited, i.e. the household number of the first household will be number 001, the second 002, the third 003, etc. in three digits.

**Column 4\_1: Census Structure Number (Cen STR No.):** for each household, write down the Census structure found on the wall. If the number is not there but respondent can remember it, record the census structure number from the respondent. If the number was there but respondent cannot remember it, record **9999**.

**Column 5: Type of use:** write **R** if the structure of the household is used for residential purpose, **B** if it is used for both residential and business purposes and **N** if it is non-residential. Please note that business is non-residential is then coded **N**.

**Column 6: Name of Head of household:** write down the name and the surname of the household head as supplied by the household head or any other member of the household who is 18 years of age and above. This name should be commonly known by villagers.

**Column 7: Sex:** state whether the household head is male or female by writing **1** for male and **2** for female.

**Column 8-9: No. of Persons:** State the number of Males and number of females in columns 8 and 9 respectively in the household.

**Column 10: Did your household own/operate fields in the last Agricultural season? (Crops)** Write down **1** if yes and **2** if no, these are fields belonging to the household, excluding kitchen gardens (less 0.03ha). It should be clear that the fields belonging to the household are those belonging to any member of the household. It should also be noted that fields that are rented out are included in the count. Fields that belong to the household but are share-cropped should be included. Similarly write down the number of fields that are presently rented in and those not owned but fully operated by the household. **If No, skip to 15.**

**Column 11-14. Number of fields by Crop:** For each crop (maize, sorghum, wheat and vegetables) record number of fields.

**Column 15: Does the household keep/rear livestock in the Agricultural year?** Write down **1** if yes and **2** if no livestock is kept. **If No, skip to 20.**

**Column 16-20. How many cattle, sheep, goats, pigs, and poultry:** For each livestock, record number kept /reared by household.

**Column 21. GPS Location of the Household:** Record the GPS Location of Household (Coordinates) if it is an Agric. HH. The reading should be taken **NOT** more than **FIVE** metres from the entrance of the Structure (*that is, accuracy should be 5m or less*).

**Column 22:** Type of agricultural activity: From the drop down menu, select the appropriate response.

C = Crop

L = Livestock

M = Mixed farming

N = None

**Column 23:** Was this HH Selected for the Census? (Y or N). Record **1** if Yes and **2** if No

## PART II: HOUSEHOLD QUESTIONNAIRE

### SECTION PA: IDENTIFICATION

In each structure, enumerators should identify eligible household (s) engaged in any of the agricultural activities within the PSUs i.e. Crop farming, Livestock and aquaculture. The enumerator should ensure that Section A of the questionnaire is completed before beginning the interview. From the drop down menu, select the codes for District, Constituency, etc.

**Identification:** Select the appropriate codes for District, District and Primary Sampling Unit (PSUs) variables from the drop down menu. Select also both the PES and Census Structure Numbers and the PES and Census Household Numbers (HH) from the drop down list before you continue with the interviews (A1to A9b).

**A10. Location of Structure:** Record the GPS Coordinate obtained from the Listing.

**A11a. PES Household Number:** Same as Listing PES HH No. (Column 4)

**A11b. Census Household Number:** This must be obtained from the Census enumeration

**A12. Name of Household Head:** Record the name of Household head

**A13. Name of Respondent:** Record name of respondent

**A14. Contact number of respondent:** Record the contact telephone number of respondent

**A15. Occupancy of structure:** Ask respondent if structure is occupied and chose the appropriate response from the drop down list.

1. Yes -- Occupied, GO TO A.17
2. No -- Vacant, CONTINUE TO A16

**A16. (If No in Q15, ASK NEIGHBOUR):** Ask if someone was living in the structure here during the Census and record the appropriate response from the drop down list.

1. Yes, moved permanent
2. Yes, moved temporal
3. No (END INTERVIEW)

**A17. Was this household enumerated during the Census?:** Ask if household was enumerated during the census and record the appropriate response from the drop down list.

1. Yes, in this structure
2. Yes, elsewhere same village (indicate locality name)
3. Yes, different village same district)
4. No
5. Don't know

**A18. INTERVIEW STATUS:** From the drop down list record the appropriate interview status.

1. Interview Completed
2. Non-Contact
3. Vacant
4. Refused

## **SECTION P2: DEMOGRAPHIC AND SOCIAL CHARACTERISTICS**

*This section deals with the demographic characteristics and economic activities of the agricultural household members. It provides information on each individual person in the household.*

Household member ID is a serial number which is already given in column 1.

**P1: List of Household (HH) members** (including those absent and current visitors) (*start with head of Household*): Ask for and type in the *name* of each household member that lives in the household. Start with the head of HH as the first entry. As much as possible, type in this order: **First Name, Middle name, Surname**. A HH member must have lived in the household continuously for **at least six months** or has intention of staying with the household **beyond six months**.

**P2. Residency status of member:** Was [NAME] a usual resident or visitor of this household on census night? Choose from the drop down list the appropriate response.

1=Yes, Usual member present

2=Yes, Usual member absent

3=Yes, Visitor

4=No

5=Born after census night

6=N/A

**P3: Was (NAME) enumerated during the census?** Ask if household member was enumerated during the census. From the drop down list indicate the enumeration status of the household member.

1 = Yes in this household

2 = Yes in another household in this PSU

3 = Not enumerated

**P4: Relationship with the head of HH:** Ask for each household member, the relationship to the Head of Household. *Select the applicable response from the drop down list.*

01 = Head of Household

02 =Spouse

- 03 =Partner (Cohabiting)
- 04 =Son/Daughter
- 05 =Son/Daughter-in-law
- 06 =Step Child
- 07 =Sibling
- 08 =Own Parent
- 09 =Step Parent
- 10 =Parent-in-law
- 11 =Grand Parent
- 12 =Great/Grandchild
- 13 =Other Relative
- 14 = Not Related

**P5. Sex: Ask the sex of each member of the HH.** Select the appropriate response either “Male” or Female” from the drop-down list.

**P6: Age. Ask the age of each HH member.** Age refers to the age in completed years at the time of the survey (*i.e., Age at last birthday*). Using historic events, enumerator should assist respondents who do not know their age to estimate. Type in the applicable response. If age is less than 1 year write 00.

**P7: Marital Status. Ask the marital status of Each HH member 12 years and above.** If person is *less* than 12 years old, leave it blank. Select the applicable response from the drop-down list.

- 00 Never Married
- 01 Monogamously Married
- 02 Polygamously Married
- 03 Cohabiting
- 04 Separated
- 05 Divorced
- 06 Widowed
- 07 Don't know

**P8: What is the highest level of education that the household member attained?** Only consider persons **three years and** older for this question. *Select the applicable response from the list.* If a person is *less* than three years old, leave it blank. **Check if B4<3 years, Next member.**

- 00 Pre-school
- (01-07) Std 1-7
- (11-15) Form 1-5
- 18 None
- 19 Non Formal Education
- 20 Diploma/Certificate after Primary
- 21 Vocational and Technical after Primary
- 22 Diploma/Certificate after Secondary
- 23 Vocational Technical after Secondary
- 24 Diploma/Certificate after High School
- 25 Vocational and Technical after High School
- 26 Graduate
- 27 Post Graduate Diploma /Honours
- 28 Masters
- 29 PHD
- 30 Other (Specify).....
- 99 Don't Know



**P9: What is (Name's) Main Activity?** This refers to **any** activity that the member carries out or is involved in. Ask the *MAIN activity* that each Household member **10 years and above** is engaged in. If a person is **less than 10 years**, leave it blank. *Select the applicable response from the drop-down list.*

- 00= No Secondary activity
- 1=Crop production
- 2= Livestock
- 3= Crop and Livestock Production
- 4= Fisheries
- 5= Forestry
- 6=Aquaculture
- 7=Trader
- 8= Artisan
- 9= Agricultural paid job outside holding
- 10 = Non agriculture paid job
- 11= No activity- looking for work
- 12= No activity - not looking for work
- 13 = Student
- 14 = Household work
- 15 = Too young/old

**P9\_1: Status of main activity.** Ask the status of the *MAIN activity* for eligible household member in **relation to P7**? *Select the applicable response from the drop down list.*

- 1= Employee
- 2= Employer
- 3= Own-account worker
- 4= Contributing family worker
- 5= Member of producers' cooperative
- 11= Other (specify)

**P10: What is (Name's) SECONDARY Activity?** This refers to any activity that the member carries out or is involved in. Ask the *MAIN activity* that each Household member **10 years and above** is engaged in. If a person is **less than 10 years**, leave it blank. *Select the applicable response from the drop-down list.*

- 00= No Secondary activity
- 1=Crop production
- 2= Livestock
- 3= Crop and Livestock Production
- 4= Fisheries
- 5= Forestry
- 6=Aquaculture
- 7=Trader
- 8= Artisan
- 9= Agricultural paid job outside holding
- 10 = Non agriculture paid job
- 11= No activity- looking for work
- 12= No activity - not looking for work
- 13 = Student
- 14 = Household work
- 15 = Too young/old

**P10\_1: Status of main activity.** Ask the status of the SECONDARY activity for eligible household member in relation to P7? Select the applicable response from the drop down list.

- 1= Employee
- 2= Employer
- 3 = Own-account worker
- 4= Contributing family worker
- 5= Member of producers' cooperative
- 11= Other (specify)

**An *employer* is a person who, working on his or her own account or with one or a few partners, holds a self-employment job and, in this capacity, has engaged on a continuous basis (including the reference period) one or more persons to work for him/her as employees. He/she makes the operational decisions that affect the enterprise, or delegates such decisions while retaining responsibility for the welfare of the enterprise.**

A *self-employed* person is one who works in a job for which the remuneration is directly dependent upon the profits (or the potential for profits) derived through market transactions from the goods and services produced.

An *own-account worker* is a person who, working on his/her own account or with one or a few partners, holds a self-employment job in a market-oriented establishment and has not engaged any employees on a continuous basis during the reference period. However, during the reference period an own-account worker may have engaged one or more employees on a short-term and non-continuous basis.

A *member of a producers' cooperative* is a person who holds a self-employment job in an establishment organized as a cooperative, in which each member takes part on an equal footing with other members in determining the organization of production, sales and/or other work, investments and the distribution of proceeds among the members.

**B11: Does the Household member operate field/livestock?** Ask whether the HH member *operate* field/livestock. Select either “Yes”, “No” or N/A from the drop-down list.

1=Yes

2=No

**3=N/A (if P9 & P10=15) skip to next member**

**P12: What kind of decision does (name) make on fields/livestock?** Ask whether the HH member *take decision on the field/livestock owned or operated/kept*. Select either “Yes” or “No” from the drop-down list.

1=Complete decision

2= Partial (in consultation)

3= No decision

Check if P9 or P10=1-6 & P12=1,2 then is a holder

*Else if, Not a holder, end interview for member.*

**P13: What is holder's MAIN agricultural activity?** Ask holder's MAIN agricultural activity. Select from the drop-down list.

1= Mainly crop production (*Copy the ID of member to Section 3 and applicable Sections*)

2=Mainly livestock production (*Copy the ID of member to Section 4 and applicable Sections*)

3=Mixed (*Copy the ID of member to Sections 3 and 4*)

## **SECTION P3: PARTICULARS OF OUTMOVERS, IN-MOVERS AND OUT OF SCOPE**

### **OUTMOVERS**

**P14.** Are there any persons who were enumerated in this household (usual members or visitors) during census but did not spend last night (PES night) in this household, or have died since the census?

1. Yes - List the Name(s) of persons who have moved out since the Census
2. No - END INTERVIEW

**P15.** Is (*name*) Male/female? **Ask the sex of each member of the HH who have moved out and are currently not part of your household.** Select the appropriate response either "Male" or Female" from the drop-down list.

1=Male

2=Female

**P16.** How old is (*name*) in completed years? (*If age is less than 1 year, write 00*) **Ask the age of each HH member.** Age refers to the age in completed years at the time of the survey (*i.e., Age at last birthday*). Using historic events, enumerator should assist respondents who do not know their age to estimate. Type in the applicable response. If age is less than 1 year write 00.

**P17.** What is (*name's*) marital status? (*12 years or older*) **Ask the marital status of Each HH member 12 years and above.** If person is *less* than 12 years old, leave it blank. Select the applicable response from the drop-down list.

**P18.** What is (*name's*) highest educational level? (*For those aged 3 years and above*) Only consider persons **three years and** older for this question. *Select the applicable response from the list.* If a person is *less* than three years old, leave it blank. **Check if B4<3 years, Next member.**

### **IN-MOVERS**

**P19.** Are there any persons who were not members or visitors of your household on census night who are now current members (Including persons who spent the census night in another household or institution but are currently present in your household (e.g., married into the household, students in boarding facilities etc)

1. Yes - List the name(s) of persons who have moved in since Census night
2. No - END INTERVIEW

**P20.** Is (*name*) Male/female? **Ask the sex of each member of the HH who have moved in and are currently present in your household.** Select the appropriate response either “Male” or Female” from the drop-down list.

1=Male  
2=Female

**P21.** How old is (*name*) in completed years? (*If age is less than 1year, write 00*) **Ask the age of each HH member.** Age refers to the age in completed years at the time of the survey (*i.e., Age at last birthday*). Using historic events, enumerator should assist respondents who do not know their age to estimate. Type in the applicable response. If age is less than 1 year write 00.

**P22.** What is (*name's*) marital status? (*12 years or older*) **Ask the marital status of Each HH member 12 years and above.** If person is *less* than 12 years old, leave it blank. Select the applicable response from the drop-down list.

**P23.** What is (*name's*) highest educational level? (*For those aged 3 years and above*) Only consider persons **three years and older** for this question. *Select the applicable response from the list.* If a person is *less* than three years old, leave it blank. **Check if B4<3 years, Next member.**

## OUT OF SCOPE

**P24.** Are there any persons who were NOT in Lesotho or were not born on or before that census night and who are now living this household, including persons who were outside the country but are currently living in this household or born into the household after the census night?

1. Yes - List the name(s) of persons who have moved since census night
2. No - END INTERVIEW

**P25.** Is (*name*) Male/female? **Ask the sex of each member of the HH who have moved in and but were outside Lesotho or born after Census Night but are currently present in your household.** Select the appropriate response either “Male” or Female” from the drop-down list.

1=Male  
2=Female

**P26.** How old is (*name*) in completed years? (*If age is less than 1year, write 00*) **Ask the age of each HH member.** Age refers to the age in completed years at the time of the survey (*i.e., Age at last birthday*). Using historic events, enumerator should assist respondents who do not know their age to estimate. Type in the applicable response. If age is less than 1 year write 00.

**P27.** What is (*name's*) marital status? (*12 years or older*) **Ask the marital status of Each HH member 12 years and above.** If person is *less* than 12 years old, leave it blank. Select the applicable response from the drop-down list.

**P28.** What is (*name's*) highest educational level? (*For those aged 3 years and above*) Only consider persons **three years and** older for this question. *Select the applicable response from the list.* If a person is *less* than three years old, leave it blank. **Check if B4<3 years, Next member.**

## **SECTION P4: LAND USE AND CROPS (THEME 2 AND THEME 4)**

### **Introduction**

Identification: Check to see if CAPI has automatically transferred the Holder Number (P13) to Section 3 before you continue with the interviews for each holder.

**Land Use during 2019/2020 Agricultural Year (ask for each field).**

**PC1\_1. How many fields does (Holder) operate? (If P13=1 or 3).** Ask each holder the number of fields he/she operates in the reference year and record.

**PC1\_2. Field No.** Record the first field number and proceed to administer PC1-PC3. If Holder has more than one fields, go to the second field until all fields are covered.

**PC1: Where is the field located?** Ask holder where the field is located. Select from the drop down menu the appropriate response.

- 1= Within PSU
- 2= Outside PSU but within District
- 3=Outside PSU and outside District

**PC2: What is the Land use (LU) type for this field?** Ask holder the land use and select from the drop down menu.

- 01= Land under temporary crops
- 02= Land under temporary meadows and pastures
- 03= Land under temporary fallow
- 04= Land under permanent crops
- 05= Land under permanent meadows and pastures
- 06= Land under farm buildings and farmyards
- 07= Forest and other wooded land
- 08=Area used for aquaculture (including inland and coastal waters if part of the holding)
- 09= Land under temporary and permanent crops
- 13= Other areas not elsewhere classified

**PC3: What is the area of the field by land use in acres?** Ask the respondent for an estimate of the areas planted to each crop indicated. Record the holder estimate for the area of the field by crop use type.

**Note:**

Land owned by members of a household but rented to others should **NOT** be included in the area of the holding. Conversely, land not owned by members of a household but rented from others for agricultural production purposes **SHOULD BE** included in the holding area.

## **SECTION P5: LIVESTOCK (Holding level)**

Livestock refers to all animals, birds and insect kept or reared in captivity mainly for agricultural purposes. This includes cattle, sheep, goat and pigs, as well as poultry. ***Domestic animals, such as cats and dogs, are excluded unless they are being raised for food or other agricultural purposes.***

Check to see if CAPI has automatically transferred the Holder Number (P13) to Section 4 before you continue with the interviews for each holder.

***Note that the reference period for the livestock is the day of enumeration***

The number of animal is the animal population on the holding at a specific point of time, the day of enumeration. These refer to number of animals being raised by the holding on the day of enumeration, regardless of ownership. Animals raised include those present on the holding, as well as those being grazed on communal grazing land or transit at the time of enumeration, except livestock belonging to another holding moved temporarily for sanitary or other reasons (sanitary cleaning, etc.). The latter should be reported by the other holding.

**Identification:** Select the appropriate Holders Number from the drop down list before you continue with the interviews.

**PL1: Does the holding keep/rear any of the following livestock?** Enter Yes or No for the respective livestock from the drop down menu.

01= Yes

02= No

### **Type of Livestock**

01=cattle

02=Sheep

03=Goats

04=Pigs

04=Chicken

**PL2.** Number of livestock. From the drop down list select the livestock and enter number of livestock the holder has per type of animal.

## PART III : RECONCILIATION VISITS

### SECTION RA: IDENTIFICATION

In each structure, enumerators should identify eligible household (s) engaged in any of the agricultural activities within the PSUs i.e. Crop farming, Livestock and aquaculture. The enumerator should ensure that Section A of the questionnaire is completed before beginning the interview. From the drop down menu, select the codes for District, Constituency, etc.

**Identification:** Select the appropriate codes for District, District and Primary Sampling Unit (PSUs) variables from the drop down menu. Select also both the PES and Census Structure Numbers and the PES and Census Household Numbers (HH) from the drop down list before you continue with the interviews (A1to A9b).

**A10. Location of Structure:** Record the GPS Coordinates obtained from the Main PES Questionnaire.

**A11a. PES Household Number:** Same as PES HH No. in the Main PES Questionnaire.

**A11b. Census Household Number:** This must be obtained from the Census enumeration

**A12. Name of Household Head:** Record the name of Household head

**A13. Name of Respondent:** Record name of respondent

**A14. Contact number of respondent:** Record the contact telephone number of respondent

**A15. REASON FOR RECONCILIATION VISIT:** From the drop down list choose the appropriate response and follow the skip.

1. Possible Match (Go to R1)
2. Person Enumerated in Census but not in PES (Go to R2)
3. Persons Enumerated in PES but not in Census (Go to R3)

### SECTION R1: POSSIBLE MATCHES (*THIS SECTION IS FOR ONLY CASES WITH POSSIBLE MATCH*)

**R1-R2: Name Reconciliation:** Record the PES and Census possible matches' names in R1 and R2 respectively.

**R3.** Are the names in PES and Census for the same person in the household? From the drop down list choose appropriate response.

- 1=Yes, the same person  
2=No, Not the same person

**R4-R5. Relationship reconciliation:** Record the PES and Census relationship to head of household in R4 and R5 respectively.

**R6.** Reconcile Relationship of person to household head in PES and Census: Ask if relationship was correctly obtained. From the drop down list choose appropriate response.

- 1=Relationship to head in PES was correctly obtained

- 2=Relationship to head in Census was correctly obtained
- 3=Relationship to head in both PES and Census were correctly obtained
- 4=None was correctly obtained

**R7-R8. Sex Reconciliation:** Record the sex of name in the PES and Census in R7 and R8 respectively.

**R9.** Reconcile the sex of name in the PES and Census. Check if Sex in PES is same as sex in the Census. From the drop down list choose appropriate response.

- 1=Yes
- 2=No

**R10-R11. Age Reconciliation:** Record the age of name in the PES and Census in R10 and R11 respectively.

**R12.** Reconcile the age of name in the PES and Census: Check if age in PES and age in the Census were correctly obtained. From the drop down list choose appropriate response.

- 1=Yes, PES age is correctly obtained
- 2=Yes, Census age is correctly obtained
- 3=Yes, both ages correctly obtained
- 4=None is correct

**R13-R14. Education Status Reconciliation:** Record the education status of name in the PES and Census in R13 and R14 respectively.

**R15.** Reconcile education status in PES and Census: Check if education status in PES is same as education status in the Census. From the drop down list choose appropriate response.

- 1=Yes
- 2=No

**R16-R17. Marital Status Reconciliation:** Record the marital status of name in the PES and Census in R16 and R17 respectively.

**R18.** Reconcile marital status in PES and Census: Check if marital status in PES is same as marital status in the Census. From the drop down list choose appropriate response.

- 1=Yes
- 2=No

**R19. MATCHING STATUS.** Choose “Match” if R3, R6, R9, R12, R15, R18 are equal to Yes. Otherwise Name is Non-Match.

- 1=Match
- 2=Non-Match

## **SECTION R2: PERSONS ENUMERATED IN CENSUS BUT NOT IN PES (THIS SECTION IS FOR ONLY PERSONS IN CENSUS BUT NOT IN PES)**

**R20.** Record all the names of household members enumerated in the Census but not in the PES.



**R21. Residency status of member:** Was [NAME] a usual resident or visitor of this household on census night? Choose from the drop down list the appropriate response.

- 1 = Yes, Usual member present
- 2 = Yes, Usual member absent
- 3 = Yes, Visitor
- 4 = No not a member of this household (**GO TO NEXT PERSON**)

**R22.** Was [Name] enumerated in this household or elsewhere during the census? From the drop down list choose the right response.

- 1= Yes, correctly enumerated in household
- 2=Yes, enumerated elsewhere
- 3=No, omitted

**R23.** What was the main reason (Name) was excluded in PES? From the drop down list choose the right response.

- 1 = In-mover, was enumerated elsewhere
- 2=Enumerator Erroneously included him/her in Census
- 3 = PES enumerator erroneously excluded him/her

**R24.** Is name still usual member/visitor of this household? From the drop down list choose the right response.

- 1=Yes
- 2=No

**R25. WHAT IS THE MOVING STATUS OF (NAME)?** From the drop down list choose the right response.

- 1=In-mover
- 2=Non-mover
- 3=Out-mover
- 4=Out-of-scope

**R26. WHAT IS ENUMERATION STATUS OF (NAME)?** From the drop down list choose the right response.

- 1=Correctly enumerated
- 2=Erroneously enumerated
- 3=Out of- scope

**R27. WHAT IS THE MATCHING STATUS OF (NAME)?** From the drop down list choose the right response.

- 1=Match
- 2=Non-Match

**SECTION R3: PERSONS ENUMERATED IN PES BUT NOT IN CENSUS (THIS SECTION IS FOR ONLY PERSONS IN PES BUT NOT IN CENSUS)**

**R28. NAME OF HOUSEHOLD MEMBER NOT MATCHED**

**R29.** Was [NAME] a usual resident/ visitor of this household at census night? From the drop down list choose the right response.

- 1 = Yes, Usual member present
- 2 = Yes, Usual member absent
- 3 = Yes, Visitor
- 4 = No not a member of this household (**GO TO NEXT PERSON**)

**R30.** Was [Name] enumerated in this household or elsewhere during the census? From the drop down list choose the right response.

- 1= Yes, correctly enumerated in household
- 2=Yes, elsewhere
- 3=No, omitted

**R31.** What was the main reason (Name) was excluded in Census? From the drop down list choose the right response.

- 1 = Out-mover
- 2=PES enumerator erroneously included him/her in PES
- 3 = Census enumerator erroneously excluded him/her
- 4= other specify

**R32.** Is (Name) still usual member/visitor of this household? From the drop down list choose the right response.

- 1=Yes
- 2=No

**R33.** WHAT IS THE MOVING STATUS OF (NAME)? From the drop down list choose the right response.

- 1=In-mover
- 2=Non-mover
- 3=Out-mover
- 4=Out-of-scope

**R34.** WHAT IS ENUMERATION STATUS OF (NAME)? From the drop down list choose the right response.

- 1=Correctly enumerated
- 2=Erroneously enumerated
- 3=Out of- scope

**R35.** WHAT IS THE MATCHING STATUS OF (NAME)? From the drop down list choose the right response.

- 1=Match
- 2=Non-Match

### GLOSSARY OF TERMS

**Additional items:** one of the three categories of census items which are provided for countries wishing to collect more in-depth (supplementary) data on specific themes. They can be collected using either the classical or modular approach.

**Agricultural holder:** civil person, group of civil persons or juridical person who makes the major decisions regarding resource use and exercises management control over the agricultural holding operation.

**Agricultural holding:** economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size.

**Agricultural land:** total of cropland and permanent meadows and pastures.

**Agroforestry:** sustainable land management system in which forest species of trees and other wooded plants are purposely grown on the same land as agricultural crops or livestock.

**Aquacultural census:** collection of structural data from all aquacultural production units.

**Aquacultural holding:** economic unit of aquacultural production under single management comprising all aquaculture facilities without regard to title, legal form or size.

**Aquaculture:** farming of aquatic organisms such as fish, crustaceans, molluscs and plants, as opposed to other forms of aquatic exploitation such as capture fisheries.

**Arable land:** land used in most years for growing temporary crops.

**Archiving:** a means of ensuring long-term preservation of data including ensuring its understandability by users.

**Census:** statistical collection involving the enumeration of all units (large sample-based collections are sometimes also referred to as censuses).

**Census coverage:** geographical regions of the country covered by census activities. Sometimes, countries omit certain areas of the country – such as urban areas, remote areas or areas with security problems – for operational reasons.

**Census of agriculture:** statistical operation for collecting, processing and disseminating data on the structure of agriculture, covering the whole or a significant part of a country.

**Census reference day:** point in time used for data collection on livestock numbers and other inventory items.

**Census reference year:** period of twelve months, either a calendar year or an agricultural year, generally encompassing the various time reference dates or periods of data collection for individual census items.

**Census scope:** types of agricultural production activities included in the agricultural census. The scope of the agricultural production industry could be interpreted very broadly to cover not only crop and livestock production activities but also forestry and fisheries production activities, as well as other food and agriculture-related activities.

**Classification variables:** characteristics used for the classification of data.

**Common pasture:** land not belonging directly to the agricultural holding, but on which common rights apply. In general terms, common pasture is agricultural area owned by a public authority (state, parish, etc.)

over which another person is entitled to exercise rights of common; these rights are generally exercisable in common with others.

**Complete enumeration:** collection of data from all units, rather than from just a sample of units.

**Computer-Assisted Personal Interview (CAPI):** interviewing method whereby the enumerator records responses using an electronic questionnaire on mobile devices such as personal digital assistants, tablets, laptops or smartphones.

**Computer-Assisted Self Interviewing (CASI):** collects data using questionnaires placed on the Internet using secure methods and completed by a knowledgeable respondent.

**Computer-Assisted Telephone Interview (CATI):** collects data from the holdings by telephone, with the operator located at central level reading and completing the questionnaire on the computer.

**Cropland:** total of arable land and land under permanent crops.

**Cross-tabulations:** tables showing statistical data classified by two different items simultaneously.

**Coverage rate:** Coverage rate refers the ratio of matched population to the PES population. The matched population was the sum of matched non-movers and estimated matched in-movers; likewise, the PES population was the sum of non-movers and in movers.

**Coverage error:** Refers to either an under-count or over-count of units owing to omissions of persons/housing units or duplication/erroneous inclusion, respectively.

**Content error:** Refers to the response differences of the same characteristic, as reported during the census and the PES.

**Current agricultural statistics:** ongoing agricultural statistics on such things as production and prices, as opposed to structural data collected in the agricultural census.

**Cut-off threshold:** minimum size limit for inclusion of agricultural units in the census.

**Double-cropping:** see *successive crops*.

**Educational attainment:** highest grade of formal education completed or attended by a person.

**Employee:** person who holds a paid employment job.

**Employer:** person who, working on his or her own account or with one or a few partners, holds a self-employment job and, in this capacity, has engaged on a continuous basis one or more persons to work for him/her as employees.

**Enterprise:** economic unit of production, under single management, that independently directs and manages all the functions needed to carry out production activities.

**Enumeration area:** small geographical unit defined for census enumeration purposes.

**Erroneous enumeration:** It is the enumeration of persons that should not have been included in the census.

**Erroneous enumeration duplication:** Duplications occur when persons or households were enumerated more than once either intentionally or unintentionally.

**Erroneous inclusions:** This includes persons that are enumerated in the census when they should not have been or were enumerated in the wrong place (e.g., including a person who died before the census date and births that occurred after the census date in a census).

**Essential items:** items that are imperative for national purposes and international comparability, which all countries are recommended to collect, regardless of their approach to the census.

**Establishment:** an enterprise or part of an enterprise situated in a single location and primarily engaged in a single type of production activity.

**Field:** piece of land in a parcel separated from the rest of the parcel by easily recognizable demarcation lines, such as paths, cadastral boundaries, fences, waterways or hedges.

**Forest:** land spanning more than 0.5 ha with trees higher than 5 metres and a canopy cover of more than 10 percent, or trees able to reach these thresholds *in situ*.

**Frame items:** items related primarily to the modular approach; those items collected in the core module and deemed necessary for the establishment of frames for supplementary census modules or follow-up surveys.

**Frame:** the basis used for identifying all the statistical units to be enumerated in a statistical collection.

**Global Positioning System (GPS):** system that makes it possible to find the geographic position of a point on the earth's surface by longitude and latitude. GPS allows geo-referencing of the holding, the household and the land to the appropriate administrative areas. GPS devices enable much more rapid measurement of areas than traditional objective methods for area measurement.

**Hired manager:** person who manages an agricultural holding on behalf of the agricultural holder.

**Holder:** see *agricultural holder*.

**Holding:** see *agricultural holding*.

**Holdings in the household sector:** holdings that are operated by household members.

**Holdings in the non-household sector:** holdings that are in sectors other than the household sector, such as corporations and cooperatives.

**Household:** arrangements made by persons, individually or in groups, for providing themselves with food or other essentials for living.

**Head of household:** The household usually recognizes one person as the head. The head of household is generally the person, male or female, who has economic and social responsibility for the household.

**In-mover:** An in-mover is one who moved into the household or house/compound after the Census enumeration date.

**Inter-planted crops:** plot or field in which one crop is planted between rows of another crop.

**Irrigation:** action of purposely providing land with water, other than rain, for improving pastures or crop production.

**Land under farm buildings and farmyards:** surfaces occupied by operating farm buildings, buildings for animal production and farmyards.

**Land use classification:** classification of land according to the activity undertaken on the land.

**Land used for agriculture:** total of “agricultural land” and “land under farm buildings and farmyards”.

**Legal status of the holder:** juridical aspects under which an agricultural holding is operated.

**Listing:** It is the process of identifying and recording all housing units and all other structures in an EA.

**Livestock:** all animals, birds and insects kept or reared in captivity mainly for agricultural purposes.

**Match:** A person is classified as a match if the name and other characteristics are the same on both the PES and Census questionnaires. In other words, if there is no doubt that the person in the PES questionnaire is the same person as in the Census questionnaire.

**Matched population:** Matched non-movers and matched out-movers

**Metadata:** information that helps users to understand what the data are measuring and how they have been created. This information helps to prevent users misunderstanding the data and helps to promote appropriate use of the data. Metadata can also help users to understand the quality of data by providing information about the data collection process.

**Microdata:** data recorded on the unit of enumeration – the holding or household – when an agriculture census is conducted. Each set of information about a unit represents a microdata record.

**Mixed crops:** more than one crop grown unsystematically in a plot or field.

**Net cropped area:** physical area of land on which temporary crops are grown.

**Non-match:** A person is considered as a “Non-Match” if he/she was not enumerated in the Census when he/she should have been. This means that he/she was not found in any Census questionnaire but there is a record from the PES enumeration.

**Non-mover:** A non-mover refers to a household member enumerated in the PES and was present on Census Night.

**Nursery:** area where young plants, trees or vines are propagated for the purpose of transplanting.

**Omissions:** This results from missing housing units, households, or persons during census enumeration. Missing a whole housing unit implies that all households and persons living in that housing unit will also be missed during the census enumeration.

**Other wooded land:** land spanning more than 0.5 ha<sup>2</sup> with: (i) trees higher than 5 metres and a canopy cover of 510 percent or trees able to reach these thresholds *in situ*; (ii) trees not able to reach a height of 5 metres *in situ* but with a canopy cover of more than 10 percent; or (iii) combined cover of shrubs, bushes and trees of more than 10 percent.

**Out-mover:** Residents who left the household or died during the interim period between the census and the PES.

**Out-of-scope:** A person is considered as out-of-scope if he/she was born after Census Night or if there is insufficient information for matching.

**Own-account worker:** person who, working on his/her own account or with one or a few partners, holds a self-employment job, and has not engaged any employees on a continuous basis during the reference period.

**Own-use production work:** form of work comprising production of goods and services for own final use (an unpaid form of work).

**Paper and Pen Interview (PAPI):** traditional interviewing method whereby enumerators interview the respondents and data is collected by the enumerators using paper questionnaires.

**Parcel:** any piece of land of one land tenure type, entirely surrounded by other land, water, road, forest or other features not forming part of the holding or forming part of the holding under a different land tenure type.

**Permanent crops:** crops with a more than one-year growing cycle.

**Persons in employment:** persons of working age who, during the reference period, were engaged in any activity to produce goods or provide services for pay or profit.

**Persons in own-use production work of goods:** persons of working age who, during a short reference period, performed any activity to produce goods for own final use for a cumulative total of at least one hour.

**Persons in unemployment:** persons of working age who: (i) were not in employment; (ii) carried out activities to seek employment during a specified recent period; and (iii) were currently available to take up employment given a job opportunity.

**Plot:** part or whole of a field on which a specific crop or crop mixture is cultivated.

**Population census:** the total process of planning, collecting, compiling, evaluating, disseminating and analyzing demographic, economic and social data at the smallest geographical level pertaining, at a specified time, to all persons in a country or in a well-delimited part of a country.

**Population census:** A Population Census is the official enumeration of all persons in a country at a specific time. The Census implies the collection, compilation, evaluation, analysis, publication and dissemination of demographic, social and economic statistics relating to the population.

**Possible match:** This is the situation where the name recorded on the Census questionnaire is not exactly the same as that on the PES questionnaire or there is a significant difference in age or some other attributes.

**Production:** actual quantity of produce, after drying and processing, ready for sale or consumption.

**Sample enumeration:** sampling of the whole or part of the target population for the census.

**Sample survey:** collection of data from a sample of units, rather than all units, as in a census.

**Sampling errors:** errors in statistics obtained from a sample survey because data are collected from only sample units.

**Sampling frame:** list of units to be sampled.

**Single-stage sampling:** sampling scheme in which the sample is selected directly from a list of units covered by the survey.

**Statistical unit:** the basic unit for which data are collected. The statistical unit for the census of agriculture is the agricultural holding.

**Duplications:** Duplications occur when persons, households or housing units are enumerated more than once. They also occur owing to enumerators' overlapping of assignments or errors committed during pre-census listing and EA delineation.

**Gross coverage error:** Gross coverage error represents the sum of three components of coverage error namely, duplication, erroneous inclusions and omissions.

**Net coverage error:** It is the difference between what should have been counted (true population) and what was counted (census population).

**Census population enumeration:** It is the total matched non-movers, matched out-movers, population erroneously included in the census and population correctly enumerated in the census but missed in the PES census population.

**PES population:** It is the total number of non-movers and in-movers.

**True population:** It is the population estimated from the PES multiplied by the census population after correcting it for erroneous inclusions and divided by matched population between the census and the PES.