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REPUBLIC OF ZAMBIA

2023 LIVESTOCK SURVEY

2022/2023 MARKETING SEASON

(Household)

INTERVIEWER'S INSTRUCTION MANUAL

Zambia Statistics Agency
Ministry of Fisheries and Livestock

October, 2023

CHAPTER 1: INTRODUCTION

Background and Purpose

25 The Government of the Republic of Zambia through the Zambia Statistics Agency
26 (ZamStats) undertakes various types of censuses and sample surveys to produce
27 detailed official statistics on various sectors including the agricultural sector.
28 Zambia's agricultural sector mainly comprises crop, livestock and fish production.
29 Much of the comprehensive information that is available regarding the
30 performance of the sector is on crop production. There is scanty information on
31 the contribution of livestock, fisheries as well as honey to the national economy.
32 With respect to the agricultural sector, agricultural censuses have been
33 conducted since independence. The first one was done in the 1970/1971
34 agricultural season whereas the second was undertaken in the 1991/1992
35 agricultural season. Both Censuses were undertaken on a large sample basis
36 using sampling frames derived from the immediate past Population and Housing
37 Censuses. Thus, sampling frames derived from the 1969 and 1990 Population and
38 Housing Censuses were used to sample Enumeration Areas (EAs) for Agriculture
39 surveys undertaken in subsequent years.

40 It should be noted that these two agricultural censuses generated
41 comprehensive agricultural statistics for Zambia. However, the information
42 generated by the censuses was skewed towards crops. Therefore, the 2017/18
43 Livestock and Aquaculture Census provided correct and accurate information
44 required for decision making such as disease control, Livestock production,
45 Pasture etc. Since 2017 when Livestock and Aquaculture Census was conducted
46 there have been notable changes in the livestock and aquaculture parameters
47 that require updating in order to facilitate effective policy formulation of the
48 current data. It is against this background that 2022 Livestock Survey was
49 conducted to assess the trends as well as take the livestock inventory. Due to
50 various factors affecting Livestock productivity, Government has continued to
51 support the collection of Livestock statistics data hence the 2023 Livestock
52 Survey.

53 The overall objective of the survey is to collect updated, reliable and creditable
54 livestock statistics that will guide policy formulation, cooperating partners support
55 and private sector decisions regarding investments and the development of the
56 livestock sector. The specific objectives are to:

- 57 • Determine the number of households and establishments participating in
58 livestock and poultry raising, and honey production;
- 59 • Determine the population and population changes for the major livestock
60 species;
- 61 • Estimate the population of poultry in the country;
- 62 • Determine the major challenges affecting livestock and poultry production in
63 Zambia;
- 64 • Determine the herd-structure for the major livestock species in the country;
- 65 • Estimate the livestock productivity levels in Zambia;

- 66 • Determine the number slaughters of livestock for the major livestock in Zambia;
- 67 • Determine the livestock reproduction and management practices applied by
- 68 the households in raising the livestock in Zambia.
- 69 Estimate the quantity of honey produced by households and establishments;
- 70 • Estimate the number of households engaged in raising major livestock breeds.
- 71 • Provide data for measuring key economic performance indicators such Gross
- 72 Value Added (GDP) and its contribution to the economy.
- 73 • Provide statistics which can be used to determine the deficit or surplus status of
- 74 the different types of livestock raised in Zambia, and
- 75 • Provide information to be used as a basis for determining the export potential
- 76 of the country with regard to livestock products;
- 77 It is envisaged that results of the 2023 Livestock Survey will in turn help in measuring
- 78 the true contribution of the livestock sub-sector to the economy.

79

80 **Sample Design and Coverage**

81 The Ministry of Fisheries and Livestock in conjunction with Zambia Statistics Agency
 82 (ZamStats) successfully conducted the 2017/18 Livestock and Aquaculture Census. The
 83 Census provided useful baseline data that can be used to formulate subsequent
 84 detailed livestock and aquaculture household surveys. The 2023 Livestock Survey is one
 85 such survey.

86 The 2023 Livestock Survey is designed to cover a representative sample of about 9,680
 87 households residing in both rural and urban parts of the country. A total of 484
 88 Enumeration Areas (EAs) will be drawn from 25,600 EAs nationwide. The survey will
 89 produce reliable estimates at national, provincial and Residence (rural/urban) levels.

90 **Sample Stratification and Allocation**

91 The sampling frame for the 2023 Livestock survey is based on the 2022 Census of
 92 Population and Housing. The country is administratively demarcated into 10 provinces,
 93 which are further divided into 116 districts. The districts are further subdivided into
 94 constituencies, which are in turn divided into wards. For the purposes of conducting
 95 household surveys, wards are further divided into Census Supervisory Areas (CSAs), which
 96 are subsequently subdivided into Enumeration Areas (EAs). The EA's constitute the
 97 Primary Sampling Units (PSUs) for the survey. In order to have reasonable estimates at
 98 provincial level and at the same time take into account variation in the sizes of the
 99 provinces, the survey will adopt the Optimal Square Root sample allocation method
 100 (Leslie Kish, 1987). This approach offers a better compromise between equal and
 101 proportional allocation, i.e. small sized strata (province) are allocated larger samples
 102 compared to proportional allocation. The following is the rural/urban allocation within
 103 each province.

104 **Provincial and Rural/Urban allocation of EAs**

Province	Allocation of EA
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	Urban	Rural	Total
Central	15	56	71
Copperbelt	8	24	32
Eastern	12	59	71
Luapula	4	19	23
Lusaka	12	30	42
Muchinga	6	26	32
Northern	7	27	34
North western	7	30	37
Southern	20	76	96
Western	5	41	46
Total	96	388	484

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Coverage

109 The 2023 Livestock survey will be undertaken using a sample of 484 EAs. All rural and
 110 urban households will be explicitly stratified into categories based on the scale of their
 111 agricultural livestock activities, that is, raising livestock and/poultry or honey production.

112 **Note that the survey will also collect data from all livestock raising institutions/farms**
 113 **which operate as establishments on a 100 percent basis. This will be done using a**
 114 **separate establishment questionnaire.**

115

Selection of Households

116 The 2023 Livestock survey will use a two-stage stratified cluster sample design. During the
 117 first stage, 484 EAs will be selected with Probability Proportional to Estimated Size (PPES)
 118 within the respective strata. The measure of size to be used is population figures for each
 119 EA taken from the 2022 Census of Population and Housing. During the survey, households
 120 will be listed and stratified according to their scale of livestock, poultry or bee keeping
 121 activities. Listing of all households in the selected EAs will be done to provide basic
 122 agricultural data. A sample of 20 households will be drawn and a detailed interview
 123 conducted. There are three explicit categories created at the second sampling stage
 124 in each EA namely A, B and C. For the purposes of the survey 5, 5 and 10 households will
 125 be selected from A, B and C categories, respectively.

126 The total sample size in each EA is 20 households. Where all the three categories have
 127 adequate numbers of households listed, the sample household's distribution will be, C–
 128 10, B–5 and A– 5.

129 In cases where there are shortfalls in category C, include all households in this category
 130 and allocate the difference from 20 equally to categories B and A. if the differences
 131 from 20 cannot be equally allocated to the two categories, allocate category B one (1)
 132 more sample household than category A.

133 Where there is no household in category C, allocate 10 sample households to category
134 B, and 10 to category A.

135 Where there is no household in category C and less than 10 in category B, include in the
136 sample all those in B and increase the allocation in category A to make up for the
137 shortfall from the required number of 20 sample households.

138 Where all households in an EA fall in category A, select all the required 20 sample
139 households from that category.

140 The following criteria will be used to stratify households into the three (3) categories: A, B
141 and C.

142 **Category C:**

143 1. Households reporting Bee keeping or specified livestock (sheep). When only 1
144 or 2 households in the EA report Bee keeping or specified special livestock
145 (sheep).

146 2. Households raising 50 or more cattle, 20 or more pigs, 30 or more goats, and

147 3. Households raising 50 or more chickens.

148 **Category B:**

149 1. Households reporting Bee Keeping or sheep. When 3 to 5 households in the
150 SEA report Bee Keeping or specified livestock.

151 2. Households raising 10 to 49 cattle, 10 to 19 pigs, 10 to 29 goats, and
152 households raising any number of chickens but less than 50.

153 **Category A:**

154 All households not in **Category C** and **Category B**.

155 Households raising less than 10 cattle, less than 10 goats, less than 10 pigs, and
156 less than 50 chickens. All such households belong to category A.

157 **Stratification Procedure**

158 When stratifying households, start with category C.

159 **Category C**

160 1. Identify the number of households that reported any of the specified special
161 livestock. If there are only 1 or 2 of each type of special livestock (either bee keeping
162 or sheep raising) such households will automatically be included in category C.

163 2. Identify households that reported raising 50 or more cattle, 30 or more goats, 20 or
164 more pigs and include them in Category C.

165 3. Identify households that reported raising 50 or more chickens and treat these in the
166 same manner as explained in '2'.
167

168 **Category B**

169 1. Identify households that reported any of the special livestock. If there are 3 to 5 such
170 households in the SEA, include them in Category B
171

172 **NOTE: if there are more than 5 households in the SEA reporting any of the specified**
173 **livestock, these households will not automatically be included in category 'B' based on**
174 **'specified livestock' criteria but stratification will be based on livestock or poultry.**

175 2. Identify households that reported 10 to 49 cattle, 10 to 29 goats, 10 to 20 pigs
176 and include them in Category B.
177

178 **Category A**

179 Critically check the stratification of households in category C and B. When you are
180 satisfied that everything is in order, verify that all the remaining households are not in
181 category C or B, and have reported raising less than 10 cattle, less than 10 goats, less
182 than 10 pigs, and less than 50 chickens. All such households belong to category A.

183 **Estimation procedure and sampling weights**

184
185 Due to the disproportionate allocation of the sample points to various strata,
186 sampling weights are required to correct for differential representation of the sample
187 at the national and sub-national levels. The weights of the sample are in this case
188 equal to the inverse of the product of the two selection probabilities employed at
189 each stage of sampling.

190

191 Therefore, the probability of selecting an EA will be calculated as follows:

$$P_{hi}^1 = \frac{a_h M_{hi}}{\sum M_{hi}}$$

Where:

P_{hi}^1 = the first selection probability of EAs

a_h = the number of EAs selected in stratum **h**

M_{hi} = the size (in terms of the population count) of the **i**th EA in stratum **h**

$\sum_i M_{hi}$ = the total size of the stratum **h** ($i = 1, 2, 3, \dots, n$)

The selection probability of the household will be calculated as follows:

Example of category A

$$P_{hiA}^2 = \frac{n_{hiA}}{N_{hiA}}$$

Where:

P_{hiA}^2 = the second selection probability of households in category A

n_{hiA} = the number of households selected in category A from the **i**th EA

N_{hiA} = the total number of households listed in category A in an EA.

Therefore, the EA specific sample weight for category A will be calculated as follows:

$$W_{iA}' = \frac{1}{P_{hi}^1 \times P_{hiA}^2}$$

Survey instruments

- i) Listing Book
- ii) Household and Establishment Questionnaires
- iii) Enumerator's Manual

- iv) Enumeration Area Maps
- v) Stickers
- vi) Tablets

CHAPTER 2: DUTIES AND PERFORMANCE OF INTERVIEWERS

Importance of Interviewer Performance

Field interviewers are the eyes and ears of the data collection team. The interviewer serves as a link between those who analyse and use the data and the respondents who furnish the data. The information collected in any survey is only as good as the interviewers working on the survey. Quality depends on all interviewers following the same procedures. Only when the same techniques have been used for all interviews can the data be effectively analysed and interventions confidently implemented.

Ethics and Rules of Conduct of Interviewers

As an interviewer, it is your responsibility to **keep completely confidential** anything you learn and observe during an interview. Never disclose any facts about anyone you interview to any unauthorized person(s) outside the survey process. Respondents should be told that the data they provide will be used for statistical purposes only.

Things You Must Do

- You must read and intensively study your manual to become thoroughly familiar with its contents in order to do your work efficiently.
- You must introduce yourself on every visit and explain to the respondent the reason of your visit before starting the interview.
- You must ask the questions in exactly the same way to each respondent and in the same order in which they are presented in the questionnaire. This will enable the interviews to be comparable. The question order needs to be standard from respondent to respondent.

- You must make every effort to write legibly, and keep the documents you are working on clean and free from damage.
- You must attend to all '**call-backs**' as early as possible, and must be punctual in keeping all appointments.

You are solely responsible for all documents issued to you in connection with the survey, and you must ensure that they are secure at all times. Remember that no person not employed and sworn-in by ZamStats/MFL to work on this survey can be allowed to see the information you collect, nor must you discuss such information with anyone.

Things You Must Not Do

- You must not solicit or permit any unauthorized person to assist you with your survey work. No matter how intelligent they are, they will not have had the training you have or the authority to participate in interviewing.
- You must not combine survey work with any canvassing for personal gain, church, political party or any other organization.
- You must **NEVER** become involved in religious or political discussions while you are on the job.

List of Basic Duties and Responsibilities of interviewers

You, the interviewer, are the key to the success of the survey. You alone have direct influence on the accuracy of the data collected. Since it is more practical and economical to concentrate on collecting accurate data than correcting inaccurate data after collection, you must make every effort to become familiar with this survey and follow its instructions carefully.

It will be of utmost importance that you:

- Attend the training course and all other scheduled meetings.
- Study this manual very carefully and remember the main points that are explained here.
- Become fully familiar with the questionnaire.
- Complete all the data collection activities as required.
- Review each completed questionnaire for accuracy and completeness.
- Submit completed questionnaires to your Supervisor as promptly as possible.
- Enumerate all the Households sampled in the EA.
- Ensure that all survey materials are looked after properly and returned to the supervisor after the survey exercise is over.

- Perform any other Survey related functions which the supervisor may assign from time to time.
- Keep all data received strictly confidential.

At times you will find that the actual situation in the field will make your job somewhat difficult. You should seek common sense solutions to the difficulties you are likely to encounter. For example, you may be going in an area where there is no network, in that instance you should download the questionnaire well in advance.

Timeliness of the submission of questionnaires

Prompt submission of the questionnaires is absolutely crucial for timely processing. If submission of the *questionnaires* is delayed, it will be impossible to process them on a timely basis. Make sure that all the completed questionnaires are submitted before moving to the next SEA. The value of the data for planning and decision-making is directly related to its timeliness.

CHAPTER 3: GENERAL INTERVIEWING PROCEDURES

Preparing for the interview

There are four important steps that must be taken before you visit the household.

Reviewing the Interviewer's Manual

This includes reviewing the general interviewing procedures, the specific field procedures and the question-by-question instructions.

Reviewing the Questions on the Survey Questionnaire

Before you begin interviewing, practice using the questionnaire to build up your confidence. A successful interview requires an interviewer who fully understands the survey questionnaire and can use it easily and correctly. Losing your place on the tablet can disturb the person being interviewed.

Organizing Survey Materials

Be sure you know what survey materials you need and that you have them with you before going into the field to interview.

Appearance and Behaviour

The first thing a respondent notices about the interviewer is his/her appearance. It is important to create a good impression by being polite, neat and courteous.

Establishing a good working relationship

A comfortable relationship between the interviewer and the respondent is the foundation for good interviewing. The person's impression of you during your visit will largely determine the atmosphere during the interview. If you seem bored, uninterested or hostile, the respondent will probably act in a similar way.

Remember that persons tend to react favourably if they think the interviewer is someone they will enjoy talking to. This means that you have to impress the respondent as being someone who is friendly and understanding. Through your behaviour you can create an atmosphere in which the respondent can talk freely.

Using the survey questionnaire and asking the questions

The goal of the interview is to collect accurate data by using the questionnaire and following standard interviewing practices. To reach this goal, the interviewer needs to understand the survey questionnaire, including how to ask the questions, how to follow the instructions in the questionnaire and how to identify the various types of questions.

When asking the questions, observe the following rules:

Remaining Neutral

You must maintain a neutral attitude with the respondent. You must be careful that nothing in your words or manner implies criticism, surprise, approval, or disapproval of either the questions asked or the respondent's answers.

You can put respondents at ease with a relaxed approach and gain their confidence. The respondent's answers to the questions should be obtained with as little influence as possible by the interviewer. Another interviewer should be able to obtain the same answers as you would have obtained.

The questions are all carefully worded to be neutral. They do not suggest that any answer is preferable to another. When a respondent gives an ambiguous answer, never assume what the respondent means by saying something like 'Oh, I see, I suppose you mean... is that right?' If you do this, very often the respondent will agree with your interpretation, even though it is not correct.

Asking Questions in the Order Presented

Never change the order of the questions in the questionnaire. The questions follow one another in a logical sequence, to change that sequence could alter the intention of the question. Asking a question out of sequence can affect the answers you receive later in the interview.

Asking Questions as Worded

Do not change the question, each question must be asked in exactly the same way to each respondent. If the respondent does not seem to understand the question, simply repeat it. If it is clear that a respondent does not understand a question after you have repeated it using the original language, you can rephrase it in simpler or colloquial language. However, you must be careful not to alter the question.

Sometimes, respondents will ask you to define words in a question or explain some part of a question. When this occurs, refer to the 'General concepts and definitions' in Chapter 4 of this manual where all the important words and terms are defined.

Avoid Showing the Questions to the Respondent

Respondents can be influenced by knowing what questions are coming next or by seeing the answer categories that are not asked together with the questions.

Instructions in the questionnaire

The questionnaire contains instructions for you the interviewer. These instructions must be followed closely as they are there to enable you to use the questionnaire correctly.

'Skip' Instructions

'Skip' instructions are usually written out. You must read the 'Skip' or 'go to' instructions with care, so that you do not miss questions which should have been asked. The data application will also guide you to follow the skip instructions. If questions are not to be asked, the questions will be grayed out and not available for input. Likewise, it is important that you go to the correct question when necessary. If you are careless, you may skip some questions incorrectly and miss some essential questions. An example of a skip instruction can be found in LP01, Did the Household raise.....between 1st May 2022 and 30th April, 2023? **1=Yes 2= No-->go to next livestock type**

Note: If you miss any questions, the program will mark the entire Section BLUE and if you successfully answer all questions in a section, the system will turn the Section GREEN. An error message in RED will appear if you enter an invalid answer.

Question-specific Instructions

In addition, there are 'question-specific' instructions for you in the questionnaire. These instructions usually alert you to a consistency check that has to be made at the time of the interview, or tell you how to record an answer. All these instructions are in **bold** and **italicized**. E.g. the statement in LSD04 (page 1) 'Enumerator: ask for all persons born in 2011 or before (12 years and above)' is an instruction to you.

Probing

Probing and Why It Is Necessary

Probing is the technique of questioning by the interviewer to obtain a full, complete and relevant answer. An answer is probed whenever it is not meaningful or is incomplete, that is when it does not adequately answer the question.

In everyday social conversation, people normally speak in vague and loose terms. Therefore, it is understandable that respondents may at first answer questions in a way, which is not clear or specific. It is essential, however, to encourage respondents to express themselves more precisely and in very specific terms.

Respondents sometimes miss the point of a question. They will provide an answer of a kind but they do not answer the question. It is easy to be misled by a respondent who is talkative and gives a detailed response which is beside the point and irrelevant. In most cases, respondents give an irrelevant answer because they have missed an important word or phrase in the question. Sometimes respondents will think that they are answering a question when all they are doing is simply repeating an answer, which was already given, or repeating parts of the answer. A respondent can talk a great deal and still be merely repeating the already given answer in different words.

Probing therefore, has two major functions:

- To motivate respondents to expand upon or clarify their answers;
- To make the respondent's answer precise so that irrelevant and unnecessary information can be eliminated.

Probing must be done without introducing bias or antagonizing the respondent. Respondents must never be made to feel that you are probing because their answer is incorrect or unacceptable.

Understanding the Intention of the Questions

The kind of probe to use must be adapted to the particular respondent and the particular answer given. There are some general types of probes that are frequently used but the most important point is to avoid getting into the habit of using the same probe. Instead, you must seek to understand what the intention of each question is, so that you will always know in what way a particular answer falls short of being satisfactory. The probe, then, should be devised to meeting this gap. This will require skill, tact and persistence.

Neutral Probing Methods

It is always very important to use neutral probes. By 'neutral', we mean that you must not imply to the respondent that you expect a particular answer or that you are dissatisfied with an answer. The reason for probing is to motivate the

respondent to answer fully or precisely without introducing bias. Bias is the distortion of responses caused by the interviewer favouring one answer to another.

EXAMPLE of a biased probe: Question LP04 (page 2, Table 2.1)

LP04: How many..... were you raising on 30th April, 2023?

ANSWER: 80 or 90 animals.

IMPROPER PROBE: Oh I see, you mean 90 animals?

(This improper probe is pushing the respondent to say 90 animals when it may be 80 animals)

PROPER PROBE: Was it 80 or 90 animals?

Some respondents have difficulty putting their thoughts into words. Others may give unclear or incomplete answers; still others may be reluctant to reveal their attitudes. You must deal with such factors and use procedures that encourage and clarify responses. The following kinds of probes might help you obtain more accurate responses.

Repeat the Question

When the respondent does not seem to understand the question, when he/she misinterprets it, unable to make up his/her mind, strays from the subject, the most useful technique is to repeat the question.

An Expectant Pause

The simplest way to convey to a respondent that you know he has begun to answer the question, but that you feel he/she has more to say, is to be silent. A pause - often accompanied by an expectant look or a nod of the head - gives the respondent time to gather his/her thoughts.

Repeating the Respondent's Reply

Simply repeating what the respondent has said as soon as he/she has stopped is often an excellent probe.

Neutral Questions or Comments

Neutral questions or comments are frequently used to obtain unbiased, clearer and complete responses. The following are examples of the most commonly used probes:

Repeat question

Anything else?

Any other reason?

Any other?

Could you tell me more about your thinking on that?

Would you tell me what you think?

What do you mean?

Why do you feel that way?

Which would be closer to the way you feel?

These probes indicate that the interviewer is interested and they make a direct request for more information.

Asking For Further Clarification

In probing, it will sometimes be useful to appear slightly puzzled by the respondent's answer and indicate with your probe that it might be you who failed to understand. For example, 'I am not quite sure I understand what you mean by that - could you please tell me a little more?' This technique can arouse the respondent's desire to co-operate with someone he/she thinks is trying to do a good job.

It should not be overplayed however; otherwise the respondent will get the feeling that you do not know when a question is properly answered. Occasionally, a respondent will give an 'I don't know' answer.

This can mean a number of things. For instance:

The respondent does not understand the question and answers 'I don't know' to avoid saying he/she does not understand.

The respondent is thinking the question over and says 'I don't know' in order to fill the silence and to give himself time to think.

The respondent may be trying to evade the issue, or he/she may feel that the question is too personal and does not want to hurt the feelings of the interviewer by saying so in a direct manner.

The respondent really may not know, or may not have an opinion or attitude on the subject.

Try to decide which of the above is the case. Do not immediately settle for an 'I don't know' reply. If you sit quietly, but expectantly - the respondent will usually think of something to say. Silence and waiting are frequently your best probes for an 'I don't know' answer. You will also find that other useful probes are, "well, what do you think?" or 'I just want your own ideas on that'. If you feel that the respondent has answered 'I don't know' because he/she was afraid of admitting ignorance, you should say that there are no right or wrong answers to the questions and that you just want the respondent's answer or opinion.

Likewise, if you think the respondent says 'I don't know' because a question is too personal, you should remind the respondent that the survey information is confidential.

Always probe at least once to obtain a response to an "I don't know" before accepting it as the final answer, but be careful not to antagonize the respondent or force an answer if he/she says 'I don't know' again.

When to Stop Probing

You should stop probing when you have a clear and relevant answer. However, if at any time the respondent becomes irritated or annoyed, stop probing that question. We do not want the respondent to refuse to complete the rest of the interview.

Controlling the Interview

While it is important to maintain a pleasant and courteous manner in order to obtain the respondent's co-operation, you must also be able to control the interview so that it may be completed in a timely and orderly fashion. For example, when answering questions, the respondent may offer a lengthy explanation of problems or complaints. In this situation, you must be able to bring the discussion to a close as soon as possible so that the interview may continue. Politely, tell the respondent that you understand what he/she is saying but that you would like to complete the interview. If necessary, you may try to postpone any outside discussion by saying 'Please, let's finish this interview first and we can talk about that later'.

In some cases, the respondent may start to provide information about some aspect of his/her farm that is covered at a later time during the interview. Again, you must control the interview by telling the respondent that you must ask other questions first and that they should wait until later to provide information on that particular aspect.

Recording the Answers

Asking the questions correctly and obtaining clear answers is only part of your job. Equally important is recording the answers given by the respondents. All typed responses should be in block letters e.g. responses on Village/Locality name.

Legibility

All the entries you make on the stickers must be legible. All responses that require written words should be clearly printed in block letters rather than script. All numbers should be clearly written so that one number is not confused with another.

There are basically two types of responses required in the questionnaire i.e., writing words and recording numbers

Writing words

In some cases, you are required to write in the questionnaire; this may be the name of the head of the household, the village/locality name, or comments concerning the problems encountered.

To avoid the difficulty of reading script, you should start with Capital letters followed by small letters.

Recording numbers

Special care must be taken when entering numerical responses. Special care should be taken with some numbers such as a '1' and a '7', a '4' and a '7', or an '8' and a '9', which can be misinterpreted. **Note: Make sure you record correct entries as given by the respondent.**

Recording notes/comments

The program allows notes to be written on each question (answer). If the enumerator wants to write a note, he/she should press and hold below the answer categories, a dialogue box opens to allow the enumerator to write a

note. The people who work on the data later will use those notes to interpret the information.

Ending the interview

After all the questions have been asked, thank the respondent for the interview and mention that his or her co-operation has been most helpful in providing the information for the survey. Also inform the respondent that you or your colleague may possibly be returning to collect more information.

1 **CHAPTER 4: GENERAL CONCEPTS AND DEFINITIONS**

2

3 It is important that you acquaint yourself with the general concepts and
4 definitions used for this survey before embarking upon the fieldwork.

5

6 **Definitions**

7

8 **Standard Enumeration**

9 **Area (SEA):** An enumeration area is a geographical area assigned to
10 an enumerator for the purpose of conducting a census/
11 survey count. It is apportioned considering the workload
12 that an enumerator is expected to cover. This is given a 1-
13 digit code – 1,2,3 or 4.

14

15 **Qualified Respondent:**

16 is an adult member of the household who is knowledgeable
17 about agricultural and other activities of
18 the household. A child is not a suitable
19 respondent. It is not necessary that all the
20 information be given by one person. A
21 respondent may consult any other
22 member of the household on different
23 items in the questionnaire.
24 Knowledgeable female members are
25 encouraged to also participate as
26 respondents.

27

28 **Adult member:** refers to a member of the household
29 who is 12 years or older.

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31 **Household:** a household consists of a group of
32 persons related by blood, marriage, or
33 adoption, including other persons, such
34 as house-help or farm labourers, if any,
35 who normally live together in one house
36 or closely related premises and take their
37 meals from the same kitchen. This group
38 of persons looks to one person whom

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they regard as the head of the household. The household may also consist of just one member. The household is our unit of enumeration and you have to be clear about what constitutes a household. A household is not necessarily a family. You should have a look at the composition of the household and be satisfied that this group of persons live together and eat together from the same kitchen. Some respondents have pride in showing how large their families are and will include persons who do not live there as members of the household. Please be mindful of such situations. In the case of polygamous households, what will qualify this family as a single household is if it meets one of the three criteria: The wives live at the same homestead and there is common provision for food and other necessities. If this family lives together and makes common provision for food and shares production resources e.g., land, equipment, labour, all the family members will be considered as belonging to one household. The responsibility of cooking for everyone is shared between the wives although the cooking may take place in different kitchens. Typically there is a duty roster to cook for the rest of the household members.

Usual Household Member:

A usual household member is any individual who in the last 12 months has lived with the household for at least six months regardless of whether they have intentions to stay or not. A household member includes;

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- ✓ Persons temporarily away on holiday, business or pleasure trip or any other purpose within the country or abroad who are expected to be back within six months;
- ✓ Persons working elsewhere who usually go home to their respective households at least once a week;
- ✓ an individual attending school away from home;
- ✓ newly born babies;
- ✓ individuals who are newly wedded-in;
- ✓ Individuals who have stayed for less than six months but have come to stay with the household.
- ✓ Employees of household - includes servants who eat and sleep with the household and who do not go home at least once a week.
- ✓ Someone who stayed with the household for more than 6 months between May 2022 and April 2023 but has left the same household before the survey and has no intention of rejoining
- ✓ Persons remanded in Prison and Prisoners convicted for less than 6 months will be considered members of the household.
- ✓ Persons Admitted to hospitals should be considered usual members of the household.

113 **Head of Household:**

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is a person who is considered to be the head by the members of the household and makes the household decisions. The husband, in a matrimonial household is usually (but not always) taken as the head of the household. In his absence it is the wife or the eldest member of the household who assumes responsibility of head of household.

124	Polygamous Marriage:	a polygamous marriage is where a man is
125		married to more than one wife. The
126		husband is usually attached to the first
127		wife. This helps to prevent double
128		counting especially during listing.
129		
130	Agricultural Household:	is a household in which at least one
131		member is carrying out some agricultural
132		activity (defined below).
133		
134	Agricultural Activity:	is the growing of any crop and/or raising
135		of livestock, raising of poultry and/or fish
136		farming.
137	Crop production	The growing of field crops such as maize,
138		millet, cassava etc. The crops of interest
139		for this survey are maize, rice, sorghum,
140		sunflower, soya beans, groundnuts, sweet
141		potatoes and cassava.
142		
143	Agricultural Season:	Zambia's agricultural season starts from 1 st
144		October of a given year to 30 th
145		September of the following year.
146		
147	Agricultural chemicals:	Refers to chemicals used in growing of
148		crops, fish and rearing of livestock e.g.
149		herbicides, pesticides, acaricides,
150		dewormers, lime, vaccines, drugs, etc.
151	Herbicides:	Substances used to control unwanted
152		plants e.g. round-up a chemical
153		(Glyphosate) used to destroy weed.
154		
155	Holding:	Is all land wholly or partly operated for
156		agricultural purposes such as growing
157		crops, fish farming and/or raising livestock
158		and/or raising poultry for production
159		under single technical management. A
160		holding may consist of one or more

161		parcels located in one or separate areas,
162		the parcels share the same means of
163		production e.g., labour.
164		
165		
166	Irrigation:	supplying of water to crops through
167		artificial means and not being dependent
168		on rain as a supplier of water. This can be
169		done through sprinklers, furrows and other
170		methods.
171		
172	<u>Livestock</u>	
173		
174	Livestock:	all domesticated animals that are
175		used/may be used for food and
176		agriculture systems such as cattle, pigs,
177		goats, sheep and poultry.
178		
179	Poultry:	all domesticated fowls such as chickens,
180		ducks, geese, pigeons, guinea fowls,
181		turkeys and quails. Poultry also includes
182		rabbits.
183		
184	Livestock Production:	all activities pertaining to the raising of all
185		types of livestock.
186		
187	Livestock Management:	all activities pertaining to the control and
188		organization of livestock production.
189		
190	Livestock Activity:	is the raising of livestock.
191	Stocking	The placing of livestock in areas where
192		livestock has been absent for a
193		considerable period of time.
194	Restocking	Placing of livestock where numbers have
195		decreased due to diseases

196	Water Source:	is a source of water for animals to drink
197		e.g. boreholes, rivers, lakes
198	Fodder/Forage:	Crops that are grown for feeding livestock
199		such as grasses (Rhodes grass, Napier
200		grass, Bracaria and Panicum) and
201		legumes (velvet beans, Cow peas,
202		Sunhemp, Pigeon peas, and Dolicos
203		lablab.
204	Supplementary Feeds	
205	To be defined	
206	De-worming:	administration of drugs in order to expel
207		worms from an animal.
208		
209	Vaccine:	a preparation administered to an animal
210		to prevent it from suffering from a
211		particular disease or condition.
212		
213		
214		
215		
216	Vaccination:	this is administration of vaccines in order
217		to prevent diseases.
218		
219		
220	Veterinary equipment:	equipment used in veterinary operations
221		and these include castrators, needles and
222		syringes.
223		
224	Poultry production:	all activities pertaining to the raising of all
225		types of fowls including rabbits.
226		
227		
228		

229	Livestock extension:	these are support services rendered to
230		farmers with regards to improved
231		methods of raising livestock e.g. how to
232		feed livestock, how to construct goat
233		housing facilities etc.
234		
235	Production System:	method of raising a particular type of
236		livestock e.g. Intensive production, Semi
237		intensive production, Extensive etc.
238		
239	Intensive production:	method of raising livestock that often
240		requires high level of management e.g.
241		zero grazing.
242		
243	Semi intensive production:	method of raising livestock that combines
244		free range and supplementary feeding.
245		
246	Extensive :	method of raising animals based on
247		grazing on natural pastures without
248		supplementary feeding e.g. the
249		traditional livestock raising system.
250	Zero grazing:	A system where cattle are usually kept in
251		an enclosure and feed and water are
252		brought to them.
253	Free range:	method of raising animals where they
254		feed for themselves.
255		
256	Backyard:	method of raising animals within the
257		premises of the residence.
258		
259		
260	Handling facilities:	structures that facilitate handling of
261		animals such as crush pens, kraals,
262		loading bays, etc.

263	Exotic livestock	
264		These are type of livestock species that
265		have been introduced into a new
266		environment such as Fresians and Jersey
267		for Dairy, beef (Bosmara, Sussex) as well as
268		brahman and boran. Examples of poultry
		are black astrolopes, kroilers and sasols.
269	Indigenous Livestock	
270		These are livestock species that have
271		evolved or lived in a specific environment
272		for a long period of time and they are
273		adaptable to the same environment e.g.
		Barotse, Tonga, Angoni etc.
274	<u>Cattle</u>	
275	Bulls:	are uncastrated adult male cattle.
276		
277	Oxen:	are adult castrated male cattle.
278		
279	Steers:	are young castrated male cattle.
280		
281	Cows:	are female cattle that have given birth at
282		least once.
283	Heifers:	are female cattle that have not yet given
284		birth and are less than 3 years old.
285		
286	Calves:	are either male or female young cattle
287		that are suckling.
288	Weaners	These are young animals that have
289		stopped sucking and are less than 1 year
290		old.
291	<u>Pigs</u>	
292		
293	Boar:	mature male breeding pig.
294		
295	Sow:	mature female breeding pig.
296		

297	Gilt:	young female pigs that have never given
298		birth).
299	Weaners	young pig that has stopped suckling less
300		than one year
301	Piglet:	are either male or female young pigs that
302		are still suckling.
303		
304	<u>Goats</u>	
305		
306	Buck/Billy:	mature male breeding goat.
307	Doe/Nanny:	mature female breeding goat.
308	Weaners	
309	Kid:	young goat that is still suckling.
310		
311	<u>Sheep</u>	
312		
313	Ram:	mature male breeding sheep.
314		
315	Ewe:	mature female breeding sheep.
316	Weaners	these are small livestock that have
317		stopped suckling or feed on milk less than
318		one year
319	Lamb:	young sheep that is still suckling.
320		
321	Donkey:	A domesticated animal similar to cattle
322		and are specifically used for draught
323		power.
324		
325	Cats:	A small domesticated animal with soft fur
326		a short snout and retractable claws
327		widely kept as a pet.
328		

329	Dogs:	A domesticated animal with non-
330		retractable claws widely kept as a pet,
331		guard or hunter.
332	<u>Poultry</u>	
333		
334	Village chicken:	traditional indigenous chickens normally
335		raised for meat.
336		
337	Chickens (Broilers):	exotic chickens raised mainly for meat.
338		
339	Chickens (Layers):	exotic chickens raised mainly for egg
340		production.
341		
342	Guinea fowl:	large speckled grey or White African bird
343		and current been domesticated that is
344		often eaten as meat.
345		
346	Pigeons:	bird usually white/grey in colour mostly
347		kept at home.
348		
349	Ducks:	birds with webbed feet and are mostly
350		kept for meat.
351		
352	Quails:	bird essentially streaked brown with a
353		white eye stripe and has long wings.
354	Rabbit	small animals which normally burrow in
355		the soil and have long ears and a short
356		tail.
357	Clutch:	A batch of eggs that a hen lays for a
358		period of time, before it sits to brood.
359		
360	<u>Tick control methods</u>	
361		

362	Acaricide:	This is a tick-killing chemical.
363		
364	Dipping:	is a method of tick control which involves
365		the plunging of the animal into the Plunge
366		Dip containing a mixture of water and
367		acaricide.
368		
369	Pour-on:	is a method of tick control which involves
370		the applying of acaricide on the skin and
371		hair along the back of an animal.
372		
373	Spraying:	this is the application of a chemical
374		(acaricide) using a sprayer or a spray race.
375		
376	Hand dressing:	Removing of ticks using the application of
377		tick grease from the body of an animal.
378		
379	Traditional tick control:	unconventional tick control method e.g.
380		application of herbs to control ticks.
381	Forage:	These are vegetative plant parts that
382		are available and eaten by animals
383		which include leaves, flowers, twigs,
384		Pods, stems and roots.
385		
386	Pasture:	Grasses, legumes and other
387		plants/herbage used by livestock for
388		grazing.
389		
390	Fodder:	Includes any plant parts and
391		feedstuffs such as hay, straw, silage,
392		residual post-harvest materials that is
393		carried to livestock for feeding.
394		

395	Forage crop:	Plants that are grown to be harvested &
396		used by grazing before being fed to animals
397		e.g. hay, silage and green chop.
398		
399	Hay:	is dry grass, legume forages or post-harvest
400		fodder that is harvested at the right time
401		(just before flowering), stored and
402		conservation under suitable atmospheric
403		conditions for later feeding as roughage to
404		ruminant livestock
405	Silage:	is a form of conserved forage that is made
406		from fresh grass, fodder crops or legume
407		forages (or a mixture) and stored under
408		anaerobic (no oxygen) conditions to be fed
409		fermented.
410		
411	Forage production:	The deliberate production of
412		plants/vegetative matter to feed livestock
413		
414	Conception rates:	Chances of getting pregnant within a certain
415		period of time
416		
417	Yield:	The amount of crops produced or
418		generated
419		
420	Cut & curry:	Is a method of feeding where any forage
421		material is cut in fresh form at whatever
422		moisture content the forage is and
423		transported to the livestock to be fed
424		
425	Crop residues:	Post-harvest materials which can be used as
426		animal fodder
427		

428	Grazing:	This is a method of feeding where livestock
429		directly feeds on plants such as grasses,
430		shrub or tree leaves or pods
431		
432	Utilization:	Refers to the way in which forage material is
433		used such as hay or silage to be fed to
434		livestock
435		
436	Legumes:	Plants that obtain nitrogen from air and fix
437		it into soil through bacteria e.g. Velvet
438		beans, Sunnhemp, Stylosanthes
439		
440	Grasses:	vegetation consisting of typically short
441		plants with long, narrow leaves, growing
442		wild or cultivated to be used as a fodder
443		crop.
444		
445	Other Concepts and Definitions	
446		
447	Payment in Cash:	is payment made in cash and/or by
448		cheque or electronic (in Zambian
449		Kwacha). If payment is made in a currency
450		other than Zambian Kwacha, convert to
451		Zambian Kwacha.
452		
453	Payment in kind:	is payment made not in cash or by cheque
454		but in form of goods or services.
455	Animal manure:	refers to forms of livestock droppings such
456		as chicken droppings, cattle dung etc.
457		
458	Mechanical power:	Energy to do work which is derived from
459		machinery driven by either an engine or
460		electricity, e.g. tractor.
461		

462 **Animal draught power:** Energy to do work, derived from
463 domesticated/trained animals, e.g. oxen,
464 donkeys etc.

465

466 **Manual labour:** this is physical work done by human
467 beings.

468

469 **Hired labour:** man power that is contracted to do work
470 at a cost.

471

472 **Household Family Labour:** man power that is contracted to do work
473 derived from household members without
474 pay

475 **CHAPTER 5: DATA COLLECTION PROCEDURES**

476 **Approaching a Household**

477

478 The interviewer is expected on the onset to identify himself/herself by name
479 and state the institution explain the purpose of the visit, the confidential nature
480 of the interview, and the expected time the interview will take. The purpose of
481 the interview is to collect data which when processed (main objectives) will
482 provide information, which will assist policy makers plan and make better
483 decisions. The interviewer is not expected to make promises. Just stick to the
484 purpose of the interview. The interviewer can mention that he/she is merely the
485 eyes and ears of Government.

486

487 **Identification information**

488

489 Once the cluster number is entered in the menu application and the
490 questionnaire is opened items 2 through 8 will automatically be pre-filled with
491 identification particulars associated with that cluster.

492

493

494 **9. Village/Locality Name**

495 Enter the name/locality name in the space provided.

496

497 **10. Household Serial Number**

498 Enter the serial number of the household in the three boxes provided.

499

500 **11. Name of the Household Head**

501 Write the name of the head of household in the space provided.

502

503 **12. Contact Mobile Phone Number (Where available)**
504 Enter the contact phone number of the head of household in the space
505 provided. In case the head of the household has no contact phone
506 number, record the phone number of any member of the household.
507

508 **13. Global Positioning System (GPS) Coordinates**
509 Enter the GPS coordinates as recorded by the tablets. The coordinates
510 should be taken at the main household whenever possible.
511

512 **14. Name of Main Respondent**
513 Identify the household head but if the head is not there, the interviewer
514 with the help of household members should identify a qualified
515 respondent who is knowledgeable and can answer questions. Record
516 the name, starting with the family or second name, the name of the
517 main respondent if this person is different from the head of the
518 household.
519

520 **15. Response Status**
521 Record the response status for the questionnaire by using the following
522 codes: -
523

524 1 Interview consented; the respondent has agreed to be
525 interviewed
526

527 2 Refusal: i.e., the household refused to co-operate.
528

529 3 Moved out of EA;
530

531 4 Non-contact: i.e., for some reason, no responsible adult member
532 was available during the period of the survey. The Supervisor has
533 to ensure that all non-contact households are revisited and
534 enumerated during the course of the survey.
535

536 5 Household dissolved;
537

538 Select the appropriate response status code.
539

540 The interviewer should report to the supervisor all response status entries other
541 than 'complete' and the supervisor should investigate all such cases. Final
542 entries of the response codes other than 'complete' should be done only after
543 the supervisor has completed his/her follow ups.
544

545 **SECTION 1: DEMOGRAPHIC CHARACTERISTICS OF HOUSEHOLD MEMBERS**

546

547 This is part of the questionnaire that captures basic information of household
548 members. The CAPI system will take you through all the questions of one

549 household member before moving on to the next member. This order of
550 questioning helps improve recall for the respondent.

551
552

553 **Table 1 Enumerator: find out the names of all the usual household**
554 **members.**

555
556
557

MEM: This is already pre-entered

558 **Name:** Find out from the respondent, the names of all the members of the
559 household and enter the names, starting with the head of the
560 household. Enter the surname first.

561

562 **LSD01:** Enter the sex of the household members. If you can observe the
563 sex, you should record the response without asking. Indicate the
564 sex of each of the household members by entering the sex code
565 in the space provided. Enter code '1' if the member is male, or
566 code '2' if female.

567

568 **LSD02:** Ask about the member's relationship to the household head. Enter
569 the appropriate response code. The codes for possible answers
570 are listed at the bottom of the table. There is need to probe further
571 to ascertain the exact relationship to the household head.
572 **Enumerator**, '1' is pre-entered in the first row for the household
573 head. As much as possible attempt to enter the spouse second
574 and the household members in order of age starting with the
575 eldest.

576

577 **LSD03:** Find out the year in which this person was born. Select the
578 response code for the month and record the year in four digits,
579 e.g., 1996.

580

581 **LSD04:** Ask for persons born in 2011 and before only (12 years and above).
582 Find out from the respondent the current marital status of each
583 adult household member. For those household members who are
584 married, establish whether they are married monogamously or
585 polygamous. Enter the appropriate response code.

586

587 **LSD05:** Ask for persons born in 2018 and before only (5 years and above).
588 Ask what highest level of education the member completed. For
589 example, a member who is attending Grade 10 will have
590 completed Grade 9. We are interested in knowing the course level
591 that has been completed. We are not counting the number of
592 years spent at school. Enter the appropriate response code. For
593 students at college/university, use codes 15 and 16 respectively.

594

595 **Enumerator:** *In a number of cases, wrong information for this question is*
596 *entered. For instance, a six-year-old child may be recorded to*
597 *have completed secondary school education. Therefore, level of*
598 *education (LSD05) and age (LSD03) should be checked and*
599 *confirmed.*

600

601 **LSD06:** Ask for persons born in 2018 and before only (5 years and above).
602 Ask whether the member participated in any agricultural activities
603 between 1st May, 2022 to 30th April 2023? If the answer is 'yes' enter
604 '1' in the space provided and ask the questions that follow. If the
605 answer is 'No' enter 2 and skip to next MEM.

606

607 **Household member's participation in agricultural activities**

608

609 **LSD07:** Find out if the household member participated in Crop
610 production/Forage production from 1st May 2022 to 30th April
611 2023? Enter the appropriate response i.e. enter "1" if Yes and enter
612 "2" if No.

613

614 **LSD08:** Find out if the household member participated in
615 Livestock/poultry production from 1st May 2022 to 30th April 2023?
616 Enter the appropriate response i.e. enter "1" if Yes and enter "2" if
617 No.

618

619 **LSD09:** Find out if the household member participated in Fish Farming.
620 Enter the appropriate response in the space provided. I.e. enter
621 "1" if Yes and enter "2" if No.

622

623 **LSD10** Find out if the household member participated in Bee keeping.
624 Enter the appropriate response in the space provided. I.e. enter
625 "1" if Yes and enter "2" if No.

626

627

628 **SECTION 2: LIVESTOCK PRODUCTION AND HEALTH**

629 In this section, we are interested in capturing the type of livestock the
630 household was/is raising and the type of housing used. It is important to
631 understand who owns these livestock and how the stock levels
632 change/changed over the reference period (1st May 2022 to 30th April 2023).

633 2.1 Find out if the household raised any Livestock from 1st May 2022 to 30th April
634 2023. Enter the response in **HH01**.

635 **Table 2.1 Livestock Production and Animal Health**

636 **LP01:** Ask the respondent whether the household raise any of the listed types
637 of livestock during the reference period. If the response is 'Yes', enter

638 code '1'. If the response is 'No', enter code '2' and go to the next
639 livestock type.

640 **LP02A:** Find out the 1ST main purpose of raising this livestock. Select the
641 appropriate response code from those provided.

642

643

644

645 **LP03:** Find out how many of the specific type of livestock the household raised
646 on 1st May, 2022. Record the number. Enter '0' if none were raised.

647 **LP04:** Find out how many of the specific type of livestock the household was
648 raising on 30th April, 2023. Record the number. Enter '0' if none were
649 raised and go to LP08.

650 **LP05:** Find out how many of the livestock in LP04 belonged to the members of
651 this household. Record the number. Some of the livestock raised by the
652 household may not belong to the household. Enter '0' if none were
653 raised by members of this HH and go to LP08.

654 **LP06:** Find out how many of the specific type of livestock referred to in LP04
655 belonged to female members. Record the number. (CAPI: put a check
656 , LP06 < LP04)

657 **LP07:** Find out how many of the specific type of livestock referred to in LP04
658 were female. Record the number.

659 **LP08:** Find out how many of the livestock were slaughtered from 1st May, 2022
660 to 30th April, 2023. Record the number. Enter "0" if none.

661 **LP09:** Find out how many of the livestock were sold live between 1st May 2022
662 to 30th April 2023. Enter '0' if none.

663 **LP10:** Find out what was the major constraint faced in raising the Livestock.
664 Select the appropriate response from the list provided.

665 **LP11:** Find out if any of the livestock types were affected by any disease from
666 1st May, 2022 to 30th April, 2023. Enter code "1" if Yes. if No skip to Table
667 2.2.

668 **LP12:** Find out what main disease affected this livestock type from 1st May, 2022
669 to 30th April, 2023. Select the appropriate response from the list of
670 diseases provided.

671

672 **Table 2.2 Livestock Management**

673 In this section the aim is to find out the husbandry practices households are
674 involved in. Ask the follow up questions on livestock management practices if
675 the household raised cattle, sheep, goats, pigs, donkeys, horses and poultry.

676 **2.2.1:** Ask the respondent if their livestock holding is enclosed by a fence. If the
677 response is 'Yes', enter code '1'. If the response is 'No', enter code '2' in
678 **HH02.**

679 If any of the livestock types is secured in a fence e.g. a fenced chicken ran
680 should be regarded as an enclosed holding.

681 **2.2.2:** Find out if the household keeps livestock production records such as date
682 of birth, average weight, age of the animal, tagging, branding etc. If the
683 response is 'Yes', enter code '1'. If the response is 'No', enter code '2'
684 in **HH03.**

685 **2.2.2.1:** Find out if the household practice supplementary feeding for livestock
686 excluding broilers, layers and quails. If the response is 'Yes', enter code '1'.
687 If the response is 'No', enter code '2' in **HH03A and skip to Ques 2.2.2.4**

688

689 **2.2.2.2:** Find out the type of feed did the household used. Select and enter the
690 appropriate response in **HH03B.**

691 **2.2.2.3:** Find out the major constraint the household faced in feed supplementation.
692 Select and enter the appropriate response in **HH03C.**

693 **2.2.2.4:** Find out the main reason for household not practicing supplementary feeding.
694 Select and enter the appropriate response in **HH03D.**

695 **2.2.2.5:** Find out the type of feed did the household use for broilers, layers and quails.
696 Select and enter the appropriate response in **HH03E.**

697 **2.2.2.6:** Find out the major constraint the household faced in feeding broilers, layers
698 and quails. Select and enter the appropriate response in **HH03F.**

699 **2.2.3:** Find out if the household kept financial production records such as sales
700 of livestock, purchases, rent etc. If the response is 'Yes', enter code '1'.
701 If the response is 'No', enter code '2' in **HH04.**

702 **2.2.4:** Find out if the household kept animal health records e.g. vaccination
703 dates, deworming dates, dipping dates etc.. If the response is 'Yes',
704 enter code '1'. If the response is 'No', enter code '2' in **HH05.**

705

706 **2.2.5:** Find out the main source of water for the livestock. Select the appropriate
707 response code from those provided and enter the code in **HH06**.

708 **2.2.6:** Find out the distance in kilometers to the nearest water source which was
709 used for the livestock. Enter '0' if less than 1km. Enter the response in
710 **HH07**.

711 The assumption is that **1 hour on foot is about 5 km**. This means that **12 min on**
712 **foot is about 1 km**.

713

714 **2.2.7:** Find out from the respondent, if the household had access to livestock
715 production extension services. If the response is 'Yes', enter code '1'. If
716 the response is 'No', enter code '2' in **HH08**.

717 **2.2.8:** Find out from the respondent, if the household had access to animal
718 health extension services. If the response is 'Yes', enter code '1'. If the
719 response is 'No', enter code '2' in **HH09**.

720 **2.2.9:** Find out from the respondent, if the household has access to agribusiness
721 extension services e.g. marketing information, trade, credit,
722 entrepreneurship etc. If the response is 'Yes', enter code '1'. If the
723 response is 'No', enter code '2' in **HH10**.

724 **2.2.10:** Find out the distance in kilometers to the nearest physical livestock
725 extension service provider. Enter '0' if less than 1km. If the respondent
726 does not know enter -9. Enter the response in **HH11**.

727 **2.2.11:** Find out the main method the household used to control livestock
728 diseases. Select the appropriate response code from those provided
729 and enter the code in **HH12**.

730 **2.2.12:** Find out what main method the household used to control ticks. Select
731 the appropriate response code from those provided and enter the code
732 in **HH13**.

733 **2.2.13:** Find out if the household vaccinated any of the livestock against diseases
734 from 1st May 2022 to 30th April 2023. If the response is 'Yes', enter code
735 '1' and if the response is 'No' enter 2 and skip to 2.2.15.

736 **2.2.14:** Find out from the respondent, which livestock diseases the household
737 vaccinated against from 1st May 2022 to date. If the response is 'Yes',
738 enter code '1'. If the response is 'No' enter code '2' in **HH14A** up to
739 **HH14J**.

740 **2.2.15:** Ask the household if they hired any labour to help with the livestock
741 keeping from 1st May 2022 to 30th April 2023. Enter code "1" if Yes and
742 enter code "2" if No in **HH15 and go to Table 2.3.**

743 **2.2.16:** Find out the main type of labour the household employed for their
744 livestock activities. Select the appropriate response from the list provided
745 and enter the code in **HH16.**

746 **2.2.17:** Find out the total cost of labour the household spent for keeping
747 livestock from 1st May 2022 to 30th April 2023. Enter the response in **HH17**
748 Enter "0" if none.

749 2.2.18: Find out the major constraint the household faced in raising livestock.
750 Select the appropriate response from those provided and enter the
751 code in **HH18.**

752

753 **Table 2.3 Livestock Population by Breed Type**

754 In this section, we would like to find out the main breeds of the livestock being
755 raised by households.

756 **LB01:** Find out what the main Cattle breeds the household was raising on 30th
757 April 2023. Select the appropriate response(s) from those provided.

758 **LB02:** Find out what the main Pig breeds the household was raising on 30th April
759 2023. Select the appropriate response(s) from those provided.

760 **LB03:** Find out what the main Goat breeds the household was raising on 30th
761 April 2023. Select the appropriate response(s) from those provided.

762 **LB04:** Find out what the main Sheep breeds the household was raising on 30th
763 April 2023. Select the appropriate response(s) from those provided.

764

765 **TABLE 2.4: MILK PRODUCTION AND SALES**

766 In this section we want to find out about the household's involvement in milk
767 production. Quantities of milk produced, sold or consumed between 1st May
768 2022 and 30th April, 2023 will be recorded.

769 2.4.1: Find out if the household produced any cow milk from the beginning of
770 May 2022 to the end of April 2023. If the response is 'Yes', enter code '1'. If the
771 response is 'No' enter code '2' in **HH19. If the response is 'No', go to table 2.5.**

772 **MP01-MP12:** Find out in which months milk production/sales/consumption was
773 None, Low, Moderate or High between 1st May 2022 and 30th April, 2023. Enter
774 "0" if None, "1" if Low, "2" if Moderate and "3" if High.

775 **MP13:** Find out in a typical **High** production/sale month how much milk the
776 household produced/sold/consumed per day. Note that the quantities of fresh
777 milk sold or consumed should not be greater than production. Quantities
778 should be recorded in litres.

779 **MP13a:** Find out in a typical **High** production month how much sour milk the
780 household sold per day.

781 **MP14:** Find out in a typical **Moderate** production/sale month how much milk
782 the household produced/sold/consumed per day.

783 **MP14a:** Find out in a typical **Moderate** production/sale month how much sour
784 milk the household sold per day.

785 **MP15:** Find out in a typical **Low** production/sale month how much milk the
786 household produced/sold/consumed per day.

787 **MP15a:** Find out in a typical **Low** production/sale month how much milk the
788 household sold per day.

789 **MP16:** Find out from the household who primarily decides how revenue from
790 the sales will be used. Enter codes provided.

791 **MP17:** Find out from the household who **mainly milked the cows**. Select the
792 appropriate response from those provided.

793 **MP18:** Find out from the household **where they mainly sell the milk?** Select the
794 appropriate response from those provided.

795 **MP19:** Find out from the household **who determines the price at the point of**
796 **sale?** Select the appropriate response from those provided.

797 **Table 2.5 Egg Production and Sales**

798 In this section we want to find out about egg production and sales in the
799 household. Information on the number of eggs produced and sold will be
800 collected.

801 **EP01:** Find out if any of the poultry raised by the household produced eggs
802 from 1st May 2022 to 30th April 2023. Enter "1" if Yes and enter "2" if No.
803 If No, go to the next poultry raised.

804

805 **EP02:** Find out from the Household the main purpose for producing the eggs.
806 Enter the appropriate code.

807 **EP03:** Find out how many clutches a single bird of each poultry type had on
808 average from 1st May 2022 to 30th April 2023. Enter the number.

809 **EP04:** Find out the clutch size a single bird of each poultry type laid in the last
810 clutching period. Enter the number.

811 **EP05:** Find out the number of eggs per single bird that hatched from the last
812 clutch for each poultry type raised. Enter the number.

813 EP06: Find out the main method of hatching used in the last clutch reported in
814 EP04. Enter the appropriate code.

815 **EP07:** Find out which household member is mainly in charge of selling the
816 eggs produced per poultry type raised. Enter the appropriate code.

817

818 **Table 2.6: Animal Draught Power and Manure Use**

819 We are interested in capturing information pertaining to the household use of
820 animal draught power and manure. The reference period for this information
821 is from 1st May 2022 to 30th April 2023.

822 **APM01:** Find out if this household used any of its livestock type for draught
823 power (e.g. for ploughing, transport) from 1st May 2022 to 30th April 2023. Enter
824 "1" if Yes and enter "2" if No. If No go to the next livestock type raised.

825 **APM02:** Find out what the main use of draught power was from the livestock
826 type raised from 1st May 2022 to 30th April 2023 Enter the appropriate code.

827 **APM03:** Find out if this household hired out the livestock type to provide
828 ploughing and/or transport services to other households. Enter "1" if Yes and
829 enter "2" if No.

830

831

832 **TABLE 2.7: LIVESTOCK REPRODUCTION AND MANAGEMENT**

833 We are interested in capturing information pertaining to Livestock
834 Reproduction and Management by the Household. The reference period for
835 this information is from 1st May 2022 to 30th April 2023.

836 **LR01:** Find out if the household practised controlled mating e.g. selective
837 animal reproduction, artificial insemination) for each livestock type
838 raised from 1st May 2022 to 30th April 2023. Enter "1" if Yes. Enter "2" if
839 No and skip to the next livestock type.

840 **LR 02:** Find out the main type of controlled mating methods used by the
841 household for each livestock type raised from 1st May 2022 to 30th April 2023.
842 Enter the appropriate code.

843 LR 03: Find out what the main source of the semen was. Enter the appropriate
844 code.

845

846

847 **LR 04: Find out how** many breeding animals the household had from 1st May
848 2022 to 30th April 2023

849

850

851

852 **SECTION 3: HONEY PRODUCTION (own production)**

853

854 In this section we are interested in capturing information from households
855 involved in honey production from 1st May 2022 to 30th April 2023. -----
856 -----

857

858

858 **3.1:** Find out if any member of the household was involved in honey
859 production from 1st May 2022 to 30th April 2023. If the answer is
860 Yes, enter '1' in **HH20** and ask the questions that follow. Enter '2' if
861 the answer is No and end the interview.

862

863 **3.2:** Find out how much comb honey the household harvested from
864 1st May 2022 to 30th April 2023. Enter the quantity in **HH21A** and
865 the unit of measure in **HH21B**.

866 **3.3:** Find out if the household sold any comb honey harvested from 1st
867 May 2022 to 30th April 2023. If the answer is 'Yes', enter '1' in **HH22**.
868 If the answer is 'No', enter 2 in **HH22** and skip to **HH25**.

869

870 **3.4:** Find out how much comb honey the household sold. Enter the
871 quantity in **HH23A** and the unit of measure in **HH23B**.

872

873 **3.5:** Find out to whom the household mainly sold their
874 processed/comb Honey from 1st May 2022 to 30th April 2023.
875 Record the response in **HH24**.

876

877 **3.6:** Find out if the household faced any constraints in honey
878 production from 1st May 2022 to 30th April 2023. If the answer is
879 'Yes', enter '1' in **HH25**. If the answer is 'No', enter 2 in **HH25** and
880 end interview.

881

882 **3.7:** Find out what the three (3) major constraints the household
883 experienced in honey production from 1st May 2022 to 30th April
884 2023. Enter the **most severe** constraint in **HH26A** followed by the
885 second **severe** constraint in **HH26B** and the **least severe** constraint
886 in **HH26C**.
887

888 **SECTION 4: FORAGE PRODUCTION**

889

890 In this section we are interested in capturing information from households involved
891 in Forage production from 1st May 2022 to 30th April 2023.

892

893

894 4.1. Find out if any member of the household grow any forage crops between 1st
895 May 2022 and 30th April 2023. If the response is 'Yes', enter code '1'. If the response is
896 'No' enter code '2' and end interview.)

897

898 4.2. Find out what forage types the household grow? Select the appropriate response
899 from the codes provided.

900 4.3. Find out the size of the land used for growing forage. Select the appropriate
901 response from the codes provided.

902 4.4. Find out how the household used (utilize) the forage types cultivated for
903 livestock feeding? Select the appropriate responses from the codes provided.

904

Disease Local Names**Disease**

Abortion
 Anaplasmosis
 Anthrax

 Black Quarter
 Brucellosis

 Cestodes Infection
 Contagious Bovine Pleuro-
 pneumonia
 Contagious Ophthalmia
 Dermatophilosis
 Distomatosis/Liver Fluke
 Fish Diseases

 Foot and Mouth Disease
 Heartwater
 Hemorrhagic Septicemia
 Hygroma
 Mange
 Newcastle Disease
 Pink Eye

 Rabies
 Tick-borne Disease

 Trematode Infection
 Unknown Disease

Language Lozi

Butuku bwa kufoloza
 Butuku bwa nyoko
 Butuku bwa lubete
 Butuku bwa ngongola
 (sifefe)
 Butuku bwa kufoloza
 Butuku bwa linoha za
 mwamba

 Butuku bwa maswafu
 Butuku bwa meto
 Butuku bwa sikwekwe
 Butuku bwa minyopi
 Matuku ya litapi
 Butuku bwa taku ni
 mulomo
 Butuku bwa matakani
 Butuku bwa kang'oto
 Butuku bwa mbumba
 Butuku bwa sikwekwe
 Butuku bwa kakotwe
 Butuku bwa meto
 Butuku bwa
 mutanganyo
 Matuku ya likufa
 Butuku bwa linoha za
 mwamba
 Butuku bo busazibahali

906

907

Disease

Abortion
 Anaplasmosis
 Bloat
 Contagious Bovine Pleuro-
 pneumonia
 Dip Poisoning
 East Coast Fever/Corridor
 Fish Diseases

 Foot and Mouth Disease

Language Bemba

Ubulwele bwa kuposa
 Ubulwele bwa kondoloka
 Ubulwele bwa kufimbilwa

 Ubulwele bwa cifuba ca ng'ombe
 Sumu
 Ubulwele bwa mbuli
 Amalwele ye sabi
 Ubulwele bwa filonda kumolu (kumakasa) na
 kumulomo (kukanwa)

Fowl Pox
 Goitre
 Heartwater
 Heavy Metal Poisoning
 Helminthiasis
 Highly Pathogenic Avian
 Influenza
 Hoof Burn
 Infectious Coryza
 Mastitis
 Newcastle Disease
 Pesticide Poisoning
 Plant Poisoning
 Rabies
 Salt Poisoning
 Trypanosomiasis

 Tuberculosis
 Tungiasis/Jiggers
 Unknown Disease

Ubulwele bwa tupumba kumutwe
 Ubulwele bwa cibukulo
 Ubulwele bwa menshi kumutima
 Sumu
 Ubulwele bwa nsokanda

 Ubulwele bwa cifine ca nkoko
 Ukupya kwa citende
 Ubulwele bwa kufimba umutwe
 Ubulwele bwa cibebe
 Ubulwele bwa cikuku (cipumpu) ca nkoko
 Sumu
 Sumu
 Ubulwele bwa kalyelye
 Sumu
 Ubulwele bwa misakalala
 Ubulwele bwa kuondoloka/icifuba cantanda
 bwanga
 Ubulwele bwa mawundu
 Ubulwele ubushaishibikwa

908

Disease

Abortion

 African Swine Fever
 Arthritis
 Bloat
 Contagious Ecthyma/Orf
 East Coast Fever/Corridor
 Footrot
 Helminthiasis
 Lumpy Skin Disease
 Mange
 Newcastle Disease
 Rabies
 Trypanosomiasis
 Tuberculosis
 Unknown Disease

Language Chewa

Matenda a kupolodza
 Chigodola cha nkhumba/Chipumphu cha
 nkhumba
 Ku tupa kwa nkhangono
 Matenda a kutumphu mimba
 Matenda a zilonda ku kamwa
 Matenda a chigodola cha ng'ombe/Kandukutu
 Matenda a ku bola kwa mwendo
 Matenda a nyongolozhi
 Abilisi
 Chipele
 Matenda a chigodola cha nkuku
 Matenda a chiwewe
 Matenda a kamuzembe
 Chifuwa chabefu
 Matenda osa dziwika

909

Disease

Abortion
 Anaplasmosis
 Babesiosis
 Bloat
 Brucellosis

Language Tonga

Bulwazhi bwa kusowa
 Bulwazhi bwa muluwe
 Bulwazhi bwa kusuba bulowa
 Bulwazhi bwa kuzimbilwa
 Bulwazhi bwa kusowa

Contagious Bovine Pleuro-
pneumonia
East Coast Fever/Corridor
Foot and Mouth Disease
Heartwater
Hemorrhagic Septicemia
Lumpy Skin Disease
Newcastle Disease
Trypanosomiasis

910

911

Disease

Anaplasmosis
Anthrax
Babesiosis
Brucellosis
Contagious Bovine Pleuro-
pneumonia
East Coast Fever/Corridor

Foot and Mouth Disease
Heartwater
Hemorrhagic Septicemia

Lumpy Skin Disease
Trypanosomiasis

912

913

Disease

Brucellosis
Contagious Bovine Pleuro-
pneumonia
East Coast Fever/Corridor
Foot and Mouth Disease
Hemorrhagic Septicemia
Lumpy Skin Disease
Newcastle Disease
Rabies
Tungiasis/Jiggers

914

915

Disease

Bulwazhi bwa ma fufwe/Bulwazhi bwa mapunga
Bulwazhi bwa denkete
Bulwazhi bwa zilonda kunsumba a kumulomo
Bulwazhi bwa cizinguluzingulu
Bulwazhi bwa kalowa
Bulwazhi bwa makotomakoto
Bulwazhi bwa chibbobbobbo
Bulwazhi bwa luuka

Language Ila

Bulwazhi bwa muluwe
Bulwazhi bwa kasuntu
Bulwazhi bwa kusuba bulowa
Bulwazhi bwa kusowa

Bulwazhi bwa ma huhwe
Bulwazhi bwa denkete
Bulwazhi bwa shilonda kuhumba a
kumulomo
Bulwazhi bwa cizunguluzungulu
Bulwazhi bwa kalowa
Bulwazhi bwa shikotoshikoto
(mapumbamapumba)
Bulwazhi bwa luuka

Language Lamba

Ubulwele bwakuposa ipafu ubwambukila
ubwa ng'ombe

Ubulwele bwakalaso ubwa ng'ombe
Denkete
Ifilonda fyakumakasa nakumulomo
Ubulwele bwakututuma
Ubulwele bwafikotokoto pamubili
Kamanungwe
Akalyelye
Malundu

Language Lunda

Anaplasmosis
 Black Quarter
 Contagious Bovine Pleuro-
 pneumonia
 Dermatophilosis
 Dystocia
 Enteritis

 Foot and Mouth Disease
 Heartwater
 Helminthiasis
 Mange
 Newcastle Disease
 Pink Eye
 Rabies
 Tick-borne Disease
 Transmissible Venereal
 Tumour

Musong'u wa ndondu/Musongu
 waku shambama
 Musong'u waku balakata

 Muson'gu wa mapwapwa
 Mukuli
 Musong'u wa lusemu
 Kuhitisha
 Musong'u wa yilonda ku kanwa ni ku
 nyendu
 Chinkonya
 Nyisanda
 Mukuli
 Shiki
 Musong'u wa mensu
 Musong'u wa kuzaluka
 Musong'u wa tunzeñu

 Chikenka

916

917

Disease

Abortion
 African Horse Sickness
 African Swine Fever
 Anaplasmosis
 Anthrax
 Arthritis
 Atrophic Rhinitis
 Avian Salmonellosis
 Babesiosis

 Black Quarter
 Bloat
 Blue Tongue
 Bovine Viral Diarrhoea
 Cestodes Infection
 Chronic Respiratory Disease
 Coccidiosis
 Contagious Bovine Pleuro-
 pneumonia
 Contagious Caprine Pleuro-
 pneumonia
 Contagious Pustular Dermatitis
 Dermatophilosis
 Dip Poisoning

Language Luvale

Kupihisa
 Musongo wabimbulu
 Musongo wa va ngulu
 Musongo wa mambuli
 Musongo wa kufwa va ngombe na watu
 Lusoso
 Kujimba mazulu
 Shiki
 Musongo wa masu
 Musongo wa kulaba nyama kumaboko
 chipwe mahinje
 Kujimba lijimo
 Lilimi lya usungu
 Kuhichisa
 Tututu
 Shiji ya miliwu
 Shiki

 Musongo wa mahuyongu

 Musongo wa mahuyongu mu va pempe
 Mukule
 Mukule
 Musongo wakubitumbo

Distomatosis/Liver Fluke	Tututu twa mumeya
Dystocia	Kuhona ngolo yakusema
East Coast Fever/Corridor	Musongo wa fukula
Enteritis	Musongo mu jimo
Equine Influenza	Shiki ya jimbulu
Fish Diseases	Musongo wa vaishi
Flea Infestation	Mbwangala
Foot and Mouth Disease	Musongo wa jisende na mukanwa
Footrot	Musongo wa jisende
Fowl Pox	Musongo wa tusumbi wa kumeso
Goitre	Lishakushaku
Heartwater	Musongo wa meya kumuchima
Helminthiasis	Musongo wa tututu mujimo
Hemorrhagic Septicemia	Musongo wa fukula
Highly Pathogenic Avian Influenza	Shiki ya tusumbi
Hoof Burn	Kuwema cha jisendeku
Infectious Bursal Disease/Gumboro	Shiki ya tusumbi
Infectious Coryza	Shiki
Low Pathogenic Avian Influenza	Shiki
Lumpy Skin Disease	Mukule wa unene
Malignant Edema	Kujimba
Mange	Mukule waundende
Mastitis	Musongo jinyeso
Mububa/Albizza Poisoning	Ulembe
Mucosal Disease/Bovine Virus Diarrhoea	Musongo wa mapweumbwa
Nematodes Infection	Tututu twa mulufu
Newcastle Disease	Shiki ya tu sumbi
Paratuberculosis	Musongo wa mahuyongu
Pesticide Poisoning	Musongo wakufuma kutututu
Pink Eye	Musongo wa mumeso
Plant Poisoning	Bulemwe wa ku mitondo
Pneumonia	Chishika cha va ngombe
Pulpy Kidney	Musongo wa jiso
Rabies	Musongo waliheke
Salt Poisoning	Ulembe wa mungwa
SARS-COV-2	Kuhona kuwhima kanawa
Schistosomiasis	Fukula
Scrapie	Mukule
Sheep Scab (Mange)	Mukule
Snakebite	Kusumiwa kulinoka
Sweating Sickness	Musongo wa mavule
Swine Flu	Shiki ya va ngulu
Tick-borne Disease	Musongo wafuma ku tuzengwe

Transmissible Venereal Tumour	Musongo wa kulitambasana
Trypanosomiasis	Musongo wa tuzende
Tsetse & Trypanosomiasis	Chikesu na musongo wa mumeya
Tsetse Fly Control	Chikesu
Tuberculosis	Musongo wa mahuyongu
Tungiasis/Jiggers	Tutomba
Unknown Disease	Musongo wa kuhona kutachikizha
Urea Poisoning	Bulembe wa kufuma kuwilo
Varroosis of Honey Bees	Musongo wa puka
Wounds	Jimbandu

918

919

Disease

Abortion
 Bloat
 Brucellosis
 Canine Distemper
 Coccidiosis
 Contagious Bovine Pleuro-
 pneumonia
 Distomatosis/Liver Fluke
 Dystocia
 Enteritis
 Fish Diseases

 Foot and Mouth Disease
 Goitre
 Mange
 Mastitis
 Nematodes Infection
 Newcastle Disease
 Pink Eye
 Rabies
 Sheep Scab (Mange)
 Tick-borne Disease
 Trematode Infection
 Tuberculosis
 Tungiasis/Jiggers

Language Kaonde

Kupulumuna
 Kuvimbilwa/Mfwii
 Kupulumuna
 Luwowota
 Kikopolo

 Kushinka mukyaji
 Bikola bya mizambo
 Kunkalwa kusema
 Kapokota
 Kikola kwamasabi
 Bulwele bwaku maulu na
 ku kanwa
 Kibovu
 Nkwasa
 Bikola yama mbele
 Mizambo
 Nshiki
 Kufota menso
 Nkukonya kwa bakabwa
 Nkwasa
 Bikola bya mashe
 Mizamikuvimbo
 Kikola kyamu kyanji
 Tutobela

920