## Enumerator Manual

National Panel Survey (NPS 2010-2011)

2010-2011
[United Republic of Tanzania]
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## Part I: Household Questionnaire

## General Instructions

## Introduction

For planning processes such as the design of social programs, investment in infrastructure, or the evaluation of policy, data are needed. Household surveys are one way to obtain such data. Research on income and expenditure at the household-level seeks to collect and analyze the flow of resources acquired and expended by households. The results of this research help evaluate different policies for addressing needs in the community.

## Research Aims /Objectives

The main objectives of the present household research project in Tanzania and Zanzibar (2010/2011) is to collect information at the household-level on: education, health, employment, children living outside of the home, water and sanitary practices, food expenditure both in and outside the household, nonfood expenditures, household resources, grants, crime and conflicts, governance, recent shocks to household wealth, deaths, women's issues and anthropometric status.

This data will allow the following:

* Evaluation and analysis of levels of poverty and quality of life at the household level
* Analysis of primary indicators on economic productivity, employment, and social welfare
* Preparation of a 'weighting system' for a Consumer Price Index
* The generation of general economic (macroeconomic) indicators; e.g. estimates of national income (Gross Domestic Product - GDP)
* Analyzing household ownership of productive assets and their linkages with household income activities


## Panel Data

Most household data is collected by visiting different households in different years of the survey. This data is called "cross-sectional." The National Panel Survey data is different because it revisits the same households as last time, meaning that we are recording information about not only the living conditions of the population, but also how those conditions have changed since the last survey. This makes fieldwork slightly more complicated - it will take time to find the same households again and to track
members that have moved. But it also makes the analysis more informative as now we know how shocks affect different types of households differently. It is important in this survey that you work hard to find every household on your list, as it is not possible to select replacement households for this survey.

## Confidentiality

Data collected from household members is confidential, as directed by the legal act 1:\{2002\} and should not be exposed to unauthorized persons unrelated to this research. Personal identifying details will not be removed before the data is released to researchers. This information will only be used for planning and future identification purposes. It is necessary to ensure respondents that the information they give will remain confidential and be used for research purposes only.

## Terminology

The following are explanations and clarifications of terminology used in this questionnaire and the research as a whole:

- HOUSEHOLD - The word 'household' refers to people who live together and share income and also basic needs. In other words, residents of a household share the same centre of production and consume from that centre.
- HEAD OF HOUSEHOLD - The head of household is the member of the given household who holds the role of decision maker in that household; other residents normally recognize this individual as their head. In most cases the household head should take part in the economy, control, and the welfare of the household in general.
- HOUSEHOLD HOUSING - This refers to the land/plot owned by one household regardless of appearance. It can be a single room, a building occupied by tenants, or more than one building occupied by household
- HOUSEHOLD INCOME - Sources of household include:
(a) Wages, salaries, benefits earned by workers
(b) Profits from agricultural and non-agricultural activities
(c) Interest earned on investments or savings
(d) Loans, aid or pension-payments received
(e) Income from the sale of property
(f) Other payments received from insurers, etc
- HOUSEHOLD EXPENDITURE - This includes the following:
(a) Resources used to buy items and services for daily living
(b) The price of items and services consumed by the household and the line item expenditure for these good and services
(c) Tax contributions, insurance payments, lottery tickets, interests for loans together with expenditure on items not used for consumption


## Responsibilities

The following section identifies the responsibilities of enumerators conducting this household research. Instructions given here relate to tools and procedures for work at the job-site. As in any other kind of work, unforeseen obstacles may develop during implementation of the research. To address these problems, it is important that the supervisor remain in clear and frequent communication with the head office in Dar es Salaam.

## Research Tools

Each interviewer should have the following on their person:
(i) Identity card
(ii) Letter of introduction
(iii) Instructional book (for interviewer and for questionnaire)
(iv) List of selected households in a given area
(v) Questionnaire
(vi) Pre-printed Roster Sheet
(vii) Pencil, rubber eraser, and sharpener
(viii) Writing board
(ix) Notebook
(x) Weighing sac
(xi) Spring balance
(xii) Beam Balance
(xiii) Infant Measuring Mat
(ixx) Upper Arm Measuring Tape
(xx) Meter rule
(xxi) Rain boots and raincoat

Supervisors will be given some of the aforementioned items together with a list of the households in the given area. Interviewers and supervisors should ensure that the tools are well kept because they cannot be obtained easily and there won't be excess tools issue for those that are destroyed.

## HOW DO WE GET INTO THE RESPECTIVE HOUSEHOLD FOR THE FIRST TIME?

Before initiating an interview in any give enumeration area, make sure that the village executive office (VEO) is aware of your presence. The interviewer should show his/her identity card and introductory letter to the village leaders at this time. Your supervisor will show the village leaders the list of people you are to interview, and then these leaders can introduce you to the households. The interviewer will be responsible for explaining the purpose of his/her arrival to each household. The interviewer should be neat, respectful, and dressed appropriately. Female interviewers should wear khanga to cover themselves when sitting, due to the lack of chairs in certain households.

## WHAT SHOULD BE DONE IF THE HOUSEHOLD IS UNAVAILABLE?

Because the National Panel Survey is returning to the same households that they interviewed two years ago, it is possible that some households or individual members will no longer be living in the same location. These households will be known as either "tracking" or "split off" households. More information will be available later in this manual about how to deal with these households, and you should tell your supervisor when one of these cases arises in the field.

## WHAT SHOULD BE DONE IF A HOUSEHOLD REFUSES TO PARTICIPATE?

The interviewer should do their best to earn the maximum cooperation of the interviewed households. Interviewers should inform respondents in advance that the research is for the benefit of the country. The interviewer should also seek for help from village leaders if they encounter severe obstacles. If a household continues to refuse to participate in the survey, the interviewer should report this to the supervisor. The interviewer should fill in the household identification information as done in other households.

## HOW SHOULD WE CONDUCT AN INTERVIEW?

Fill in the household preliminary information in the part A-1: HOUSEHOLD INFORMATION. The Identification Code for Regional, District, Ward and enumeration area (EA) will be given to you by your supervisor, as well as the household Code, Name of the household head and the list of eight household that will be interviewed. Remember, the household number is obtained from the list of households (listing forms) in the village or from the Enumeration Area (EA).

The success of the 2010/2011 panel survey depends on the responsibility and commitment of supervisors and interviewers. Make sure you collect the data correctly and that you build warm relationships with the interviewed households in your area. Make sure you arrive promptly at each household. Follow the pre-instructions and procedures, bearing in mind that you should return to the household regularly.

## Responsibilities of the Interviewer

As in many research projects, the interviewer is of fundamental importance. It is critical that the interviewer collect the necessary data/information accurately, as the whole research project depends on the way the interviewer fulfils his/her responsibilities:
(i) The interviewer must follow instructions step-by-step to successfully accomplish their tasks
(ii) The interviewer should generate warm relationships with their respondents, in order to receive accurate responses. Have confidence, and familiarize yourself with the traditions and customs of the given society you are working in.
(iii) The first-impression that the interviewer makes to the respondent, in terms of their manner of speech and dress, has great importance for the accuracy of the results, so do your best to look and act appropriately.
(iv) The interviewer should present him or herself with confidence and as someone who knows what they are doing. Additionally, the interviewer should never mention the gift/reward offered
at the end of the survey before it is complete, as this may affect the accuracy of information obtained from respondents.
(v) The interviewer must mention and emphasize the confidentiality of this research. The interview should be conducted between the interviewer and the respondent only; no other persons who do not pertain to the household should be present during the interview, unless allowed by the head of the household and for an important reason.
(vi) The interviewer must remember that the interviewer's role is to ask questions, whereas the respondent's role is to answer them. Therefore, the interviewer must not offer suggestions to the respondent. Nor should the interviewer express annoyance or any other reaction in response to the answers given by the respondent, as this may bias the data collected.
(vii) If the respondent does not readily respond to a question, the interviewer should remind them of the objectives of the research, as well as the confidentiality of the information given. But in no case should the interviewer force the respondent to answer.
(viiii) The survey includes a large number of questions but the interviewer must always follow the correct sequence, and manage the process effectively. If the respondent digresses during his/her Reponses, the interviewer should let the respondent do so and not seek to intervene in their speech. But after listening to him/her to the end, the interviewer should try to politely direct them back to the original question as in the questionnaire
(ix) You have to report to the supervisor immediately when you have the 'call back' so that the supervisor can prepare the schedule for the next day.
(x) It is important that the interviewer establishes a pre-agreement with the respondent about the time and place of the interview, and that they meet them promptly at the time and location that they prefer.

If the interviewer encounters any problem, he/she should petition help from their supervisor. It is important to remember that by collaborating in this way with the supervisor, the best data will be obtained.

## Questionnaire

The survey is made up of four questionnaires:
1: Household information questionnaire
2: Agricultural questionnaire
3: Fisheries questionnaire
4: Community Questionnaire (This will be conducted by the supervisor him/herself)

First category: Household information on demographics, education, health, labour/employment, , housing, water and sanitation, food consumption in the last week, food consumption outside the household, non food consumption (for the past week and month), non food consumption (for 12 past months), household assets, assistance and groups, credit, finance, recent shocks to household welfare, deaths, and anthropometric measurements.

Second category: Agricultural information on each household. This part has some questions concerning with agriculture such as the number of plots, crops grown on each plot, production and sales of agricultural products, agricultural equipments, livestock, etc.

Third category: Fisheries questionnaire. This questionnaire asks households about their activities in fishing, fish processing and fish trading, including questions on inputs, labour, sales and consumption. It is divided into two parts, one that asks high season information and one that asks low season information.

Fourth category: Community questionnaire. This part asks about the availability of community social services, investment projects in the last year, land usage, agriculture in villages, village demographics, available sanitation facilities, leadership, and price reports

## General Instructions for Completing the Household Questionnaire

## General Instructions

The most important thing to remember when completing the household questionnaire is to write clearly and accurately. Your information will have to be legible to the data entry operators for them to correctly input your answers into the computer. If answers are not written clearly, and cannot be correctly read by the data entry operator, they will trigger the consistency checks included in the data entry program, and may stop the team from moving from the EA on a timely schedule.

All of the questions are written as they are to be read to the respondents. Enumerators should not ask the questions according to their own criteria, except in situations where the respondent does not understand the question. In such situations, you must explain the content without changing the sense of the question. This is important to ensure that all respondents are answering the same questions.

## Format of the Questionnaire

The household questionnaire modules are organized according to two basic formats.

Columns (vertical) : In this format, the text area, the response categories and the response to each question are found organized sequentially in columns. An example of this is found in Module J: Housing, Water and Sanitation where only one response is needed for information covering the entire household.

Columns and rows: This format is used when there is information from multiple respondents in a single module. In this format, the questions are located in the columns and the responses are recorded in the rows. An example of this format is found in Module D: Health, where the responses from all household members are recorded on individual rows for the same set of questions.

## The Flap

The household questionnaire has a fold-out flap to record the name, age, and sex of each household member, translating into a "simplified"

household roster. The 12 rows of this table correspond to the 12 rows that appear in all modules in which information on individual household members is collected. When you fold out this flap, its rows align with the rows of the questionnaire modules. The agricultural module has three flaps, for sections three, four and five. Be sure to always use your flaps when completing the questionnaire as they will help assure that you put the information on the correct lines.

## Skip Codes

Throughout the questionnaire, you will find 'skip codes.' Skip codes tell you to proceed to a different question than the one that immediately follows to improve the flow of the interview. For example, if the respondent tells you that they have never attended school, you do not want to ask them at what age they began school or what was the highest level that they completed. Therefore you will find a skip code. This is

| 3. | 4. | 3. | 4. |
| :---: | :---: | :---: | :---: |
| Did [NAME] ever go to school? | At what age did [NAME] start school? | Did [NAME] ever go to school? | At what age did [NAME] start school? |
| YES . . 1 |  | YES . . 1 |  |
| NO.. . 2 |  | NO. . . 2 |  |
| (-29) | AGE | (-29) | AGE |
| 1 | 7 | 2 |  | the first time of skip you will find in the questionnaire, and is called a "conditional skip" which means that you skip based on the respondent's answer to the question. In the first example, the respondent did go to school, so the skip code does not apply and the interview continues with the next question in the sequence. In the second example, the respondent did not go to school. Therefore the skip code to question 29 applies. The following question is left blank and the next question that the respondent should answer is question 29.

The other type of skip code that you will find in the questionnaire is an "unconditional skip." These codes are easy to find because they have a box around them. With unconditional skips, no matter what the respondent answers, you should skip to the question indicated in the box. In this example, you should always skip to question 22, no matter what year the respondent indicates. All questions that are not answered because of the skip pattern or general flow of the questionnaire should be left blank - no information should be recorded.
\(\left.\begin{array}{|l|}\hline 8 . <br>
What year <br>
did [NAME] <br>
leave <br>
school for <br>
the last <br>
time? <br>
PUT "9999" <br>
IF DON'T <br>

KNOW\end{array}\right\}\)| -22 |
| :--- |
| $\mathbf{1 9 9 4}$ |

## Completion of Section C - F

- Read each of these sections continuously for the same person before proceeding to the next person. For example, in the household there are 3 household members: Julius, Mary and Alli. You are interviewing Julius. After completing the Household Roster:
- Complete Section C for Julius
- Complete Section D for Julius
- Complete Section E for Julius
- Complete Section F for Julius
- Then if you can find and interview Mary:
- Complete Section C for Mary
- Complete Section D for Mary
- Complete Section E for Mary
- Complete Section F for Mary
- DO NOT complete the first page of Section C (question 1-9) for Julius then ask about Mary for the first page of Section C. Complete a section in its entirely for one person before either moving to the next section for that person, or asking that section for a different person. It is very confusing for the respondent and for the enumerator!

Other responses. If the respondent says 'other' as his/her response, you should record the response. You should write the 'code for others' and then write the specific response next to the number. In this example, the
 respondent was absent from school to visit family in Dar es Salaam. This is not an answer choice, so the interviewer selects "12" and writes the reason in words.

Zero response. Responses that require a monetary figure have to be filled with ' 0 ' if there is no any amount used for the particular question. In the following example, the respondent says that he was

| CORRECT | INCORRECT |  |
| :---: | :---: | :---: |
| 15. | 15. | 15. |
| What w as the total cost of [NAME]'s stay(s) at the traditional healer or faith healer? | What w as the total cost of [NAME]'s stay(s) at the traditional healer or faith healer? | What was the total cost of [NAME]'s stay(s) at the traditional healer or faith healer? |
| INCLUDE EStim ATED VALUE OF ANY IN-KIND PAYMENTS. <br> TSHS | INCLUDE ESTIMATED VALUE OF ANY IN-KIND PAYMENTS. TSHS | INCLUDE ESTIMATED VALUE OF ANY IN-KIND PAYMENTS. TSHS |
|  |  |  |
| 0 |  | -- |

not charged for being taken to the spiritual services or when taken to the witchdoctor. The correct method of recording is to put " 00 ", as in the first example. It is incorrect to leave the box blank, as in the second example.

It is never permissible to leave a question blank that is not intended to be blank from the skip patterns. If the respondent does not know, probe to get the necessary information. If after probing the respondent still does not know, indicate '99' on the questionnaire instead of leaving it blank. Note, '99' answers cannot be used in the analysis, so every effort should be made to minimize the incidence of these responses.

Reading questionnaire. The interviewer should not ask a sentence or words written in CAPITAL LETTERS (other than the answer choices). Such sentences or words are Instructions to the interviewer, or they are answers to questions asked. Information written in capital letters is for the interviewer only. In these two examples, do not read the following to the respondent. Instead observe the roster list of household members and write the correct answer for this question.
[EXTRA EXAMPLE HERE IN SWAHILI MANUAL]

| 1. | 36. |
| :---: | :---: |
| IS THIS PERSON ANSWERING FOR HIMSELF/ HERSELF? | IS THE <br> RESPONDENT <br> A WOMAN <br> AGED 12 TO <br> 49 YEARS? |
|  | YES. . 1 |
| YES. . 1 | NO. . . 2 |
| NO. . . 2 | (\$42) |

Entering dates. When entering the month or year of an event, follow these rules:

Calendar month: Always enter 1-2 digits. Do not write the name of the month.

Calendar year: Always 4 digits

| Correct |  | Incorrect |  |
| :---: | :---: | :---: | :---: |
| 8. <br> Approximately when do you expect to pay back the money? |  | 8. |  |
|  |  | Approximately when do you expect to pay back the money? |  |
| MONTH | YEAR | month | YEAR |
| 7 | 2012 | July | 12 |

Last 7 days. For questions that ask for information from the "seven days ago", refer to the immediate last 7 days. Example: If the interview is on Monday, "seven days ago" refers to the previous Monday through Sunday (yesterday).

Decimals. If you need to report portions of a quantity less than 1, you should use decimals. Make sure that you write the decimal point in the questionnaire very prominently, such as 3.5 . Do not write fractions. For example, do not write " $31 / 2$ ".

Monetary amounts. When the response to be recorded is a monetary amount or figure, write the correct response in the corresponding cell. Only record responses in Tanzania Shillings. For example, if a respondent says $\$ 50$ (US dollars), use the approximate exchange rate to convert that into Tshs. If you are not sure, check with your supervisor. Record monetary amounts in Tshilling with no decimal point. Do not include cents. For any values less than 1 Tshilling, round to the nearest Tshilling. For any amounts over Tsh 1,000 include a comma.

Example:

| I | 1. <br> Within the past 7 days, did the members of this household eat/drink any [. . .] w ithin the household? | 4. |
| :---: | :---: | :---: |
| T |  | How much did |
| E |  | you spend? |
| M |  |  |
| C | YES . . 1 |  |
| D | NO. . . 2 |  |
| E | ( $\triangle$ NEXT) | TSH |

CORRECT

INCORRECT

| 0101 | Rice (paddy) | 1 | 3400 |
| :--- | :--- | :---: | :---: |
| 0101 | Rice (paddy) | 1 | $3,400 /=$ |
| 0101 | Rice (paddy) | 1 | 3,400 Tsh |

Comments. You should write any relevant/important comments in the Comment Box on the second page of the questionnaire. You can write small comments or notes to yourself on the other pages of the questionnaire (in the margin) to help you when you edit the questionnaire later. But do not expect your supervisor to read these comments. Any comments you want your supervisor to read should go on page 2 in the Comment Box.

## Pre-Printed Roster Form

The most important change from the last survey is the pre-printed roster form, which we will call T0. You will have this form for every household that was visited during the last survey, and it will contain the information that you will need to re-locate the household, and the fill in the appropriate forms for both household members that remained in the household or those that have left. The "Tracking" section that appears later in this manual will give you all the details you need to complete this form and the other forms as needed. What is important for the household questionnaire is that you have the "hhid" number for the original household (which you must copy carefully and accurately onto the cover of the household questionnaire) and the original roster numbers for the respondents (which is needed to complete question 6 of section B.)

## Section A-1: Household Identification

We start with name of the region and its code (the code of the region has only two figures, example, Dodoma region is coded 01, Arusha 02 up to last region which is Kusini Pemba 55). Then follows the names of the district, ward and villages with their codes. All the codes are listed on the National Census and habitat of 2002.

Codes for villages/streets have three figures. Normally the village code starts with 0 followed by a number. Household codes have four figures depending on the selected households for the interview.

On the right side of the introduction of the household there is box. Put $\mathbf{x}$ in the box and the number of the form below the box. If you use more forms for one household make sure you do the same thing.

FORM $\qquad$ OF $\qquad$ TOTAL

If you have used more forms, write $\mathbf{x}$ inside the small box on the right side of this page, and FORM 1 OF 4 TOTAL.

## Question 8:

You will write the name of the current household head. If the household head is the same as the head at the time of the last survey, this response will be the same as question 10 . If the head has changed, you should write the name of the new head here.

## Question 9:

If this household is the original household in the same location as in the previous round of the survey, code it 1. If it is the original household but in a new location, code it 2 . If it is a split off household from the original household, code it 3.

## Question 10:

Write the name of the original head when the household was interviewed in 2010/2011 - even if this person is no longer the household head. This information will be available to you on the preprinted roster sheet, which you will bring to the household.

## Question 11:

Copy the full 14-digit household identification number from the pre-printed roster sheet. This number should be the same as the one printed on the sheet even if the household has moved to a new location. It is extremely important that you copy this number accurately as it will be used to link the data between the two years of the survey.

## Question 12:

You will write the number of the house if this exists, if not, the location: like the name of the neighboring household head, permanent address, telephone number and other important features like school, church, mosque, police station, etc which can help a person to locate the household. This information will be used to locate the household in subsequent rounds of the survey.

## Section A-2: Survey Staff Details

## Question 13:

Name of enumerator. Here the interviewer writes their full name.

## Question 14:

Enumerator code. Every interviewer will have a code; this is always filled in for each and every questionnaire he/she attends.

## Question 15:

Time interview start. The interviewer should record the starting and finishing time of the interview. The start time should be recorded in Swahili here, and the finishing time should be recorded in Swahili in the box at the end of the questionnaire.

## Question 16:

Date of the Interview. Write the date of the household with the household member. Start with day month and then year.

## Question 17, 18, \& 19

These questions are for the supervisor to fill out with his/her name, number and the date of questionnaire inspection.

## Question 20, 21, \& 22

These questions are for data entry only. The data entry clerk should fill out with his/her name, number and the date of entering the data.

## Question 23, 24, \& 25

These questions are for second data entry only. The second data entry clerk should fill out with his/her name, number and the date of entering the data.

## Observations on the Interview

On the right side of this page there is a big box where the interviewer should write their views on how the interview was conducted, and any more important information, which may help the
supervisor and the analysts of the questionnaire. Observations should be written at the end of the interview.

## Introduction to the household to be interviewed

The interviewer has to read the letter of introduction confidently, and then give time for the respondent to ask questions. The interviewer should explain the content of the questionnaire: Education, health, employment, etc. There are three different version of the introduction and you will need to select the one that is appropriate to the household that you are interviewing. All households should be read "Convey the Following to the Respondent" section. If the household is in the newly selected clusters in Morogoro, Dar es Salaam or Pwani (which will be interviewed at the very beginning of data collection), they should then be read "New Households in Morogoro, Dar es Salaam and Pwani." If the household is part of the main fieldwork and is not a split off household, they should be read "NPS Households." This section will be the most common. If the household is a split off household, you should read the "Split-Off Household" section. All households should then hear the "All" section before you begin the interview.

## Section B: Household Member Roster

You should complete questions 1-6 for all household members before moving on the remaining questions. You should also complete the household roster flap after question 6 .

Question 1. List all household members, starting with the head, wife (if there is any), children, relatives, and servants. You have to list those who share the meal in the household and contribute to the household income. After listing, read out the names to the household head to make sure that all household members are listed.

Question 2. Gender codes are 1 for men and 2 for women. This is an important question for all household members. Do not determine the gender by names, because some names are used by both genders - for example, Tumain, Bahati and Happy can be both men and women. Even for children, you have to make sure of the gender, because sometimes boys can look like girls, and girls like boys. The interviewer should be careful, because wrong coding of the household members can distort the whole data.

Question 3. When was (NAME) born?
Fill in the month and year when (name) was born. Write year first, then month. If the respondent does not remember the month, you will write '99' on the month Column.

It is possible that household members may not remember the year of his/her birth. Then the interviewer should use the following events to help the respondent to remember the year.
Events ..... Year
Starting of First World War ..... 1914
End of First World War ..... 1918
Starting of British rule in Tanganyika ..... 1919
Starting of Second World War ..... 1938
End of Second World War ..... 1945
Birth of TANU ..... 1954
Independence of Tanganyika ..... 1961
Zanzibar revolution and Zanzibar-Tanganyika Union ..... 1964
Arusha declaration ..... 1967
Birth of CCM 1977
Kagera war 1978
Retirement of Tanzania first president 1985

Question 4. Age of (NAME). Enter age of all household members in two digits. If the age is below one year, write ' 00 ' and if it is ' 98 ' and above enter ' 98 '. You should verify that this is consistent with the year listed in the previous question. You should also compare this information with that on the preprinted tracking form. If there are differences, you should probe to find out the real information from the respondent. Indicate the correct age on the new roster. You should also make a note on the observations box that the pre-printed date was incorrect.

Question 5. Enter the code of the relationship with the household head. These are codes with only one figure example (1...9) Servants to be included are those who share the meal and recognize the household head as their boss. Use the codes as indicated on the questionnaire. Again, this information should be compared with that on the pre-printed form and any discrepancies reconciled on the new questionnaire.

Question 6. In this question the interview will indicate if this household member was present at the last NPS survey in Year 1. If yes, then write a household ID number from the pre-printed tracking form. Otherwise, fill in 99.

At this point in the questionnaire, you should pause to complete the household roster flap. You should now ask the information to a single household member straight through to section $G$ (on page 25) before continuing with other household members.

Question 7. This question intends to know if (NAME) shared the meal in the household for the past seven days. If yes, fill in 1, and if no, fill in 2

Question 8. For this question, ask how many days in the last month the household member was present in the household. If the member was present for the entire month, indicate 30.

Question 9. For the past 12 month has (name) stayed in this household for three month or more? If yes code it 1 and if no code it 2 . Those with 'no' mark them $x$ and do not ask them the following questions as they are not household members for the purposes of this analysis. Note that there are
three very important exceptions to this rule. They are listed in the directions box on the left of the first page of the roster. The exceptions are: infants less than 3 months old, new household members, and boarding school students.

Question 10. Within the past 12 (Month/Year), how many months (NAME) stayed outside this household. Record the number of month (NAME) stayed outside the household.

Question 11. What is the main occupation of (NAME) for the past 12 months? Refer to the codes of household activities: Agriculture/Livestock 1... Fishing 2... Mining 3... Tourism 4... etc. Fill in the activity the respondent depends on the most for income. Use code 17, "TOO YOUNG" only for children that are less than 5 years old who are not in school. If the child is 6 years old and not in school, use code 16 "no job".

Question 12. Ask if the father of (NAME) stays in the household. If the answer is yes, record his roster ID number and move to question 15. If he is outside the household record 97 and go to question 14. If he is dead, code 98. If the respondent does not know, use code 99 and move to question 14.

Question 13. Ask the respondent how old was (NAME) when the father died. Record the age of the child when the father died, not the age of the father when the father died.

Question 14. This question intends to know the standard of education of the father of (NAME). Record the highest grade attended. Use the codes listed on the questionnaire.

Question 15. Ask the respondent where the mother of (NAME) is. If she is a member of the household, fill in the mother's roster ID number and move to question 18. If she is outside the household fill in 97 and go to question 17. If she is dead, code 98. If the respondent does not know, use code 99 and move to question 17.

Question 16. How old was (NAME) when the mother died? Record the age of the child when the mother died, not the age of the mother when the mother died..

Question 17. Fill in the level of education of the mother of (NAME). Record the highest grade attended. Use the codes listed on the questionnaire.

Question 18. This question should not be asked to the respondent. Interviewer, check the age reported in question 4 to see if (name) is 12 years old or above. If yes then code it 1 ; if no code it 2 . If this is the last member on household roster move to question 25 . Otherwise move to the next section for this household member.

Question 19. State of marriage of (NAME): For monogamous married code 1, polygamous married code 2 , living together code 3 ; and then move to question 21 . For separated code 4 , divorced code 5 , never married code 6, widow(er) code 7; and then move to question 25.

Question 20. Type of marriage ceremony of (NAME). Enter the code of the type of marriage ceremony as it is given in the questionnaire. In this research the word 'Marriage' means a man and woman married with a ceremony by the government, religious, or traditional. It also includes those who have decided to live together for a long time. Part time lovers are not included. If it is a government marriage code it 1 , religious marriage code it 2 , traditional marriage code it 3 .

Question 21. Is the spouse/partner of (NAME) living in this household? If the answer is yes code it 1. If the answer is no code it 2 and move to question 23.

Question 22. This question is for the interviewer and should not be asked to the respondent. Here you have to record the roster ID number of the husband/wife from the household roster. If the husband has more than one wife, record their numbers. If the number of wives is more than 4, record up to 4.

Question 23. Does (NAME) have a wife/husband outside this household? If the answer is yes then code it 1 . If the answer is no, then code it 2 and skip to question 25.

Question 24. How many spouses of (NAME) live outside the household? This question should be asked to Men only! Record the number of wives living outside the household. If there are none, record '0’. Do not leave any empty space.

Question 25. For how many years has (NAME) lived in this community? Record the number of years. If it is from the time of birth record ' 99 ' and move on to the next section for the same respondent.

Question 26. (NAME) moved here from which District? This is a very important question, because it captures how people are moving in and out of this community. Fill in the name of the country if he/she moved in from another country, or the name of the district if from another district. For district, fill in the district and region codes using the code list on the back of the questionnaire. If the person has moved from another country, just enter the name of the country, and no code.

Question 27. Reason of (NAME) moved to this household. Use the codes listed on the questionnaire.

Question 28. In which district (NAME) was born? Ask the country; if it is another country record the name of the country only, and no code. If another region or district, record the name of the district and the code for the district and region using the codes on the back of the questionnaire.

## Section C: Education

Question 1. This question is for the interviewer and should not be asked to the respondent. This questions asks you to identify household members who are 5 years old and above. Check the ages from Section B. If the household member is 5 years old and above code it 1 , if no then code it 2.

Question 2. Can [NAME] read and write? You have to identify who can read and write in Kiswahili, English, or any other language, without considering whether they have gone to school. All household members over age 5 should be asked this question. Code 1 for Kiswahili only, 2 for English only, 3 for Kiswahili and English, and 4 for any other language. Code 5 if the respondent cannot read or write in any language, then go to question 3.

Question 3. Did (NAME) ever go to school? You have to identify who has education in the household, without considering the grades. All household members should be asked this question. Code 1 for yes, and code 2 for no. If the answer is no, move to question 29.

Question 4. At what age did (NAME) start school? Ask the age of starting school for the first time, this is what will be recorded.

Question 5. Is (NAME) currently in school? You need to get current information on if the respondent is going to school at the moment. If the answer is yes, then code 1 and move to question 9 , if it is no then code it 2 and continue with the following questions.

Question 6. Was (NAME) in school last year? You have to find out if the person in question was in school last year. If the answer is yes, then code it 1 and move to question 10 . If the answer is no, then code it 2 and continue with the following questions.

Question 7. What is the highest grade completed by (NAME)? Record the highest grade that was completed by the person in question. Check the codes for grades. Note that code " 19 " is "OSC," which stands for "Orientation Secondary Course." This code applies only for those students studying or those who have studied in Zanzibar or Pemba. Respondents educated on the mainland should not use this code.

Codes for question 7, 9, \& 10

PP ................ 01
PRIMARY
D1................. 11
D2.................. 12
D3................. 13
D4.................. 14
D5.................. 15
D6................. 16
D7.................. 17
D8.................. 18
OSC................. 19
MS+ CCOURSE....... 20
UNIVERSITY
U1................. . 41
U3................. 43

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ADULT ................ }0
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ADULT ................ }0
SECONDARY
SECONDARY
F1 ................... }2
F1 ................... }2
F2 .................. }2
F2 .................. }2
F3 .................. . . 23
F3 .................. . . 23
F4 .................. }2
F4 .................. }2
'O'+ course........ }2
'O'+ course........ }2
F5 .................. }3
F5 .................. }3
F6 ................... . }3
F6 ................... . }3
'A'+ COURSE ........ }3
'A'+ COURSE ........ }3
DIPLOMA .............. }3
DIPLOMA .............. }3
U2 . . . . . . . . . . . . . . . }4
U2 . . . . . . . . . . . . . . . }4
U4 ................... 44
U4 ................... 44
U5\&+ . . . . . . . . . . . . . . 45

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U5&+ . . . . . . . . . . . . . . 45
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Question 8. What year did [NAME] leave school for the last time? Record the year in which the person in question left school for the last time. If they left school for a short break in 1995 (for example to work), then returned again in 1997, and then completed school in 2000, record the year 2000 as the year they left school for the last time. Then move on the question 22 for all respondents.

Question 9. Which grade is (NAME) currently attending? You have to ask the highest grade during the interview. If it is standard seven, enter the standard seven code 17.

Question 10. What grade was (NAME) attending last year? If (NAME) was in school last year, find out what grade he/she was in.

Question 11. This is for the interviewer and should not be asked to the respondent. Refer to the response in Question 5 and indicate if (NAME) is currently attending school. They would be considered currently attending school if they have answered yes in question 5. If the respondent is not currently in school, skip to question 22.

Question 12. Who owns the school (NAME) attends? Use the codes indicated on the questionnaire.

Question 13. Is this school a boarding school? Ask whether the school is a boarding school. If yes, code 1 and go to Question 16. If no, code 2 and continue with the next question.

Question 14. How does [NAME] usually travel to school? Find out the typical means of transportation, which the respondent uses to get to school. Use the codes indicated in the questionnaire.

Question 15. How long does is take [NAME] to get to school by this means of transportation? Find out the amount of time it takes to get to school ONE WAY using the means of transportation indicated in Question 14. Give the answer in minutes

Question 16. Does (NAME) get meals at the school (school feeding)? If (NAME) does not pay any extra money for food, code it 1 . If they do not receive meals at school, or they have to pay for these meals, code it 2.

Question 17. Has [NAME] missed school in the last two schooling weeks? If the answer is yes, code it 1. If the answer is no code it 2 and move to question 19.

Question 18. Find out the reason the household member failed to attend the school. Use the codes indicated in the questionnaire.

Question 19. What is the status of the textbooks [NAME] uses for school? Find out if the household member uses textbooks, if they borrow the textbooks from school or own the textbooks themselves, and if they borrow textbooks from school, whether they can take them home. Use the codes indicated in the questionnaire.

Question 20. In the last week, approximately how many hours did [NAME] spend on homework or studying? Find out how much time the household member spends doing schoolwork in the house or outside of school. Indicate the total time in hours and minutes.

Question 21. Has [NAME] had any problems at school? Find out if the household member has any issues at school or problems with the school environment. Indicate up to two (2) answers in order of importance from the list of codes in the questionnaire.

Question 22. Did [NAME] take the Primary School Leaving Exam (PSLE)? Code 1 if yes and go to the next question. Code 2 if no and go to question 24.

Question 23. How did [NAME] score in the exam? Indicate whether the household member passed or failed the PSLE, or does not know how they scored. Code 1 if pass, code 2 if fail, and code 3 if they don't know. The "don't know" code is included mainly for those respondents who are answering for another much older household member and should be used only very rarely.

Question 24. Did [NAME] take the Form 4 or Form 6 exam? Find out if the household member took either the Form 4 or Form 6 exam. Code 1 if they took the Form 4 exam, code 2 if they took the form 6 exam, and code 3 if they did not take either exam and go to question 28.

Question 25. In what year did [NAME] take the exam? Indicate the year in which the household member took the Form 4 or Form 6 exam as indicated in the previous question.

Question 26. Will you show me the exam certificate? Ask to see the exam certificate for the Form 4 or Form 6 exam. Record whether the household member shows you the certificate using the codes in the questionnaire.

Question 27. How did [NAME] score in the exam? Ask this question to everyone who has taken the Form 4 or From 6 exam and has their exam certificate. Record the answer using the codes in the questionnaire.

Question 28. Question 28 asks about various expenses that (NAME) might have had to pay for their education over the last 12 months. Estimate the value in TSH, including in-kind goods. If there was no expenditure for a certain category, indicate 0 . The last column should be totaled by the interviewer by adding up the T-shilling amounts in all the columns preceding. Note that shoes should be considered as part of the uniform.

Question 29. Has [NAME] ever attended an adult education class? Which one? Record whether the household member has attended an adult education class, using the codes in the questionnaire. If the household member did not attend any class, record 4 and move to the next section. MUKEJA is a program for those who were unable to attend or complete primary school during their childhood. KCM (Kisomo Cha Manufaa) is a more limited adult literacy program for those who would like to learn to read or write. KCK (Kisomo Cha Kujiendeleza) is a program that offers accelerated version of primary school for those respondents that wish to re-join the formal primary or secondary school system.

Question 30. How many months did [NAME] attend this adult education class? Record the answer in months.

## Section D: Health

This section is about the health of the household members regardless their age. These questions should be asked to all household members 12 years and older, and the household member should respond for him or herself. Follow the directives and the proper codes.

Question 1. This is for the interviewer and should not be asked to the respondent. Fill in the code 1 if the household member answers the question himself and code 2 if he/she is not answering him/herself.

Question 2. This question is asked to all household members without considering who was sick and who was not. Sometimes, some people go to the clinics to check their health even without being sick. If the answer is yes, then code it 1 and continue with the next question. If the answer is no then code it 2 ; if he/she did not go to hospital or anywhere to have health advice in the past four weeks, skip to question 7.

Question 3. This question asks for the type of provided that the respondent visited. Up to two may be listed using the codes in the questionnaire. If the respondent lists a type of health provider that is not included on the list, use code 18 and write the provider in words.

Question 4. How was the treatment of (NAME) financed? Record two possible means of funding. Use the codes listed on the questionnaire. If the source of funding is not on the list, use code 9 and write the funding source in words.

Question 5. How much did [NAME] spend when you visited [PROVIDER]? Record the amount of money spent on the visit to the provider listed in question 4. If the respondent listed two types of providers, ask about the costs associated with each type separately, and record the amount spent separately for each type of provider.

Question 6. Did [NAME] have any problems during the visit to the health provider? Find out if the household member had any issues when they visited the health provider. Indicate up to two (2) answers from the list of codes in the questionnaire.

Questions7-9 is about the cost of medication. You have to add up all costs, including in-kind for all means of paying, whether through household finances or health insurance. Then record the total cost in shillings.

Question 7. What was the cost to pay for the treatment of (NAME) for medical treatment related to illness and injuries within the period of 4 weeks, including prescription medicine, tests, consultation, and in-patient fees? Convert any in-kind payments into TSH. Be careful not to include any non prescription medication in this question as it will be recorded in question 9 . Include the value reported in question 5.

Question 8. What was the cost to pay for the treatment of (NAME) for medical treatment not related to illness and injuries within the period of 4 weeks, including preventative health care, prenatal visits, check-ups, etc? Convert any in-kind payments into TSH.

Question 9. What was the cost to pay for the treatment of (NAME) for non-prescription medication within the period of 4 weeks, including Panadol, Fansidar, cough syrup, etc? Convert any in-kind payments into TSH.

Question 10. For the last 4 weeks was [NAME] hospitalized or did [NAME] stay overnight in a medical facility? Find out if the household member in question spent at least one night at a medical facility. Indicate yes or no. If yes, code 1. If no, code 2 and go to question 14.

Question 11. How many stays and for how many nights was [NAME] hospitalized? If the respondent answered yes to question 8, record how many stays nights they spent in the hospital or medical facility. The number of new stays would be the number of times that the individual was taken to the hospital and stayed at least one night, regardless of the total length of the stay. For example, if a household member was admitted to the hospital during the first week of the month for three nights, then during the third week of the month for one night, and finally in the last week of the month for four nights, the total number of new stays would be three, and the total number of nights would be eight.

Question 12. What type of illness or injury did [NAME] have that led to his/her hospitalization? Record the name of the illness or injury, using the codes in the questionnaire. List up to 2 . If the illness is not included in the choices, use the "other" code and write the name in words.

Question 13. What was the total cost of (NAME)'s hospitalization(s) or overnight stays in a medical facility? Write down the total amount of money spent when (NAME) was admitted for the health services within the period of the past 12 month. Convert any in-kind payments into TSH.

Question 14. During the last 12 months, did (NAME) stay overnight at a traditional faith healer's or faith healer's dwelling? Identify if the household member stayed overnight at a spiritual centre or the herbalist centre within the period of the past 12 months. If the answer is yes code it 1 , if the answer is no code it 2 and move to question 16. This will not include hospital and dispensary services.

Question 15. What was the total cost of (NAME)'s stay at the traditional healer or traditional faith healer? Record the total amount of money spent when (NAME) stayed at the spiritual centre or herbalist centre within the period of the past 12 month. Convert any in-kind payments into TSH. If more than one payment was made over the last 12 months, the individual payments should be added and the total amount recorded here.

Question 16. This is a question for the interviewer only to identify children under 5 years. If the respondent is a child under 5 years of age, skip to question 31. The disability/difficulty questions are only for adults and children above the age of 5 .

Question 17-30 ask about the respondent's disability status. Some people may not call themselves disabled, but still are unable to perform certain functions. These questions are designed to reach a broader definition of disability than what may be physically, mentally, or emotionally visible.

Note that the skip patterns might be a little hard to follow in this section. If the respondent indicates that they have no difficulties in performing the function, code 1, and skip the next question about age of onset. If the respondent indicates that they do have difficulty in performing the function listed, probe as to the level of severity, and use the appropriate code listed in question 17. The next question, age of onset, question should only be asked for those respondents who indicated 2, 3 or 4 in the earlier question.

Question 17 \& 18. Ask the respondent (household member) if they have any difficulty seeing, even if the respondent is wearing glasses. If the answer is no, code 1 and move to question 19. If the answer
is yes, probe for severity and then move to question 18 and record how old the respondent was when the difficulty began.

Question 19 \& 20. Ask the respondent (household member) if they have any difficulty hearing, even if you can see that they are wearing a hearing aid. If the answer is no, code 1 and move to question 21. If the answer is yes, probe for severity and then move to question 20 and record how old the respondent was when the difficulty began.

Question 21 \& 22. Ask the respondent (household member) if they have any difficulty walking or climbing steps. If the answer is no, code 1 and move to question 23 . If the answer is yes, probe for severity and then move to question 22 and record how old the respondent was when the difficulty began.

Question 23 \& 24. Ask the respondent (household member) if they have any difficulty remembering or concentrating. If the answer is no, code 1 and move to question 25 . If the answer is yes, probe for severity and then move to question 24 and record how old the respondent was when the difficulty began.

Question 25 \& 26. Ask the respondent (household member) if they have any difficulty with taking care of him/herself, including difficulty washing, dressing, feeding, using the toiler. If the answer is no, code 1 and move to question 27. If the answer is yes, probe for severity and then move to question 26 and record how old the respondent was when the difficulty began.

Question 27 \& 28. Ask the respondent (household member) if they have any difficulty communicating in their first language, like if they have difficulty understanding or being understood. If the answer is no, code 1 and move to question 29. If the answer is yes, probe for severity and then move to question 28 and record how old the respondent was when the difficulty began.

Question 29. Does this difficulty reduce the amount of work (NAME) can do at home, at work, or at school? Now look back at the answers to the previous questions (17-27). If the respondent answered yes to any of the odd-numbered questions, such that you recorded a 2 , 3 , or 4 in the answer box, then ask question 31 . Find out whether the difficulty causes the respondent to reduce the amount of work he/she does at home, at work, and at school, and how much the work is reduced. If a category is not valid, for example if the respondent is not in school, use the code "not
applicable" (code 4). If the respondent answered no to all of the previous questions (17-27), move to question 31.

Question 30. During the past 12 months, what measures were taken to improve (NAME)'s performance of activities? If the respondent answered question 29, then ask if the respondent has taken any measures to improve their performance of activities. Record the measures taken using the codes in the questionnaire.

Question 31. Did (NAME) sleep under a bednet yesterday? Ask the respondent if (NAME) used a mosquito net as a prevention of malaria last night. Use the codes listed on the questionnaire to indicate if they slept under a bednet, and probe to find out whether the bednet was treated. If they did not use a mosquito net, code 4 , or they do not know, code 5 , and skip to question 34 .

Question 32. How did the household obtain this bednet? This question intends to know how the household obtained the mosquito net used by (NAME). Use the codes listed on the questionnaire. If the mosquito net was free, code 1 and skip to question 34.

Question 33. How much did the household pay for the mosquito net? Make sure they tell you the amount used to buy the mosquito net. If it was an exchange of something which is not money, then convert the value into TSH. If a mosquito net is shared between members of the household (for example, between father and mother), only record the cost of the net once.

Question 34. Does [NAME] possess their birth certificate? Find out whether the individual has a birth certificate. If no, probe to find out if their birth was registered with the civil authority. Use the codes in the questionnaire.

Question 35. In the last year, did [NAME] access a medical exemption at a public health facility? Indicate yes, no, or don't know using the codes in the questionnaire.

Question 36. This question is for the interviewer and should not be asked to the respondent. Verify if (NAME) is a woman between 12-49 years old using the ages from the Roster. If the answer is yes, code 1 , and if the answer is no, code it 2 and skip to question 41.

## Questions 37-41 should be asked to women between 12-49 only.

Question 37. In the past 24 months, did (NAME) give birth to a child, even if born dead? If the answer is yes code it 1 , and if the answer is no code it 2 and move to question 44 . Be sensitive when asking this question as the information might be sensitive for the respondent.

Question 38. Did (NAME) regularly go to a health clinic when you were pregnant with your last child born in the last 24 months? If it is yes code it 1 and if it is no code it 2.

Question 39. Where did (NAME) deliver (NAME)'s last child born in the last 24 months? Use the codes listed on the questionnaire. If the respondent names a place that is not listed in the codes, use code 4 and write the name in words.

Question 40. Who delivered this child? Find out who assisted during labor. Use the codes listed on the questionnaire. If the respondent names a person that is not listed in the codes, use code 4 and write the person in words.

Question 41. Was this birth registered? If yes, code 1 and if no, code 2.

Question 42. This is for the interviewer and should not be asked to the respondent; verify if the household member is a child of 60 months (5 years) or less using the Roster. If yes, you will write code 1 and continue, and if no, write code 2 and move to next section.

## Question 43-49 should be asked to household members who are 60 month old or less (below 5 years)

Question 43. Has (NAME) had diarrhea in the last two weeks? Ask the respondent if (NAME) had diarrhea in the period of the past two weeks. Diarrhea is determined by the perception of the mother or caretaker, or by three or more loose or watery stools per day, or by blood in stool. If yes write code 1, if the answer is no, then write code 2 and move to the next section.

Question 44. Now I would like to know how much (NAME) was offered to drink during the diarrhea. Was he/she offered less than usual to drink, about the same amount, or more than usual to drink? If less, probe for more information as to how much less. Use the codes indicated on the questionnaire.

Question 45. When (NAME) had diarrhea, was he/she offered less than usual to eat, about the same amount, more than usual, or nothing in to eat? If less, probe for more information as to how much less. Use the codes indicated on the questionnaire.

Question 46 \& 47. Ask if the sick child (diarrhea) was given ORS or health worker-recommended homemade fluid. If yes write code 1 and if no write code 2.

Question 48. Did (NAME) seek advice or treatment for the diarrhea? If the answer is yes then write code 1 , if no, then write code 2 and move to the next section.

Question 49. Where did (NAME) seek advice or treatment? This question you will write up to three services where the respondent went for consultation and treatment of diarrhea of the child. Probe for more than one place treatment was sought. Use the codes listed in question 3 of this section, and indicate up to three responses in order of importance.

## Section E: Labour

This section is about the work activities which members of the household do in order to sustain their life. These questions should be asked to all household members 5 years and older. When possible, the household member should respond for him or herself. Follow the directives and the proper codes.

## Definitions

Work /activities: Work is any lawful activity which a person engages in, in order to sustain his life.

Last 7 days: This is an international measure on work remembrance; it has been used for many years. In these questions, the past 7 days is used to mean the seven days prior to the date of the interview. This period is very important for recording ongoing activities.

Last 12 months: In these questions, the past 12 months is used to mean the previous 12 months starting from yesterday. Since it may be difficult to remember the precise activities one year ago from today, this should include the general 12 months prior to the date of the interview.

Absence at a work place: Make sure that anybody absent from the work for some time is listed as the worker during his absence.

## Examples of absence at a work place:

Employers who are paid while on leave: These must be persons who are expecting to go back to work. The period of being out can be counted up to four months (this includes maternity leave)

Self employment in business and agriculture: A person of this caliber must be ready to go back to his business and the business must be operating during his absence. This person is given only one month of absence.

Labourers: These people should not be counted as not being on the place of work for some time. They have no contracts.

## THESE QUESTIONS SHOULD BE ASKED FOR HOUSEHOLD MEMBERS WHO ARE FIVE YEARS OR OLDER.

[EXTRA EXPLANATION PROVIDED HERE IN SWAHILI MANUAL]

Question 1. This question is for the interviewer and should not be read to the respondent. This vertical line the in reviewer is supposed to verify all household members who are above 5 years. If yes you will write code 1, and if no, write code 2 and move to next section.

Question 2. Here also the interviewer has to verify if the household member is going to answer the questions. Fill in the code 1 if the household member answers the question himself and move to question 4. Fill in code 2 if he/she is not answering him/herself. It is best if everyone person can answer for himself or herself as they would have the best information about how they use their time.

Question 3. This is for the interviewer and should not be asked to the respondent. Fill in the household id code of the person answering on behalf of the household member.

Question 4. Did you do any work of any type for pay, profit, barter or home use during the last 7 days? This question intends to find out if the household member is engaged in production for the household's expenditure in the past seven days. If yes code it 1 and skip to question 6 . If the answer is no code it 2 and continue with the following questions.

Question 5. Although you did not do any work during the last 7 days, did you have a job or own farm or enterprise at which you did not work during the last 7 days and to which you will definitely return to work? This question is about farm/business work/activities which a person is ready to continue even if he did not work for the past seven days. A good example of this would be a teacher who is on leave because the school is in recess. If the answer is yes, use code 1. If the answer is no, use code 2 and move to question 9.

Question 6. This question should capture the activity on which the household member spends most of his time. If the household member does a few different activities for work, record the one which they spend the most time doing. Note that a housewife could be considered an unpaid family worker (non-agric) or unpaid family worker (agric) depending on if she has done any work in the fields over the last 7 days. Use the codes found in the questionnaire.

Question 7. How often in a week do you work in your current job? Record the frequency that the household member does the work mentioned in question 6 for an average week. If he does the work every day, use code 1 . If he works often but not every day code 2 , if he works sometimes code 3 , and if he works seldom code 4. Then move to question 12.

## Questions 8-11 is about unemployment for the past seven days.

Question 8. Were you available for work during the last 7 days? Available means ready and willing to work, with nothing such as illness or other obligations preventing the respondent from being able to work, even if they do not have a job. If the answer is yes code it 1 and move to question 11 , and if the answer is no, code it 2.

Question 9. Ask why (NAME) was not available to work for the past seven days. Use the codes listed in the questionnaire. Following this question, skip to question 11.

Question 10. This question wants to know if (name) has made any efforts to look for work (job) within the period of the past four weeks. Steps to look for work could include printing and distributing CVs, asking in local businesses if positions are available, or going to local places where employers search for day laborers. Write code 1 if the answer is yes and code 2 if the answer is no.

Question 11. Ask (NAME) when he worked for payment for the last time - including casual labor. Write the month in two figures and the year in four figures. If the household member never looked for work, write 0 for the month and 0 for the year. If you answer this question skip to question 14.

## Question 12-43 concerns household members who are employed.

Question 12. This question asks if the respondent did any wage work during the last 7 days. If the answer is yes, code it 1 and move to question 14, if the answer is no, code it 2.

Question 13. This question asks if the respondent did any wage work during the last 12 months. If the answer is yes code it 1 . If the answer is no, code it 2 and move to question 44.

Question 14. Ask the household member for the name of the company or organization that he/she works for. Make sure you write the correct name for the answer, and verify the spelling with the respondent. If he mentions two places, ask one which is more important and record that place in this section. There will be space to discuss the other place in the "secondary employment" section.

Question 15. Is your employer for this work...? List the type of employer, using codes listed on the questionnaire.

Question 16. What kind of work do you usually do in this job? This question asks about the occupation of the respondent. The main employed occupation over the past 12 months is either an individual's only occupation OR the occupation that the respondent worked the most hours, if the respondent worked at more than one job. For individuals with two occupations with the same number of hours, the main employed occupation is the one that gives the largest income. If equal in number of hours and income, the one that the respondent considers as his or her main occupation should be noted. Occupation refers to the kind of work the person does or the kind of the work he/she did, when he/she was working for the first time. This question is to enquire specifically about the nature of the job he/she is doing most of the time in the last 12 months.

If the person uses vague answers such as Civil Servant, Businessman, or 'Labourer', ask him/her the exact type of job he/she did most of the time, and then write the occupation in the space provided. The occupation will best be described by such job titles as teacher, driver, cook etc. If a person moved from job to job, you will only record that occupation he/she is engaged in during the reference period or the last 12 months. If a person has two or more occupations enter the one in which he/she spends most of his/her time.

Try to get comprehensive answers, for example, it is not enough for a respondent to inform you that he/she is a teacher. Probe to find out if he/she is a primary or secondary school teacher etc.

Question 17. What type of trade or business is it connected with? This question is to determine the economic sector in which the respondent works. Write a description of what the establishment where the respondent worked does. Industry refers to the activity of the establishment in which an individual works at his or her occupation. An industry is usually identified on the basis of the nature of the goods and services produced. The following are a few guidelines to help you accurately determine the sector or industry in which the respondent works.

- Do NOT write the exact name of the company or the institution, except for those individuals who work for government ministries, or official/ public organizations.
- Do NOT write a generic description such as "workshop", "industry", "factory", etc since this would not provide enough descriptive information.

If the place where the person works produces more than 1 item (such as a factory that produces two different items) list the main/primary item produced. Example: A person may be an accounts clerk and employed by a dairy farmer. His occupation is 'Accounting Clerk' but his industry is 'dairy farming'.

## Further Examples:

## Proper explanation

| Secondary school teacher | Teacher |
| :--- | :--- |
| Maize and horticultural farmer | Farmer |
| House and industry pipe repair | Repairer |
| Secretary who keeps secret files | Secretary |
| Furniture making | Carpenter |

Question 18. This question intends to know the number of people who also work where the respondent works. If the respondent answers vaguely, for example "only a few" or "very many," probe to get a more accurate estimate. Record the number.

Question 19. How long does it take the respondent to get to work from the house? Record the time of going or coming back, one way only. It does not depend on the method that the respondent uses to get to their job. 30 minutes walking, 30 minutes on a bicycle or 30 minutes in a dala dala should all be coded as 30 minutes. If the respondent uses different methods on different days, use the one that $\mathrm{s} / \mathrm{he}$ takes the most often.

Question 20. Is the respondent paid, either in cash or in kind payments, by his employer? If the answer is yes fill in code 1 and move to question 22, if the answer is no, the fill in code 2 and continue with the following question.

Question 21. What is the main reason you receive no payment for this work? Use the codes listed in the questionnaire. If the respondent gives a reason that is not listed in the questionnaire, code 3 and write the reason in words. Then move to question 25.

Question 22. How much was your last payment? If the respondent has not yet been paid, then indicate the amount that they expect to receive. Also indicate also the time unit for which the payment covers using the codes in the questionnaire. For example, if the respondent received 5000 TSH an hour, code 5000 in the first vertical line and code 1 in the second. If the respondent received $2,000,000$ shillings a month, code 2,000,000 in the first vertical row and code 5 in the second.

Question 23. This question wants to know if the respondent does any extra duty apart from his normal work, for which he receives payment that is not part of his salary. If the answer is yes fill in code 1 and if the answer is no fill in code 2 and move to question 25.

Question 24. What is the value of those extra duty payments? Over what time interval? Is it for hours...1, for days... 2 for weeks... 3 , for 2 weeks... 4 , for month... 5 , for quarterly...6, for half a year...7, for whole year...8? Fill in according to the answer. Record it in Tanzanian shillings with the code of the time unit.

Question 25. How many hours did you work last week? Record also paid leave and sick leave. If he worked for two days, ask him to specify in hours.

Question 26. During the last 12 months, for how many months did you work in this job? Record also paid leave and sick leave. Write the total in months.

Question 27. During the last 12 months, how many weeks per month do you usually work in this job? For the months when the respondent works in the job, write the average number of weeks of work the respondent usually works.

Question 28. During the last 12 months, how many hours per week do you usually work in this job? For the weeks when the respondent works in the job, write the average number of hours of work the respondent usually works.

Questions 29-43 ask about secondary wage work, if the household member has had more than one form of wage employment in the last 12 months.

Question 29. Find out if the household member has worked another job for wages in the past 12 months, in addition to the one listed in the previous questions $13-28$. If the household member used to work in a different job at some point during the year but does not work there now, still list it here. For yes, code 1. For no, code 2 and move to question 44.

Question 30. Is your employer in this secondary wage work...? List the type of employer, using codes listed on the questionnaire.

Questions 31-43 repeat the same questions about the secondary job as were asked for the primary job in questions 13-29. Refer to the above section of the manual for more information on these questions.

Questions 44-50 ask about unpaid apprenticeships. Record information about any unpaid apprentice work which the household member has done for someone who is not a part of the household.

Question 44. Ask if the household member has spent any time in the past 12 months working as an unpaid apprentice for someone who is not a member of the household. If yes, code 1 . If no, code 2 and move to question 51.

Question 45. This item is concern with the economic activity which one spends most of his time, after the job listed in questions 13-28. For more information on answering this question, see question 16 in this section.

Question 46. What type of trade or business is it connected with? You will fill in the codes from ISIC depending on the answer. For more information on answering this question, see question 17 in this section.

Question 47. Is your employer in this secondary wage work...? List the type of employer, using codes listed on the questionnaire.

Question 48. During the last 12 months, for how many months did you work in this job? Record also paid leave and sick leave. Write the total in months.

Question 49. During the last 12 months, how many weeks per month do you usually work in this job? For the months when the respondent works in the job, write the average number of weeks of work the respondent usually works.

Question 50. During the last 12 months, how many hours per week do you usually work in this job? For the weeks when the respondent works in the job, write the average number of hours of work the respondent usually works.

## Questions 51-73 will concern household members who are self employed in non agricultural business or enterprise.

Household business or enterprise is an organized commercial activity, a commercial establishment, owned and managed by household members. It can be very informal and have no hired labour or formal registration. For instance, non-agricultural one-man operations providing goods/services for various different non-household members/groups, i.e. working independently on their own-account, must be classified as household enterprises.

This module collects detailed information on the ownership and operation of any incomegenerating enterprises by the survey household that were in operation over the past 12 months. The main criterion for an enterprise to be listed in this module is that it operated at some point over the past 12 months, including those that operated over the past 12 months but are closed temporarily or permanently as of the interview date, and those that may not have operated full-time every month over the past 12 months. In fact, the module is interested in capturing seasonality in business activities, i.e. the fact that the nature of some businesses leads owners not to operate continuously throughout the last 12 months.

Household non-agricultural income-generating enterprises include those that produce or trade goods or services, including owning a shop or operated a trading business, no matter how small. Enterprises might include, for example, making mats, bricks, or charcoal; working as a mason or carpentry; firewood selling; metalwork; tailoring; repair work; food processing, fish marketing, petty trading and so on. Examples of household enterprises to list in this section include:

- Tailor who repairs clothing and shoes at her stall in the market
- Business woman who goes abroad to buy clothing, and then brings it to Dar es Salaam to sell in the market
- Trader who buys maize from remote villages and transports it to the regional capital to sell
- Bricklayer who works for different stores/shops in town when they need repairs
- Individual makes charcoal and then carries it to sell along the road
- Individual owns his own car and uses it as a taxi
- Architect who designs roads and consults with many different firms and the government sometimes for different projects

Question 51. Ask the respondent if the past week $s / h e$ was engaged in non agricultural business in the past 7 days, other than agriculture. Using the guidelines above, fill in code 1 if the answer is yes and move to question 53 . Fill in code 2 if the answer is no.

Question 52. This question wants to know if the respondent was engaged in personal business apart from agriculture for the past 12 months. If the answer is yes code it 1 and if the answer is no, code it 2 and move to question 74 .

Question 53. What type of business was (NAME) working in? Write the description in the blank, and later use the ISIC codes. Do not ask the respondent for the ISIC code. For more information, see question 17 in this section.

Question 54. Who owns this business in the household? Fill in the id number of the household member from the Roster, not the name. Fill in up to 2 Roster ID numbers if the business is owned by multiple people in the household.

Question 55. How many people who are not household members are participating in this business? Write the total number. If there are no participants who are not household members write ' 0 '.

Question 56. Do not ask this question to the respondent. For the first type of business in which household members are engaged, write $A$ on the appropriate line for members for which this was their main occupation. For the second type of business, write $B$ on the appropriate line for members for which this was their main occupation. Continue until all businesses are accounted for. Each household member should have only one letter on their line. If a single household member has more than one business, use the lines on the bottom of the page to account for those enterprises.

If the business is owned by more than one household member, then fill in questions 57-71 for only one household member. That is to say that there should be one respondent for all questions relating to the " $A$ " business, one respondent for the " $B$ " business, etc.

Example: The head of household owns a market stall, and his son (member number 3) works for him in his business. The head's spouse runs a business from home. In this case the head should respond to the questions about his business, and the spouse to the questions about hers.


Question 57. Where does (NAME) run his business (place)? Use the codes listed on the questionnaire to identify the location. If the business may have moved temporarily, inquire about the usual place of business.

CORRECT


INCORRECT
Question 58. How long has this business existed? Record the number of years and the number of months that the business has existed - not the first year in which in the business opened. If the enterprise stopped its operations briefly and

| 3 | 2 | 2007 7 |
| :--- | :--- | :--- | restarted, the date should refer to when the enterprise first started operating.

Question 59. Ask (NAME) where he received the capital to start this business. Use the codes listed on the questionnaire. If the respondent names a source of capital that is not on the list, use code 11 and write the source of capital in words. Up to three sources of capital can be listed in order of importance. Note that a 'loan' needs to be formally repaid, while a 'gift' does not. 'Sale of assets owned' means that the owner sold some item of value in order to obtain the money needed to begin the household enterprise is engaged. If no start-up capital was required, record 99.

Question 60. To whom do you sell you products or services? Indicate up to two responses using the codes listed in the questionnaire. A "final consumer" (code 1) would imply that the enterprise is retail-oriented. This means that the person who is buying the product is going to use it, and will typically not re-sell the product. "Institutions" would include schools, hospitals, prisons and the like. "Manufacturers" would imply that the enterprise provides unfinished products or raw materials to other enterprises, who use them as part of the process of creating a final product for the market.

For questions 61-63, be careful with the categories. Physical capital stock includes fixed goods devoted to the production of other goods, the use of which does not prevent future use. Inputs or supplies are also used for producing other goods, but they diminish with use. Finished merchandise or goods for sale are goods that are ready to be sold.

## Examples:

1. Tailor: His/her physical capital stock includes: tailoring machines, a pair of scissors, needle (question 61). He/she may also have a current stock of inputs such as pieces of cloth and thread (question 62) and current stock of finished merchandise such as readymade clothes like gowns, shirts etc. (question 63).
2. Selling water: In this case the business may have no capital (question 61) or inputs (question 62). However, he/she may have water in stock to sell (question 63).
3. Miller: The miller's physical capital stock includes the mill itself (question 61). Inputs or supplies include fuel to run the mill and any pre-milled maize the business may own (question 62). Finished goods for sale include milled maize (question 63).
4. Stationary store: A stationary store's physical capital includes computers, printers, and copy machines, and smaller items that the stationary store uses like staplers (question 61). Inputs or supplies include paper used for printing and ink or toner used in the
machines (question 62). Finished goods include notebooks, pens, folders, or other items sold by the stationary store for customer use (question 63).
5. Selling eggs: Suppose the respondent says they sell eggs from their farm as a business. THIS SHOULD NOT BE ENTERED HERE. This activity should be entered in the agriculture questionnaire to avoid double counting.


Question 61. You need to be careful when asking this question. You have to add the total value of his properties; even those in the store, in the farm, farm implements, buildings, land, cars etc. The total amount has to be filled in this question. It may be useful to make notes in the margins of your questionnaire to assist in calculation the total value.

Question 62. What is the value of your current stock of inputs or supplies? This includes all materials that kept on hand for making or producing goods.

Question 63. Ask the respondent the value of the goods which is ready to be sold.

For questions 64-69, be careful to make a distinction between GROSS income and NET income. Gross income is before taking into account all business-related taxes and expenses. Net income is the profit. Questions 67-69 expand on the various business expenses. When you are finished with these sections, check that:
Q65 = Q64-Q67-Q68-Q69.

## Examples:

1. Tailor: To know total revenue (question 64), you need to ask the revenue for gowns (Tsh 15000) and how many were sold in the last month ( 8 sold); revenue for shirts (Tsh 10,000 ) and how many sold in the last month (3 sold). Check that Q65 = Q64-Q67-Q68-Q69. All prices should be measured in the same units.
2. Selling water: In the case of traders such as this, include money spent on merchandise under input costs (question 68).
3. Miller: Total revenue (question 64) is all money that comes in as payment for milling services. Net income (question 65) in the profit left over after paying for fuel or the electricity bill (question 69).
4. Stationary store: Gross income (question 64) includes all money that comes from sales from goods or printing. Net income (question 65) subtracts from gross income the amount of money spent on monthly wages (question 67) and buying paper or other supplies wholesale (question 68).


Question 64. What gross income/takings did you get from your business or businesses last week/month? Find out what is the monthly income before paying taxes and the fixed costs. For weekly income fill in code 1 , and for monthly income fill in code 2 for the period, and fill in the Tshilling amount.

Question 65. This question intends to know the weekly/monthly income after paying taxes and fixed costs. For weekly income fill in code 1, and for monthly income fill in code 2 for the period, and fill in the T-shilling amount. The value for this question should be less than question 64, because it is taking into account the money spent for the business after earning income.

Question 66. Ask the respondent how many employees who are not household members participated in the business in the past one month. Record the number.

Question 67. What is/was your expenditure on wages last month? Record how much the household member is spending in a month in paying salaries? If the amount is zero, fill in ' 0 '

Question 68. What was your total expenditure on raw materials last month? Record the amount spent in buying raw materials and inputs for his business. Enter the amount in TSH.

Question 69. How much were your other operating expenses (for this business) such as fuel, kerosene, electricity, etc. last month? Record the amount spent in a month in paying other services. Enter the amount in TSH.

Question 70. Ask the respondent, how many months out of the past 12 months did you operate this business? If it is the whole year, indicate 12 months.

Question 71. What is the average monthly profit of this business for the months in the last year? Record the average profit for the months in which the business was functioning. This should be the total amount of money taken in minus the fixed and variable costs of production.

Question 72. Ask the respondent if apart from this business he has engaged in another nonagricultural activity for the past seven days. If, the answer is yes, then fill in code 1 and move to the
lines on the bottom of the sheet, starting at question 53. If the answer is no, fill in code 2 and move to question 74 .

Question 73. Ask the respondent if apart from this business he has engaged in another nonagricultural activity for the past 12 months. If, the answer is yes, then fill in code 1 and move to the lines on the bottom of the sheet, starting at question 53. If the answer is no, fill in code 2.

General work for the last seven days: Questions 74-81 are very important for this research and should be asked for all household members above the age of 5. It is important to know the time (hours) spent in working, to help determine those who are working below 40 hours a week. These can be categorized as people who are working, based on the international standard of working. This is very important for economic growth; the government needs to know this fact in order to prepare policy towards workers.

Question 74. Record whether the household member has spent any time in the past week helping with a household-run business, even if the household member did not receive payment for that activity. For yes use code 1, and for no use code 2 and then move to question 76.

Question 75. Record the total number of hours that the household member spent working in a household-owned, non-agricultural business, whether or not they were paid for their work. If none, you will fill in ' 0 '. Then move to question 77.

Question 76. Record whether the household member has spent any time in the past 12 months helping with a household-run business, even if the household member did not receive payment for that activity. For yes use code 1, and for no use code 2.

Question 77. Record whether the household member has spent any time in the past week helping with the household's farm, including tending crops, feeding animals, etc., even if household member did not receive payment for that activity. For yes use code 1, and for no use code 2 and then move to question 79.

Question 78. You will fill in hours (NAME) spends in working in the household farm, plus livestock and fishing - whether or not they were paid for their work. If none, then fill in ' 0 '. Then move to question 80.

Question 79. Record whether the household member has spent any time in the past 12 months helping with the household's farm, including tending crops, feeding animals, etc., even if household member did not receive payment for that activity. For yes use code 1, and for no use code 2.

Question 80. You will fill in time, in hours and minutes, (NAME) spends in collecting firewood or other fuel materials. If none, fill in ' 0 '.

Question 81. You will fill in time, in minutes and hours, that (NAME) spends in fetching water, including the time of going, waiting, and coming back. If none, fill in ' 0 '.

## Section F: Food outside the Household

Section F should include all food or drinks consumed outside the household. (Anything the respondent ate or drank outside the household should fit in one of the questions in this section.) However, avoid double counting. For example, if the respondent ate a full dinner that included barbecue meat, list this EITHER in questions $2 \& 3$ or $4 \& 5$, NOT in BOTH places.

## Do not include gifts given out. Record received and consumed gifts. Ask their market value.

Question 1. This question is for all household members, ask if any of the household members ate or drank outside the household in the past seven days. If yes code 1 and if no code 2 . Household members with code 2 , skip to the next section.

Question 2 \& 3. For household members with code 1, ask if they had a full meal (Morning, noon and evening) outside the household. If the answer is yes code 1, and write on Question 3 the cost of the meal. If the answer is no then code 2 and move to question 4.

Question 4 \& 5. Ask the respondent (household member) if they have eaten grilled meat, roasted potatoes, roasted banana or other snacks outside the household for the past seven days. If the answer is yes, then code 1, and record on question 5 the cost of these snacks. If the answer is no, code 2 and move to question 6.

Question 6 \& 7. Ask the respondent (household member) if they have taken local beer outside the household for the past seven days. If the answer is yes, code 1 and then record the cost of the drinks in Question 7. If the answer is no, code 2 and move to question 8.

Column 8 \& 9. Ask the respondent (household member) if they have drunk wine, beer or hard drinks outside the household for the past seven days. If the answer is yes code 1, and record the cost of the drinks on Question 9. If the answer is no, code 2 and move to question 10.

Question 10 \& 11. Ask the respondent (household member) if they have drunk soda/soft drinks outside the household for the past seven days. If the answer is yes, then code 1 and record the cost of the drinks on Question 11. If the answer is no, code 2 and move to question 12.

Question 12 \& 13. Ask the respondent (household member) if they have eaten sweets, ice-cream and other refreshments outside the household for the past seven days. If the answer is yes, then code 1 and record the cost of these refreshments on Question 13. If the answer is no, code 2 and move to question 14.

Question 14 \& 15. Ask the respondent (household member) if they had taken tea, coffee, sambusa, cakes and other bites outside the household for the past seven days. If the answer is yes then code 1 and record the cost on Question 15. If the answer is no, then code 2.

## Section G: Subjective Welfare

Question 1. This is for the interviewer and should not be asked to the respondent. Because the subjective welfare questions ask about the respondent about their own opinions on their wellbeing, they cannot be answered by another member of the household. Fill in the code 1 if the household member answers the question himself. Code 2 if he/she is not answering him/herself and move to the next section.

Question 2. This question is a filter question for the age of the respondent. The subjective welfare questions should only be asked to respondents 15 and over.

Question 3. For this question, ask the respondent how satisfied he/she is with various aspects of his/her life. Ask for each item A-H, and use the codes found in the questionnaire. If the item is not applicable to the respondent, use code 8 . For example, if the respondent is a full-time student and not looking for work, then item D, your job, is not applicable.

Question 4-6. These questions ask the respondent how they would self-describe their financial circumstances this year, and compared to where they were living 3 years ago and 10 years ago. If the individual was living in a different household 3 or 10 years ago, they should answer for that household's situation 3 or 10 years ago, and not for their current household 3 or 10 years ago if they were not living there. Use the codes in the questionnaire.

## Section H: Governance

At the beginning of this section, a reminder to the respondent concerning the objective of the National Panel Survey may be necessary. The respondents may be thinking that giving certain answers during an election year may enable them to receive a certain service/product as to have a positive impact on their living standards. It should be clear to the respondent that that is not the intent of these questions, and that NBS is a neutral body.

Question 1. This is for the interviewer and should not be asked to the respondent. Fill in the household ID code of the household member who was selected to answer the questions. This information will be available on the pre-printed roster form.

If the person listed on the pre-printed roster form is not available, you should use the same randomized procedure used to select the respondent in 2008/2009, by using the random number table. To use the random number table, write the household number in the first column. Then count the number of ADULT members in the household (18 years or older) and look at the column with that number. The number in the appropriate row (this household) and appropriate column (correct number of adult members) is the member ID of the person you should interview.

For example: if you're interviewing household 0123 which has 5 adult members, in the example below you would interview member number 3.

| No. | HH ID |  |  |  |  |  | Number of adults |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | 0 | 1 | 2 | 3 | 1 | 1 | 3 | 4 | 3 | 6 | 1 | 2 | 8 |
| 2 |  |  |  |  | 1 | 2 | 3 | 4 | 5 | 5 | 7 | 6 | 6 |
| 3 |  |  |  |  | 1 | 1 | 3 | 2 | 1 | 2 | 1 | 3 | 8 |
| 4 |  |  |  |  | 1 | 1 | 2 | 3 | 3 | 4 | 7 | 3 | 8 |

Question 2. This is for the interviewer and should not be asked to the respondent. Fill in whether the selected household member was interviewed. If yes, code 1 and move to question 4 . If no, code 2.

Question 3. This is for the interviewer and should not be asked to the respondent. Fill in the household ID code of the household member who was selected as the replacement to answer the questions.

Question 4-6. Ask these questions by moving from left to right in each row. Ask questions 4-6 for each official before moving on to the next official in the next row. Still ask questions 5 and 6 if the respondent does not know the name of the official. It is possible that the respondent has talked to their official even if they do not know the official's name.

Question 7-8. Ask these questions by moving from left to right in each row. First ask if the respondent has attended any of the type of meeting in the past year. If they have attended all, use code 1 and move to the next type of meeting. If they have attended some or none of the type of meeting, code 2 or 3 , respectively, and move to question 9 to ask why they missed some meetings. Even if a respondent says that he/she attends some meetings, find out why they have not attended all of the meetings by asking question 8 .

Question 9. Find out how often the respondent has done each of the listed activities in the previous year. For each activity, use the codes in the questionnaire to record the frequency of each of the activities.

## Section I: Food Security

This module should be asked of the individual(s) primarily responsible for the preparation of food.

At the beginning of this section, a reminder to the respondent concerning the objective of the National Panel Survey may be necessary. The respondents may be thinking that exaggerating answers may enable them to receive a certain service/product as to have a positive impact on their living standards. It should be clear to the respondent that that is not the intent of these questions.

Question 1. This question seeks to find out if the household had any concerns as regards to the amount of food over the past seven days.

Question 2. Whether the response to question 1 is "yes" or "no", question 2, parts A-H should still be asked.

- It is possible that the person says there were no worries in the past 7 days about having enough food (no in question 1) but the household still took action listed in question 2.

Question 3. This question asks whether a consistently consumes some meals every day. The question further wishes to know whether under-five children eat the same number of meals compared to those above 5 years. As such if all the members of the household consume the same number of meals every day then both columns will have the same number while the opposite is true if the household members have different number of meals a day.

Question 4. This question finds out what children under 5 ate for breakfast on the day before the interview. Use the codes on the right to fill out the breakfast food. If there are no children under 5 in the household, record "00."

Question 5. This question finds out what children age 5-13 ate for breakfast on the day before the interview. Use the codes on the right to fill out the breakfast food. If there are no children age 5-13 in the household, record " 00. "

Question 6. Ask if all household members eat roughly the same diet. If one person in the household does not like to eat plantains and eats rice instead, then that still counts as "roughly" the same diet, and the answer to the question should be yes. If someone in the household has stomach problems
so that she cannot eat fish and eats chicken instead, that still counts as "roughly" the same diet and the answer should be yes. If yes, code 1 and move to question 8 . If no, code 2 and move to the next question.

Question 7. Record who in the household eats a greater variety of foods and a lesser variety of foods. A larger variety would include more foods from different food groups, like starches, proteins, vegetables, or sweets. Record whether men, women, and children (6-59 months) eat more or less diverse diets.

Question 8. Ask whether the household has been faced with a situation when they did not have enough food to feed the family in the last 12 months. If yes, code 1 . If no, code 2 and move to the next section.

Question 9. Here you should record in which months the household did nto have enough food to feed the family. Only ask about the past 12 months, so if you are doing the interview in October 2010, start by asking about the circumstances in October 2009. If you are doing the interview in March 2011, start by asking about the circumstances in March 2010.

Question 10. Describe the reason for the lack of food in the household in the previous months. Use the codes on the bottom of the page. Select up to 3 reasons, in order of importance.

## Section J: Housing, Water \& Sanitation

This section is about the facilities that the household has in their home. It should be answered by the household member who is most knowledgeable on these subjects.

Question 1. This question is about the ownership of the building occupied by the household. The building can be the property of the household, rented (the whole building or a part of it), rented by employer etc. As it is shown in the questionnaire, fill in the code according to the answers from your respondent. Remember, when the code is 2 or 4 you will skip to question 3 , and if the answer is 3,5 , or 6 you will skip to question 4.

Question 2. Ask the respondent to describe the title deed of the house. If the household is a tenant, then ask about the contract and remember the code 9. If it is a type of contract that is not included on the list, indicate " 8 " and write the type of contract in words.

Question 3. This question asks about the house rent, or how much the household pays a month for all buildings occupied by the household. If the house rent is paid by the employer, record the amount of money which the employer pays for house.

Question 4. Here what is needed is the number of the rooms occupied by the household. Remember that the number of the rooms does not include stores, toilets, shower rooms, halls, and veranda. Include only the rooms being occupied by the household; including sitting rooms, dining rooms and the kitchen. If there is a main house and secondary houses, separate the total number of rooms as is shown in the column number. If there are multiple secondary houses, sum the total number of rooms in the secondary house.

Question 5. Materials for building a wall include trees, wood, soil, soil and trees, and brick layering, as it is shown in the questionnaire. If the respondent indicates a material that is not on the list, code it as "other" (code 7) and write the material in letters. In the last round, there were very many "other" answers to this question that really should have been included in one of the existing categories. This take a long time to review and re-code. Therefore the interviewer should make an effort to use the existing codes, using other only if the response is truly not on the list.

Question 6. This question asks building materials for the roof; these include; grass, bamboo, tiles as coded in the questionnaire. Fill in the relevant code. If the respondent indicates a material that is not on the list, code it as "other" (code 7) and write it in letters.

Question 7. Indicate the main building material for the floor of all houses occupied by the household, including soil, concrete, cement etc. Look for the codes of the building materials as it is shown in the questionnaire. If the respondent indicates a material that is not on the list, code it as "other" (code 3) and write it in letters.

Question 8. Write the main source of income in the household. Use the codes listed on the right side of the page. If the respondent indicates a source of income that is not on the list, code it as "other" (code 10) and write it in letters.

Question 9. This is an environmental question. The aim is to know how they dispose their trash. If the household uses a method that is not included on the list, indicate " 6 " and record the method in words.

Question 10. This question asks about the type of the toilet used by the household. 'No Toilet' refers to the use of bushes, grass/field and other open spaces as toilet facilities. 'Flush toilet' refers to the type of toilet which is characterized by the draining of human excreta by rush of running water. 'Pour flush' is similar to a flush toilet, but the water must be manually poured. 'VIP (Ventilated Improved latrines)' is a ventilated pit latrine which is defined as an onsite means of human excreta disposal in a hygienic, low cost and more acceptable manner. The primary features of VIP latrines consist of an enclosed structure (roof and walls) with a large diameter (110mm), PVC vertical ventilation pipe running outside the structure from the pit of the latrine to vent above the roof. They often will have concrete slabs containing the latrine hole. 'Ecosan' toilets separate human excreta into solid and liquid components that can then be used for irrigation and fertilization. 'Unimproved pit latrine (slab not washable)' is a pit latrine built without health or hygienic related specifications. The floor of this latrine is made of soil or other material that cannot be readily cleaned. 'Improved pit latrine (slab washable) is a pit latrine that has a concrete (or similar material) floor. See the photos in the Annex for more details on each of these types of toilet facilities.

Question 11. This question is about the disposal of sewage. Record where the toilet flushes to, using the codes in the questionnaire. If the household is connected to a piped sewer system, code 1 and
move to question 15. This question should only be asked if the household uses a pour toilet or a flush toilet.

Question 12. This question is about the disposal of sewage. Record whether the household has paid to have their septic tank or latrine emptied in the past 12 months. If yes, code 1 . If no, code 2 and skip to question 14. This question should be asked if the household uses a VIP, Washable or Unwashable pit latrine, or a flush toilet or pour toilet without connection to a piped sewer system.

Question 13.Record the amount spent to have the latrine or septic tank emptied, in T-Shillings.

Question 14. This question is meant to find out why the household does not have a connection to the piped sewer system. Ask this question even if the piped sewer system is not available in the community. In that case, use code 3.

Question 15. Ask if the household shares its toilet facility with other households. Record 1 for yes, and 2 for no.

Question 16. This question is about the main energy the household use to cook. Note that what is needed here is not the utensil but the energy used. If the household uses a type of energy that is not included on the list, indicate " 8 " and record the type of energy in words.

Question 17. This question is about the light in the household (during the night), what type of energy is used to provide light. Use the codes listed in the questionnaire. If the household uses a source for lighting that is not included on the list, indicate " 9 " and record the source in words.

Question 18. This question is about the main source of energy used in the household. Use the codes listed in the questionnaire. If the household uses a source of electricity that is not included on the list, indicate " 7 " and record the source in words.

Question 19. This question identifies the main source of drinking water in the household during the rainy season. Use the codes found at the bottom of the page. If you put the code " 14 " make sure you write the main source of drinking water in words. If there are more than two sources, mention the one used most frequently by the household. If you use code " 1 ", move to question 22.

Question 20. This question asks the time used by the household in the process of fetching water from the source to the household during the rainy season (mentioned in the previous question). Here, time includes three aspects: going to fetch water, waiting to fill the container at the source, and time spent coming back. If for example the household spends 1 hour and 35 minutes, record 95 minutes in the 'minutes' box. Do not record it as 135 minutes!

Question 21. Read to the respondent the minutes mentioned in question 20, and ask him out of these minutes, how many are spent waiting to fetch water. If the respondent gives you the answer in hours, convert the answer to minutes.

Question 22. For the source of drinking water during the dry season, use the codes found at the bottom of the page. If you put the code "14" make sure you write the main source of drinking water in words. If there are more than two sources, mention the one used most frequently by the household. If you use code " 1 ", move to question 25.

Question 23. The question intends to know the time spent by the household to fetch water for their use from the source to the household during the dry season. This source should be the one mentioned in the previous question. Here time means: time for going to the source, time for waiting to fill in the containers, the time spent on the way coming back. For example if the household spends about 1 hour and 35 minutes, record 95 minutes in the minute box.

Question 24. Read to him the minuets mentioned in question 23 and ask out of these minutes, how many he spent waiting to fill water in his container. If it is hours convert the answer to minutes.

## Compare time spent collecting water in section E and in section J (Sec E Q 81 and Sec J Q 20/23) and probe if these look inconsistent.

Question 25. This question asks what type of treatment method the household usually uses to ensure their drinking water is safe. If they take no steps to ensure the safety of their water, use code ' 7 '. Record up to 2 answers for this question. Photos of different methods of water purification are included in the Annex of this manual.

Question 26. Record the main source of water used for cooking during the rainy and the dry season. Fill out one answer for each season. If there are more than two sources for either of the seasons,
mention the one used most frequently by the household. Use the codes found at the bottom of the page. If you put the code " 14 " make sure you write the main source of drinking water in words.

Question 27. Record the main source of water used for washing during the rainy and the dry season. Fill out one answer for each season. If there are more than two sources for either of the seasons, mention the one used most frequently by the household. Use the codes found at the bottom of the page. If you put the code " 14 " make sure you write the main source of drinking water in words.

Question 28. Record the main source of water used for gardening during the rainy and the dry season. Fill out one answer for each season. If there are more than two sources for either of the seasons, mention the one used most frequently by the household. Use the codes found at the bottom of the page. If you put the code " 14 " make sure you write the main source of drinking water in words. If the household does not have a garden, write "00."

For Questions 29-32, collect details on each water source. Record the type of container used to collect water from that source, the average number of containers used and the frequency with which they are collected, and the cost of water from that source.

Question 29. This question should not be asked out loud to the respondent. For each water source mentioned in questions 19, 22, 26, 27, and 28, put an " $X$ " in column 29. Then proceed through questions 30-32 for each source separately, reading from left to right, before moving on to the next water source. Some questions do not apply to all the answer choices and therefore have been blocked.

Question 30. Record the type of container which is typically used by the household to collect water from the source. Use the codes at the right of the page.

Question 31. Record the average number of containers fetched for each of the water sources, and the frequency with which they are filled. Use the codes on the right for time periods. For example, if the household fills up 520 Lerry cans per day, record the number as " 5 " and the frequency as " 1 ."

Question 32. Record the cost, in T-shillings, of filling a 20 L jerry can of water from the source. If the household does not use jerry cans to gather water from that particular source, calculate what the price per 20L is.

Question 33. Find out if the household gets water from the piped water utility. In the Dar es Salaam area, the piped utility's name is DAWASA, and in the Morogoro area the piped utility company is called MORUWASA. Use the local company name for the piped utility company if you are in a different area. If yes, code 1 . If no, code 2 and move to question 39.

Question 34. Ask to see the household's monthly water bill. Record the result using the codes found in the questionnaire. If you could not see the bill, move to question 36 .


Question 35. This question should not be asked out loud to the respondent. Check the bill to see if water and sewer are included together. One the left side of the bill, both the words "water" and "sewer" should appear. (These are circled in on the above example.) If both appear, code " 1 ". If only water appears, code " 2 ".


Question 36. This question should not be asked out loud to the respondent. Record information from the bill, including the date of the bill and total amount billed for water and for sewage. The information you need to record is circled on the example bill above. Note that you need to be
careful that you record the "Current Charges" (circles above) rather than the "amount due". Current charges are the amount of new charges for this month, while amount due includes any older unpaid bills.

Question 37. Ask the respondent for their opinion on the quality of the water they receive from the piped water source. Ask about taste, smell, color, etc, and record one answer for their overall satisfaction, based on the codes in the questionnaire.

Question 38. Find out how many hours the piped water runs for on the days when it is running. The water might run for different amounts of time on different days; if that is the case, calculate the average. Record the answer in hours.

Question 39. Find out how many days per week the water runs. Even if water only runs for 1 hour in a day, it runs for that day and should be counted. Then move to question 40.

Question 40. Find out why the household does not have a connection to the piped water system. Use the codes at the bottom of the questionnaire.

Question 41. Find out how the household feels about the water service from the local water utility. Ask this question of all households, even if they do not have a connection to the piped water system. It is important to know what the household knows about the piped utility in the community or in the country, and how they feel about it.

Question 42. This question can be difficult to answer. Probe respondents by giving examples of prices and ask if they would be willing to pay that amount for improved piped water supply service. Move the price up and down until the respondent agrees on the maximum price he/she is willing to pay. When the respondent agrees on a price, repeat it to confirm. Then record the final answer.

For example, ask:
"If the water supply service is improved, would you be willing to pay TSh 100 for a 20L bucket?

- If yes, would you be willing to pay TSh 200 for a $20 L$ bucket?
- If yes, would you be willing to pay TSh 300 for a 20L bucket?
- If no, would you be willing to pay TSh 150 for a 20 bucket?
- If no, would you be willing to pay TSh 50 for a 20 bucket?
- If yes, would you be willing to pay TSh 75 for a 20 bucket?
- If no, would you be willing to pay TSh 25 for a $20 L$ bucket?
- Etc.
- So, the most you would pay for a 20L bucket of water from an improved water supply is TSh 75. Is that correct? [RECORD TSH 75]


## Section K: Consumption of Food over Past One Week

This section will examine household food expenditure; food crops (starch from roots), sugar, beans, horticultural crops, fruits, meat, milk and milk products, oil, spices, tea, soft drinks, coffee. The questions ask if the household consumed any foods in the past seven days. It is important that you take your time on this section and ask the questions carefully. These measures will be used to construct poverty estimates.

NOTE: This section measures CONSUMPTION, not EXPENDITURE. The questions focus on how much was eaten, not on how much was purchased or produced. Suppose, for example, that a household purchases a 50 kg bag of rice every month for TSh. 35,000, and eats approximately 1.5 kilos per day. In the 7 days prior to the interview, the household may have purchased no rice. However, they ate $7 * 1.5 \mathrm{~kg}=10.5 \mathrm{~kg}$ of rice. We care about the 10.5 kg eaten. When asked about the amount spent, you should calculate the cost of these 10.5 kg (TSh. $35,000 / 50 \mathrm{~kg}=$ TSh $700 / \mathrm{kg}$. So for 10.5 kg , the cost was TSh 13,500.)

NOTE ON LOCAL UNITS: Respondents may give answers in local units. If they are unable to convert these into standard units (the options listed on the questionnaire), you should record the answer in local units. You are then responsible to weigh or measure these local units before you leave the village and convert all answers into standard units.

Also, be careful with option 5 in the units question ("pieces"). This should only be used with items that have a fairly standard size which will not vary from village to village. For instance, eggs may be counted in pieces. Bread should not be counted in pieces.

Column 1. Read out to your respondent all items of food listed. Code 1 if the item is consumed, and code 2 if the item is not consumed. Remember to record the items consumed in the household and not outside the household. Ask this question for all items of food listed 101-1108 before moving on to Column 2.

Column 2. This question is asked only for those items with have a " 1 " in Column 1. Record the total amount the household consumed in the past seven days. This includes purchases, own production and gifts. And make sure to carefully code the units. While a household might eat 300 grams of sugar in a week, 300 kilos would make everyone sick.

Column 3. In this Column, you should only list the purchases made by the household in the past 7 days. Again be careful to check the units.

Column 4. Record the total amount of money spent for this item in the past seven days.

Column 5. In this Column, you should only list the own production of the household in the past 7 days. Again be careful to check the units.

Column 6. In this Column, you should only list the gifts and transfers received by the household in the past 7 days. Again be careful to check the units.

At the end of the line, you should perform a quick check that the total from Column 2 is roughly equal to the sum of columns 3,5 , and 6 . If there is a large difference in the amounts, you should ask the respondent to clarify.

If the respondent says "Yes" to question 1, be sure that you have fill in all the appropriate columns for that food item. For instance, in the example below, the household said "Yes" they consumed raw maize. Even though all the raw maize came from own production (question 5) make sure you enter zeroes for questions 3 and 6. You do not need to enter units when entering zeroes. You do not need to enter shilling values in question 4 if none of the food item was purchased. See the example below.


## Question 7. Instructions on testing iodine.

Question 8. This question seeks to find out the number of days the food categories reported above were actually consumed. If a household has eaten mangoes each and every day of the past 7 days, then 7 will be recorded in line F - Fruits. If a household ate rice for 3 days and maize on 3 days, record 6 in row A - Cereals, Grains, and Cereal Products.

Question 9. Ask your respondent if any person who is not a member of their household was invited for food in the past seven days, even if it is only for one meal. If the answer is yes, code it 1 and move to question 10. If the answer is no, code it 2 and move to the next section.

Question 10. Ask the respondent to tell you the number of days they invited visitors for food. Remember to record this separating the visitors according to their age as it is itemized in $A, B, C$ and D.

Question 11. Also ask the number of meals the household invited visitors. Record it the same way as you did in question 10.

## Section L: Non-Food Expenditure - Past one week and one month

## ONE WEEK RECALL

Question 1 \& 2. Read out to your respondent all items listed below with codes 101-103. Ask if out of these, some or all were consumed in the household for the past seven days. If the answer is yes, code it 1 , and if the answer is no code it 2 . Ask for each and every item. For yes, remember to record the total amount of money used to buy the item in column 2 .

## ONE MONTH RECALL

Question 1 \& 2. This is the same question as the previous one, the difference, is that here you ask for one month and the codes are 201-224.

## Section M: Non-Food Expenditure - Past twelve months

Question 1 \& 2. These questions are also the same as the previous two questions. The difference is that here you ask about 12 months and the codes are 301-319.

## NON FOOD ITEMS THAT MAY NOT HAVE BEEN PURCHASED

Question 1. Ask your respondent if the household collected, bought or received items listed below in the past 12 month. For every item, if the answer is yes code it 1 . If the answer is no, code it 2.

Question 2 \& 3. Columns $2 \& 3$ will depend on the answer to the previous question. If the answer in question 1 is yes, then in Column 2 you will record the estimated value of the item. Probe by asking how much it could cost if the same item was sold at the market. In Column 3, record the actual price that the household paid for the item. If the household did not pay for the item, write " 0 ."

## Section N: Household Assets

These questions ask about the ownership of the resources and other valuable permanent assets as it is stipulated in the questionnaire. It is possible that your respondent could be hesitant to respond to these questions because they are very sensitive; this is information which one would not like to share with a stranger. Try to use polite language to convince him of the confidentiality of the interview.

Question 1 (codes 401-452). Read out to your respondent the list of the assets; ask him what they own and record the total number of the assets in the box. If there is none, record " 0 ". Be careful to record the number and not the value of the item. Households, no matter how wealthy, are unlikely to own 20,000,000 air conditioners.
(For row 408: give the number of single chairs - do not state the number of "seti".)

## Section O: Assistance and Groups

In this section you should ask all the questions across Columns 1-5 for row A before moving on to row $B$.

Question 1. This question intends to know if the respondent received (money or in-kind) from the Government or NGOs (religious) as it is listed on the horizontal line A-F. Do not include groups like SACCOS and UPATU (self-help groups). If the answer is yes, then code it 1 and record it on the horizontal line. If the answer is yes then code it 2 and move to the next item.

Question 2. This question is the continuation of question 1. If the answer to question 1 is yes, ask your respondent to tell the name of the group which provided the item.

Question 3. Here we need to know the amount of money received from the sources mentioned in question 2 for the past 12 months.

Question 4. Here we need to know the value of the grant listed in question 2. Ask your respondent to tell you the value (money) of this food or other assistance.

Question 5. This question intends to know if there are other things, apart from money and food, which the household received from the source of the grant (question 2 ) in the past 12 months. For other items, check the list given on Column 1 item F.

Question 6. Record the household id numbers of the household members who participated in the program, listing up to three.

Question 7. Ask your respondent if there is any household member who is a member of a Credit Union (SACCOS is a good example). If the answer is yes, code it 1 if the answer is no code 2 and skip to the next section.

Ask your respondent to tell you the names of the household members who are in the Credit Union. List the names in the first column on rows A-E. Then insert the Roster ID number of each household member.

In this section, ask questions 8 through 16 for each person listed before moving on to the next person on the list.

Question 8. This question asks the respondent how much credit (money) the household member has in the Credit Union. Be discreet about asking this question, particularly if there are others around. Respondents may not want to talk about how much money they have if others are listening.

Question 9. This question intends to know how many times and for what period the household member gives out his contribution to the Credit Union. You will record it as it is directed. If it is 2 times a month, you will write 2 on the Column of frequency and 3 on the Column of unit.

Question 10. Ask a member of the Credit Union how much money he contributes each time her contributes. Record the amount in T-Shillings.

Question 11 \& 12. Ask when he last took a loan from this Credit Union. Ask for the month and year. Record the year in four digits. Enter the amount the household member withdrew in question 12. If they have never taken a loan from the group, enter ' 0 ' and skip to the next row.

Question 13. Ask the household member how much credit he had before asking for the loan from the Credit Union.

Question 14. Ask the reason for taking out the last loan. Use the codes provided in the middle of this page.

## Question 15 \& 16.

In this question ask him/her about the period of paying back the loan. Record the time period and the amount in question 15. For example if is paying back 20,000 weekly, you will enter 20,000 on the Column of TSH and 2 on the Column of period. For question 16, your respondent will tell you how long it will take him/her to finish paying back the loan.

## Section P: Credit

This section is to be answered by the head of the household or any household member who is responsible of the loans listed below, and includes only those loans that are not from the SACCOS.

Question 1. Ask your respondent if there are any household members who took loan (money), goods or services outside the household in the past 12 months. If the answer is yes, code it 1 and if the answer is no code it 2 and move to section Q. Remember to include all the loans, including agricultural activities loans. Be particularly careful when valuing loans that are in the form of goods or services.

Question 2. Ask your respondent to mention the names of the institutions outside the household where the household members took each of the loans in the past 12 months. Make sure you finish listing people or institutions before moving to the next question.

Question 3. This question should not be asked to the respondent. The interviewer needs to insert codes for the source of loans. Use the codes provided on the bottom of this page.

Question 4. On this item, you will insert the roster number of the household member who took the loan from the institutions you listed on Question 2.

Question 5. Ask your respondent if the loan was in cash (money) or goods on credit (things). If money code 1, if goods code 2.

Question 6. You will fill in the amount of the loan in shillings (Remember, if the loan was in the form of goods, give the value in money and fill it in here).

Question 7. Ask your respondent to tell you if the whole loan is paid back. If the answer is yes code it 1 and skip to question 9 . If the answer is no, code it 2.

Question 8. Ask your respondent when he/she is expecting to finish paying back the loan. Enter the year and month expected. Enter the year in four digits.

Question 9. Ask your respondent the total amount to be paid of the loan, with interest.

Example: Eli took a bank loan amounting to 100,000 with $25 \%$ interest. The total pay of the loan with interest for Eli, is 125,000 .

Question 10. It is normal that when a person asks for a loan, there is an intended purpose for the loan. Ask your respondent the intended purpose of asking for the loan. Choose among the given codes. If the reason is not on the list, then code it " 11 " and write down the intended purpose in words.

## Section Q: Finance

This section intends to find out about use of mobile banking services, remittances payments, and bank accounts. Ask this section to the household head or any household member who knows very well the finances of the household.

Question 1. Find out if anyone in the household has used a money transfer service in the past 12 months. Answer for M-PESA, Z-PESA, and ZAP separately. If yes, code 1. If no, code 2 . If no for all three types of money transfers, skip to question 5.

Question 2. Record how often the household uses the transfer services. If multiple people in the household use the services, or if the household uses multiple services, record the total for all household members and all 3 services. Use the codes found on the questionnaire.

Question 3. Record the purposes for which the household used the transfer service. For each activity, A-H, code 1 if the household used the transfer for the given purpose, and code 2 if they did not use it for the given purpose.

Question 4. Look at all of the activities which were coded "yes" (1) in question 3. Ask which of those activities was the most important for using the transfer service. Write the letter of the activity in the box.

Question 5. Ask if anyone in the household has received cash remittances from aboard in the last 12 months. Do not include non-cash remittances, or cash coming from inside the country. If yes code 1, and if no code 2 and move to question 12.

Question 6. Record the name of the country from which the cash remittances came. Use the codes found at the bottom of the sheet. If the country name is not found, code 11 and specify the name of the country.

Question 7. Record the relationship between the household head and the person who sends the remittances. Use the codes on the bottom of the page.

Question 8. Find out for how long the sender has lived aboard. Record the number as well as the units. For example, if the sender has lived abroad for 15 years, write 15 in the number column, and 2 in the unit column.

Question 9. Record how the household receives the remittances. This is the method by which the sender sends money so that the household can receive it. Use the codes at the bottom of the page. You can list up to three different methods of sending money.

Question 10. Record the total value of cash received in the previous 12 months. Use T-shillings, even if the money came in a different currency.

Question 11. Record what the money was spent on in Tanzania. When households receive money, they may use it for a variety of different purposes. Recode the uses using the codes at the bottom of the page. Record up to three uses.

Question 12. Ask if anyone in the household has received in-kind remittances from aboard in the last 12 months. Include only non-cash remittances. If yes code 1, and if no code 2 and move to question 15.

Question 13. Record the total value of in-kind goods received in the previous 12 months. If the exact value is not known, ask the respondent to estimate the value in T-shillings.

Question 14. Record the name of the country from which the in-kind remittances came. Use the codes found at the bottom of the sheet. If the country name is not found, code 11 and specify the name of the country.

Question 15. Write whether anyone in the household has a bank account at a commercial bank, credit union, or other financial institution. If yes code 1. If no code 2 and move to question This question asks about non-wage income received by the household for property they own, excluding agricultural land. You should write down the amount, in shillings, that the household receives in one year from property they own such as houses, apartments, commercial property and any land not used for agriculture. Agricultural land must be excluded because we will record information about this in the agricultural questionnaire. If the household owns more than one rental property, add the
annual value from all properties in the margin of the questionnaire and write the total amount in the box.

Question 16. This question asks the amount received by all household members from pensions, either from the government or from private firms. If multiple members of the household receive pensions, you should add the annual amounts in the margins and write the total in the box.

Question 17. This question asks for the total of payments received from other households living in Tanzania. This could be cash or goods sent by a former household members, family friends or members of the extended family. And the cash or goods could be for any purpose - for consumption, for children's school fees, to buy a large item such as a home or a car. If the household receives goods in-kind, estimate their value and include it in the total.

Question 18. 21.

Question 19. Write the names of the institutions at which household members hold savings accounts. Use the full name of the institution.

Question 20. Record the year in which the household member first opened a bank account. Give the year in 4 digits; do not write how many years the household has had the account for. Then move to the next section.

Question 21. If no one in the household has a bank account, record the reason why not. List up to 3 reasons, using the codes on the right side of the page.

## Section R: Recent Shocks to Household Welfare

Ask this section to the household head or any household member who knows very well the welfares of the household.

Question 1. This question intends to know whether the household encountered any disasters or events from those listed in the first column, at any point in the past five years. Read the entire list of shocks (items $101-119$ ) before moving on to Question 2. In the case of 119 , specify the shock in words.

Question 2. Before answering question 2, read out the list of shocks which the household indicated that it experienced in the past five years. Ask the respondent which of these shocks had the most significant impact on their wellbeing, and then put code 1 in Column 2 for that shock. Then ask the household which shock had the second most significant impact, and code it 2 in Column 2. Similarly, code 3 for the third most significant shock. If the household indicates having only experienced two shocks in the past five years, you will not have a code 3 in this Column.

Questions 3, 4 \& 5. These questions will only be asked for the three major disasters which were listed in question 2. You will leave blank the lines which are not listed in Column 2. For question 3, the respondent will answer if the disasters lowered the income of the household. In question 4, you will ask how much these disasters affected the household. Record the answer using the codes given. In question 5, ask your respondent when the shock took place. Record the month and the year. Record the year in four digits.

## Section S: Deaths in Household

This question intends to know about any deaths that took place in the last two years in the households.

Question 1. Ask your respondent if there were any household members, including children and infants, who died within the period of the past two years. If the answer is yes code 1, and if the answer is no, code 2 and move to next section.

Question 2, 3, 4, 5 \& 6. In question 2 you will record the name of the deceased mentioned by your respondent. In question 3, record the code of the relationship between the deceased and the head of the household, using the codes at the bottom of the page. In question 4, you are asked to list the roster code of the deceased if they were present in the 2010/9 household. This question is similar to question 6 in section $B$. Use the code on the pre-printed roster, and code 99 if the member was not present in 2010/9. In question 5, record the gender of the deceased. Question 6 asks the age of the respondent in years. If the deceased was under 5, please give the age in months. If younger than 12 years, skip to Question 9. Question 7 asks if the death was registered in the death registration system. You should code 1 if yes, and 2 if no.

Question 8. This question asks what was the deceased's job during his/her lifetime. You will code it according to the codes listed at the bottom of the questionnaire.

Question 9. This question asks for the cause of death. Code the response according to the codes listed in the questionnaire. If the cause was old age, code 1 and move to question 14 . If the cause was an illness, code 2 and move to question 11. If the cause was other, code 3 and move to the next question.

Question 10. For question 10, if the deceased died from a reason different from sickness, whatever the answer, code it and move to question 14.

Question 11. Question 11 asks for the cause of death, using the codes on the bottom of the page. If you use code 34 , remember to write the reason. If the respondent mentions to you more than two illnesses, choose the major two illnesses.

Question 12. For how long was the deceased suffering from this illness before he/she died? On the Column of units, you will fill in the units. If he/she was sick for several days use code 1, for weeks use code 2 , for months use code 3 , and for years use code 4 . For example, if the deceased was sick for 4 months before his death, you will code 4 in the time column and code 3 in the measurement column.

Question 13. This question looks at the cause of death, and whether the death was diagnosed by medical staff or by the perception of the respondent. Use the codes provided on the questionnaire.

Question 14 \& 15. Did death cause the loss of land and property due to customs? If it is yes code it 1. If no, code it 2 and move to the next deceased person if your respondent mentioned more than one. For question 15, fill in the monetary value of the lost land or other assets.

## Section V-1: Household Re-contact Information

This section is important for writing information for re-visiting the household, particularly if the household decides to move to another location. Before asking the telephone number, you need to take the GPS measurement. For every interviewed household, the interviewer must measure the location of the household from the corner of North and East.

Question 1. Record the telephone number of the household head. If he has no telephone number, please fill in '98'

Question 2. Record the telephone numbers of other household members. Fill in up to 3 members. Fill in their names together with their telephone numbers. If no one in the household owns a telephone, try to find the telephone number of a friend, relative or community leader who can contact the household. You should always have at least 1 contact number for the household.

Question 3: A CLOSE PERSON IN THE COMMUNITY. This section includes relatives and friends who live in the town/village/street/sub village where the household head stays. You will fill in the name, relationship with the head of the household, work, place where he lives, other identifying information, and telephone number.

Question 4: CLOSE PERSON (OUT SIDE THE COMMUNITY OR FROM ANOTHER VILLAGE). This section includes relatives and friends who live outside the town, or village. You will fill in the name, relationship to the household member, work, location where he leaves, other identifying information and telephone number.

ATTENTION: For question 3 and 4, make sure you write full name, proper relationship with the household head, main work, the location where he stays, and proper telephone number. On the extra explanation, write characteristics of identifying a person, like their position, name etc.

## Section V-2: Filter Questions

Question 1. The question intends to know if there is any household member who has cultivated any plot or raised any crops. If the answer is yes, code 1. If the answer is no code 2.

Question 2. In this question ask your respondent if there is any household member who owns a farm which they do not cultivate. They may rent it to others, or the land may be fallow. If the answer is yes, code 1. If the answer is no, code 2.

Question 3. Ask your respondent if there is any household member who cultivated a plot or grew any crops during the long rainy season of the year 2010. If the answer is yes, code 1. If the answer is no, code 2.

Question 4. Ask if there is any household member who owned or farmed during the last completed short rainy season. If the answer is yes, code 1. If the answer is no, code 2.

Question 5. Ask if there is any household member who owned any livestock for the past 12 months. If the answer is yes, code 1. If the answer is no, code 2.

Question 6. This question should not be asked to the respondent. Indicate if the household is eligible to participate in the agricultural module. If the respondent has said "yes" to any question listed in 1-5, then they are eligible and you should code " 1 " here. All households that have a " 1 " here should be asked the agricultural questionnaire. If all questions in 1-5 have a "no" response, then they are not eligible and you should code 2.

Question 7. Ask your respondent if there is any household member who is engaged in fishing or having a fish farm in the past 12 month. If the answer is yes then code it 1 and if the answer is no, then code it 2.

Question 8. This question should not be asked to the respondent. Indicate if the household is eligible to participate in the fishery module. If the respondent said "yes" to question 7 , then they are eligible and you should code " 1 " here. All household with a " 1 " in this box should receive the
fisheries questionnaire. If they gave a "no" response, then they are not eligible and you should code 2.

## Gift to the Respondent

In this section you have to explain to the respondent that you would like to give gift to thank him/her for good cooperation in the research. Remember these gifts depend on the area. If it is a town, give out bednets and if it is a village, give out hoes.

Question 9. If the household receives a radio, code it 1, and if it receives a bednet, code it 2.

Question 10. On this section you are required to write the name of the person who receives the gift, as well as the identification number which is provided on the list of the household members. Then remember to ask him/her to sign.

## Section U: Anthropometry

Anthropometry is the study of human body measurements, especially on a comparative basis. We carry out these measurements for all available respondents, including babies. In the case of measuring babies or small children, the mother or guardian of the child SHOULD assist throughout anthropometric measurements. When taking measurements, be sure that the mother or guardian understands what will be done to the child. Explain to the mother or guardian how the child will be weighed and height will be measured. Be sure to politely and thoroughly answer any questions or other concerns that the mother or guardian might have.

Question 1 \& 2. These questions should not be asked to the respondent. Question 2 asks if the household member was measured. Code 1 for yes, and code 2 for no. If no, you should indicate the reason why they were not measured. If the reason is not on the list in the questionnaire, code 4 and write the reason in words.

Question 3. The weight should be recorded in kilograms with a leading zero. For example, 3.2 kilograms should be recorded as " 03.2 ". Make sure that the scale is on a hard flat surface and properly zeroed before you begin your measurements. If a child is too small to stand on the scale on their own, you should record the weight of the mother and child together, then the mother alone, and subtract to find the weight of the child. With all measurements, you should look at the results to make sure they seem reasonable before writing them in the questionnaire. For example, if the scale shows a weight of 100 kilos for a small child, it likely has not been properly zeroed before beginning. Similarly, if after your subtraction, you have a weight of only 2 kilos for a child, it is likely that a mistake has been made. The data entry program will have consistency checks to test for unreasonable height/weight/age combinations. If the measurements are not accurately recorded, it will necessitate a callback to the household.

Question 4. This should be recorded in centimeters with leading zeros. For example 97 centimeters should be recorded as 097. Below are the steps for taking accurate height measurements for children laying down and child/adults standing. Generally all children taller than 45 cm or older than 24 months should be measured standing up.

## Measuring the length of children laying down:

1. Place the measuring mat on a hard, flat section of the ground or floor.
2. The assistant should kneel with both knees behind the base of the board.
3. You should kneel on the right side of the child so that you can hold the foot piece with your right hand.
4. With the mother's help, lay the child on the board by supporting the back of the child's head with one hand and the trunk of the body with the other hand. Gradually lower the child onto the board. Ask the mother or guardian to kneel close on the opposite of the board facing the measurer, as this will help to keep the child calm.
5. The assistant should cup his or her hands over the child's ears. With arms comfortably straight, the assistant should place the child's head against the base of the board so that the child is looking straight up. The child's line of sight should be perpendicular to the ground. The assistant's head should be
 straight over the child's head, looking directly into the child's eyes.
6. You should make sure the child is lying flat in the center of the board. Place your left hand on the child's shins (above the ankles) or on the knees. Press them firmly against the board. With your right hand, place the foot piece firmly against the child's heels.
7. When the child's position is correct, read and write down the measurement at the foot piece to the nearest 0.1 cm .

## Measuring the height of adults or standing children

1. Place the measuring board on a hard flat surface against a wall, table, tree, etc. Make sure the board is not moving.
2. Ask the mother/guardian to remove the child's shoes and unbraid any hair that would interfere with the height measurement. Ash her to walk the child to the board and to kneel in front of the child in order to reassure the child.
3. Place the child's feet flat and together in the center of and against the back and base of the board/wall. The assistant should place his or her right hand just above the child's ankles on the chin. Gradually close your hand. Do not cover the child's mouth or ears. Make sure the shoulders are level, the hands are at the child's side, and the head, shoulder blades, and buttocks are against the board/wall. With your right hand, lower the headpiece on top of the child's head. Make sure you push through the child's hair.
4. When the child's position is correct, read and write down the measurement at the headpiece to the nearest 0.1 cm .


Question 5. All individuals taller than 45 cm and able to stand should be measured standing. Babies shorter than 45 cm or those unable to stand (generally those under 24 months) should be measured lying down. Indicate the position in which the respondent was measured. This should apply to all individuals, not just children.

Question 6. This is a filter question for the measurement of upper arm circumference. Only children younger than 60 months should answer question 7.

Question 7. This question asks you to use the upper arm measuring tapes to measure the circumference of child's arm. Wrap the measuring tape around the arm above the elbow but below the shoulder. Record the measurement down to the nearest 0.1 cm .


## Following the Interview

Please remember to record the time spent on the interview. Thank the respondent for taking the time to complete the survey. Let them know again that all the information will be kept confidential. Also, tell them that the survey is annual and that they may be contacted again, and so finding them is important. Ask them to provide information to the VEO if they are planning on moving from the community

## Part II: Agricultural Questionnaire

## Introduction

## Summary of the Interviewer's Responsibilities on the Agricultural Questionnaire

1. activities before the interviews begin. This includes provision of information to the street/village chairman about the major objectives of this research and securing their cooperation to facilitate in the smooth completion of our tasks. This information should be provided early before commencement of the research.
2. You are responsible to identify and visit sampled households as well as to measure all of the household's plots with GPS.
3. You must talk to the head of the household or another household member who is above 18 years for every sampled household explaining the objectives of your work and then make an appointment for interview.
4. Arrange a reasonable time for interviewing residents of the households selected.
5. After completing the interview, thoroughly check the questionnaire to ensure you have not made any mistakes/errors before leaving the interviewed household. For GPS plot measurements, make sure that all the plots are measured and fill in the GPS measurement questions in Section 2. All plots must be measured that are within one hour's travel of the household (either on foot, bicycle, motorbike, etc.) If you think a plot is too far to measure, you must receive permission from your supervisor not to measure it.
6. You must maintain frequent communication with your supervisor for assistance as well as for inspection of your work.
7. Where necessary you will be required to answer somequeries raised by your supervisor/staff from NBS headquarters. This is meant to ensure the efficiency of your work.
8. You must submit questionnaires to your supervisor immediately when you have completed them.

## Section A- 1: Household Identification

You will get ID codes for Regions, Districts, Wards, Villages/Enumeration Areas from your supervisor. Write the Household ID code as written on the household questionnaire, make sure that the household ID codes are identical to that of the agricultural questionnaire. You should also fill in your name, enumerator ID number, date and time of the interview - just as you have done in the household questionnaire. On page 2 there is also a place for you to note any notes or special information about the interview.

## Section 1: Household Roster

Copy all information from household questionnaire. It is IMPORTANT to make sure that every household ID's are identical in both questionnaires. In question 4, you should place an ' $x$ ' in the line for the respondent to this questionnaire. If there are more than one respondent answering together, mark multiple respondents in this section.

## Section 2: Plot Roster

Definition of a plot: A contiguous piece of land is a single plot in almost every case. However, if the farmer thinks of the plot as multiple separate plots and these plots have different tenure status you should treat them as separate plots.

Example 1: If the household owns four acres farmed primarily by the husband, and an adjoining acre farmed primarily by the wife, these should be treated as separate plots.

Example 2: If a farmer has two acres for which he has a title of some sort and also farms an adjacent two acres with no title these should also be treated as separate plots.

Example 3: On the other hand, if a farmer has 10 acres of land in one piece but farms only 2 of these acres, this is till one plot of 10 acres.

Minimum size for a plot: In rural areas the idea of a plot is usually clear. Most households will also grow something around the house (shamba la nyumbani) which should also be counted as a plot. In urban areas, households may have a few trees or plants around the house. Use the following rules when deciding whether to count these as a plot.

| Tree/plant | Minimum quantity for a plot |
| :--- | :--- |
| mango, avocado, passion, guava, orange, <br> mandarin, lime/lemon, jack fruit | 1 tree |
| Banana, papaya | 4 trees |
| tomatoes, carrots, cabbage, spinach, etc. | 4 square meters |

Question 1: Did you or anyone in this household own or cultivate any plots in the long rainy season 2010? If yes, continue with table A. If the answer is no, go to question 5 to ask for short rainy seasons.

Table A: Please list all plots of which anyone of your household owned or not cultivated during the 2010 long rainy season. List all plots being cultivated by the household owned or not owned by the household (rented or cultivated freely). You should ensure that all plots listed as 'still cultivated' on the household tracking form appear on this list.

## Question 2: Name of the plot

If plots were listed during the 2008/2009 survey, they should be listed here with the same name, even if their size has changed. All new plots should be given unique names that are clearly understandable. Therefore, by using correct plot identification names, respondents will identify names of plots we are interested to get their information for a particular time. It is likely not the same person interviewed will provide information on the following year, but we need any household member who may respond to be able to identify them.

Example: Name like, 'Maize farm' is not sufficient because the same plot may not have maize in the following years. Write the name of the plot like 'Kiswaga Plot', 'Home plot', etc

## Question 3: Description/location

It is necessary to provide sufficient information on the plot locations to be readily able to identify them in subsequent years. You should use the information from the 2008/2009 survey to ensure that you are correctly matching the plots.

Example: the plot is located at Mahameni area, nearby the household, grazing areas etc.

## Question 4: Area (Acre) Farmer's Estimate

Ask the farmer to estimate the size of the plots in acres. Area of this estimate the acre should be recoded into two digits with one decimal point, eg $02.5,34.2$. etc. Later, you will measure the plot with GPS, but this question should be asked first so that the measurement does not influence the farmer's answer.

## Question 5: PLOT NUMBER IN 2008/2009 NPS.

Here you should copy the plot number from pre-printed tracking form that corresponds to this plot. You should take care matching these plots and use the description as well as the name to make sure you are linking them correctly. Do not depend just on the name. If the plot is a new plot that was not listed in 2008/2009, record '99', just as you do in the household roster for new members. All plots listed as still cultivates should be recorded on this list.

## Question 6: GPS LOCATION

This is the space where you should record the point estimate for the GPS measurement. Be sure that you list "S" SOUTH on the top line, and "E" EAST on the second line. You should record these
measurements after you finish with the agricultural questionnaire, and should not interrupt the questionnaire to do it now. The point estimate should be recorded from the corner at which you will begin the area measurement. Further instructions for using the GPS machines are provided in the annex.

## Question 7: PLOT MEASURED?

This question should only be used if the GPS area measurements were not recorded. You should measure the area of all plots unless you receive special permission from the supervisor not to measure a plot. The rule for measuring plots is that all plots with one hour's transport each way should be measured. This includes using a motorbike or bicycle to reach the plot. In some cases the respondent may initially refuse to measure the plot, perhaps because it is far away. You should encourage the respondent to have the plot measured, perhaps scheduling a time early in the morning to go to the plot when it is not so hot, or arranging for another household member who is familiar with the plot location and dimensions to accompany you.

## Question 8: WHY WAS THE PLOT NOT MEASURED?

In this question you record why the plot was not measured. (It should be skipped if you did measure the plot.) Again, you must get permission from your supervisor not to measure a plot. The only two valid reasons for not measuring a plot are distance and household refusal. In the rare cases of other reasons, you should note code ' 3 ' and record the reason in words. If you need more room to offer a more detailed explanation, you should use the 'notes' box on page 2 .

## Question 9: AREA (GPS MEASUREMENT)

This is the area which you record from the GPS measurement. You should record this measure in acres to two decimal places. Further instructions for recording an area measurement with the GPS are found in the annex.

## Question 10: WEATHER CONDITIONS AT MEASUREMENT

This question is for the enumerators and should not be read to the respondents. It is asking you to record the weather conditions at the time when you measured the plot. This is because certain types of weather conditions can affect the accuracy of GPS measurements. Use the table below as a guide.

| Descriptive Picture | Weather Condition | Survey Response Code | Definition |
| :---: | :---: | :---: | :---: |
|  | Clear / Sunny | 1 | No opaque (not transparent) clouds in the sky. |
|  | Mostly Clear / Mostly Sunny | 2 | $1 / 8^{\text {th }}$ to $2 / 8^{\text {th }}$ of  <br> the sky is <br> covered with <br> opaque  <br> (not  <br> transparent)  <br> clouds.  |
|  | Partly Cloudy / Partly Sunny | 3 |  |
|  | Mostly Cloudy / Considerable Cloudiness | 4 | $5 / 8^{\text {th }}$ to $7 / 8^{\text {th }}$ <br> the of <br> the is <br> covered with <br> opaque (not <br> transparent)  <br> clouds.  |
|  | Completely Cloudy | 5 | The sky is completely covered <br> by clouds. |
|  | Rainy | 6 | The sky is completely covered clouds and ther is precipitation. |

Question 11: What year was the last completed short rainy season?
Ask what year was the last completed short rainy season, either 2009 or 2010 by using codes provided in the questionnaire. The short rainy season takes place from September to December. The short rainy season is completed when the majority of crops from the season have been harvested.

Question 12: In addition to the plots above, did you, or anyone in your household, own or cultivate any plots during the last completed short rainy season [YEAR]?

Ask the respondent if there is any household member who cultivated/owned any plot during short rainy season in the year listed in question 11, other than the plots listed in Table A for the long rainy season. If the answer is no, skip to question 20. If plots are cultivated in both long and short rainy season, list them only in Table A and do NOT repeat them in Table B. Table B is only for plots that were cultivated in the short rainy season, but not in the long rainy season.

Table B. PLEASE LIST ANY ADDITIONAL PLOTS OWNED OR CULTIVATED BY ANYONE IN THE HOUSEHOLD DURING THE SHORT RAINY SEASON.

Since table B is only for plots that were cultivated in the short rainy season, but not in the long rainy season, in many cases this table will be left blank.

Questions 13-21: These questions repeat for the short rainy season plots the information that was collected for the long rainy season plots in Table A. See the descriptions of questions 2-10 above for more details.

## Map plotting

Please sketch a map showing where the plot is located from the house. In the sketch, make sure you show its location from home and other plots of the household using direction (North, East, South and West). Also estimate distance and time from house to the plot (walking/bicycle etc) or distance depending on the capability of the respondent.

Question 22: DID THE HOUSEHOLD OWN OR CULTIVATE ANY PLOTS IN THE LONG OR SHORT RAINY SEASONS MENTIONED IN TABLE A OR B?

This question is for the enumerator and should not be read to the respondent. Answer yes (code 1) if any plot is listed in either table A or B, and then continue with the next section. Answer no (code 2) if and only if the household cultivated no plots, then skip to the livestock section (10A).

## Overall Structure of Sections 2 - 7

## MAKE SURE SECTIONS 2 - 7 ARE CONSISTENT WITH EACH OTHER

Plots listed in Section 2 must be followed-up in 3 (and possibly 4 and 6)

- All plots list in 2A should appear in 3A.
- All plots listed in 2A AND 2B should appear in 3B.
- All plots listed in 2A should appear in 4A or 6A. Additionally, any plot listed in 3B for which the answer to 3B Question 38 was "yes" should also appear in 4B or 6B.
- Any crop listed in 4A for which the answer to 4A Question 1 is "yes" should appear in 5A.
- All crops listed in 4B should appear in 5B if the answer to 4B Question 1 is "yes".

If you harvested maize from any plot, you need to at least tell us in section 5 that you did/didn't sell any of that maize. You can skip the post-harvest questions (S5) if the respondent said they didn't harvest any of the crop in question in section 4, question 1. (But make sure they said "no" to question 1 for all plots with that crop.)

- All fruits/crops list in Section 6A should appear in 7A. All fruits/crops in Section 6B should appear in 7B.
- All plots listed in 2B should appear in 4B or 6B if the answer to 3B Question 3 was "yes". Additionally, any plot listed in 3B for which the answer to 3B Question 38 was "yes" should also appear in 4B or 6B. Same logic as for 2 A , but it doesn't fully work in reverse. If you had a plot in the short season and you farmed it in the short season, then you should report a crop on it. But farming a plot in the short season does not imply it should've been listed in $2 B$-- as these are only the plots which are exclusive to the short season.


## Do not add new plots after Section 2. Do not add new crops in Section 5 or Section 7.

- Section 2 should list all plots mentioned anywhere in the questionnaire. Do not add new plots in section 3 , section 4 or section 6.
- Section 4 should list all annual crops. Do not add new crops in section 5 that were not in section 4.
- Section 6 should list all fruit trees and permanent crops. Do not add new crops in section 7 that were not listed in section 6.


## Avoid double counting

- A given plot should not be repeated within $3 A$ or within $3 B$.
- A given plot-crop combination should not be repeated within 4A or 4B.
- A given crop should not be repeated within section 5A or within 5B or within 7A within 7B.
- All plots listed in 2A should appear in 4A or 6A if the answer to 3A Question 3 was "yes". (NB: plots can be repeated in 4A and 6A. A given plot-crop combination should not be repeated though.) 2 A is a list of plots you owned or farmed. If you tell us in Section 3 that you did in fact cultivate the plot, then you should report either an annual (S4) or perennial (S6) crop on that plot.


## Example:

Suppose has the plots shown below in the picture. The crops growing in each plot are shown for both masika and vuli seasons. Fallowed plots are shown in gray. Crops that were planted but did not yield any harvest are crossed out.

The following page shows how the questionnaire would be filled in for these plots. The diagram on the next page shows only the beginning of each section, to show which plots and which crops should be listed. Note the following:

- Mtembeni is listed in 2B because it was NOT owned or cultivated in masika - only in vuli.
- 2A plots are listed in 3A. All the plots are listed in 3B.
- Mlimani plot was dropped from vuli after section 3B because it was not cultivated in vuli.
- Waziri plot is listed twice in 4A and twice in 4B, because there were multiple annual crops (mahindi and maharage) growing on this plot in both masika and vuli.
- Mahindi is grown on two plots in Section 4A, but only listed once in 5A. For each crop, combine all plots into one line for section 5.
- In vuli season, the Maharage is dropped after section 4B because none was harvested.
- Fruit trees (like mwembe) and permanent crops (like muhogo) are listed in section 6.
- Muhogo was dropped after 6B because none was harvested.

Masika

| Waziri |
| :--- |
| mahindi <br> maharage <br> mwembe <br> mihoge- |

## Vuli

Waziri

| mahindi |
| :--- |
| maharage- |
| mwembe |
| mihogo- |

MIImani


Mtembeni



## Network Roster

The "network roster" is a list of all the individuals (non-household members), companies or organizations that the respondent has done business with over a given period of time. The network roster is built up gradually by the enumerator throughout the interview, as the respondents answer questions on the sources/points of contact associated with their business dealings.

You must not attempt to complete the network roster all at once at the end of the interview, but rather do it gradually during the course of the interview.

Throughout the entire Agriculture Questionnaire, for each question that asks of "who" outside the household, you must record their network roster ID code. For example, "with whom did you co-own this plot?" "where did you buy most of the seed?" and "to which persons, firms or institutions did you sell most of your crop?"

When the respondent lists a person for the first time as someone with whom they have done farm-related business, you must add their name to the network roster, and assign them a Network Roster ID Code (N1, N2, N3, etc...). You must then enter for appropriate question in the Agriculture Questionnaire the network roster ID code pertaining to the individual of interest.

The next time the respondent mentions the same person or institution, you must use the unique the network roster ID code (N1, N2, N3, etc...) that has already been assigned to that entity.

Each unique person/institution must be listed on the network roster separately.

Do not list the same entity more than once in the roster, even if the same person/institution's network roster ID code may be used a number of times as answers to different questions across the Agriculture Questionnaire.

It is acceptable for the respondent not to be able to provide a name if he/she has difficulty remembering it. In this case, the enumerator has to understand that even if a name cannot be recorded in the network roster, the network individual/entity exists and that a general description should be noted to identify the network roster entry. Each time same individual/entity is associated with a transaction/phenomenon, his/her/its unique network roster ID code would be recorded.
The network roster is on the second to last page of the agriculture questionnaire, on the page with the crop codes.

## Question 1: NAME

Enter the name of the individual, company or organization to whom you are referring. Do not write "relative", "neighbor" or any of the other codes from the box at the right. This should be more specific. For instance, perhaps the respondent rents land from "Frank Mhando" or sold their crops at "Korogwe Market Place" or received inputs from the "Tanga Sisal Growers Cooperative."

## Question 2: CODE

Select one of the codes from the box to the right, labeled "Question 2 Codes". These codes divide the individuals and organizations in the network roster into categories. Note that this question is in caps (CODE). You do not need to read it to the respondent if it is clear from their answer that this is, say, a neighbor or relative.

## Question 3: LOCATION

Select one of the codes from the bottom of the page labeled "Question 3 Codes". These codes simply state where the individual or organization is located. The location should be measured at the time the transaction took place. If a farmer in a village in Tanga region says he sold sisal to a certain buyer whose office is in Tanga town, but who came with his truck to the village to collect the sisal, then record the location as 1, "WITHIN THE VILLAGE".

## Example

Suppose a farmer gets both fertilizer (samadi) and seed (mbegu) for his maize from his neighbor, Frank Mhando. In this case, when you come to question 42 in section 3 you should add Frank's name to the network roster in the next available line (N2) then put this code as the response to question 42 . When you come to question 21 in section 4, you should put the SAME CODE because he bought the seeds from the SAME PERSON.

NETWORK ROSTER CARD

|  | 1. JINA | 2. GERESHO | 3. MAHALI |
| :--- | :--- | :---: | :--- |
| ID |  |  |  |
| N1 | Soko ya Korogwe | 3 |  |
| N2 | Frank Mhando | 2 | 3 |
| N3 | Tanga Sisal Coop | 5 | 1 |

## Section 3: Plot Details

Fill in the plot flap before beginning this section. Use the flap to make sure you keep the correct plot on the correct line.

Section 3A: Questions in this section are concerned with long rainy season and all plots listed in table A section 2.

Section 3B: Questions in this section are concerned with short rainy season for all plots listed in table A and $B$ in section 2. Question in Section $3 A$ and $3 B$ are similar but are asked in different seasons that are 3A which is long rainy season 2010 and 3B is the last short rainy season.

## Question 1: LIST ALL PLOTS OWNED OR CULTIVATED BY THE HOUSEHOLD IN LONG RAINY SEASON 2010.

These directions are for the interviewer and should not be asked again to the respondent. Use the list you compiled in section 2A to fill in the plots for this section.

Question 2: What is the distance from (plot) to:
Ask the respondent the distance in kilometer from plot to home, road and market. Ask them to estimate if they are unsure. If the respondent gives distances in minutes walking, assume that it takes approximately 10 min to walk a kilometer. (Therefore 15 min would be 1.5 km .)

Question 3: How did you use this plot during the last long rainy season 2010?
The purpose of this question is to know how the plot was used during the last rainy season. For example, the plot could have been cultivated, rented, given out for free etc. You should use the codes listed in the questionnaire and then follow the appropriate skip patterns. The response is "given out" means the respondent's household allowed someone outside the household to use this plot for free, and received none of the crops from this land and no other payments (in cash or kind) from the person who cultivated it. If payments were received in cash or in kind, you should use the code for "rented out" instead.

Question 4: What was the total income from renting out this plot during the long rainy season 2010?
Ask the respondent the total income earned from renting that plot. This should include cash payments, the estimated cash value of in-kind payments as well as "future/planned payments" or the cash value of payments they expect from their tenants even if those tenants have not yet paid.

Question 5: Was any of this income collected in kind?

Indicate yes if a portion of the rent paid for this plot by the tenants was in the form of goods (crops or other items) instead of in case.

Question 6: What percentage was collected in kind?
When you calculated the total income from this plot in question 4, you counted both cash and in-kind contributions. Here you should indicate the percentage of that total income calculated in question 4 that was paid in kind. So if the total income was $125,000 \mathrm{TSH}$, of which $35,000 \mathrm{TSH}$ was paid in cash and 90,000 TSH was delivered in the form of maize, then the percentage delivered in kind is $90,000 / 125,000$ or $72 \%$.

Question 7: What was the main crop cultivated on this plot in the long rainy season 2010?
Ask the respondent the main crop cultivated on the plot during the long rainy season 2010. Main crop is the one that has covered the largest portion of the plot or the crop that the farmer considers the most important. The codes for the crops are listed on the last page of the agricultural questionnaire. Be careful when using the code "other" as many times things that are classified as "others" are really local names for crops on the list. Notice also that the list of crops has been expanded since the 2008/2009 survey.

Question 8: Who decided what to plant on this plot in the long rainy season 2010?
Ask who decided on what crop planted during long rainy season 2010. Record up to 3 ID codes from household roster and/or one non household member using the network roster. Example: if the household head and spouse decide together what to plant, write their ID numbers from Section 1 (perhaps "01" and " 02 "). If a large agricultural buyer offered to buy 100 kilos of pineapples from the plot, then you should use the network roster to record this information.

Question 9: What is the soil type of this plot?
Soil texture is useful for understanding potentially how productive the plot might be in producing crops. Sandy soil is "light", whereas clay soil is "heavy". Clay soils are good for making bricks. Sandy soils are too loose to make good bricks. Loam soil is in between sandy and clay soil.

Question 10: What is the soil quality of this plot?
The soil quality refers to the fertility of the soil. Good soils are fertile and can grow and sustain a large harvest. Bad soils are difficult to grow large harvests. Average soils rank in between good and bad soils.

Question 11: How did you know the quality of the soil?
Ask the respondent to tell on the method used to determine soil fertility/quality. In most cases soil quality will be based on "own experience", unless an extension agent has come and tested the farmer's land.

Question 12: Were there any problems with erosion on this plot during long rainy season 2010?
Erosion refers to the loss of top soil from rain, wind, animals or people. Indicate yes if all or some of the plot suffered from erosion during the last long rainy season, and use the skip codes indicated in the questionnaire.

Question 13: What was the cause of these erosion problems?
Use the codes as listed in the questionnaire. Note that "cultivation which does not comply with soil conservation" would be applicable if the way that the household grows crops on the plot causes erosion.

Question 14: Was there any erosion control/water harvesting facility on this plot in the long rainy season 2010?

Ask the respondent if used any erosion control/water harvesting facility on this plot in the long rainy season 2010. The list of specific methods is given in question 15. If the respondent does not understand what you mean by "erosion control / water harvesting facility," you can read them the list from the next question to see if they use any of the individual methods.

Question 15: What type of erosion control/water harvesting facility was used on this plot?
You may list up to two methods in order of importance. The definitions for the methods are listed below, and there are photos in the annex.

Terraces: Terraces are similar to steps cut into the side of a sloped plot to provide flat growing areas and to prevent water run-off.

Erosion Control Bunds: Bunds are built up by farmers, usually made out of stone or soil, to prevent run-off on steep slopes.

Gabions / Sandbags: Gabions are structures, usually made of metal mesh, that are filled with earth and/or stone to built walls on slopes. Sandbags can similarly be used to prevent water or soil from running off the land.

Vertiver Grass: Vetiver grass may be established as permanent vegetative barriers in the bed of the gully to slow down runoff. They also trap sediment and organic matter, which enhances regeneration of vegetation and terrace formation within the gully.

Tree belts: Tree belts are line of trees planted to either break the wind or to stabilize erosion prone areas.
Water Harvest Bunds: Water harvest bunds are built out of earth or stone to channel water into collection areas.

Drainage Ditches: Drainage ditches are ditches built to collect runoff water. They are very commonly found on roadsides.

Dam: A dam stops or slows the course of a river or stream to allow water to collect into a lake or pond.

Question 16: How steep is the slope of this plot?
If water does not readily drain from the plot, it is flat. Steep and hilly plots will be somewhat difficult to cultivate because of the slope.

Question 17: Was this plot irrigated in the last completed long rainy season?
This question includes both mechanized and manual irrigation.

Question 18: What was the type of irrigation?
Ask the respondent what type of irrigation was used on the plot, then write the appropriate code in the questionnaire. Sprinkler irrigation is a way of applying irrigation that is similar to natural rainfall. It can be used on many crops, soils and geographic conditions. Micro (drip) irrigation includes a number of technologies, where water is applied only to part of the field surface. It can save on water and improve crop yield. The costs of purchasing, operating and maintaining the equipment are high. Watering can or bucket irrigation is the simplest form of overhead irrigation, and is widely used by smallholder farmers. This method is best for small plots of land, such as vegetable gardens, that are close to various water sources.

Question 19: What was the method of obtaining water?
Ask the respondent on what kind of method employed to get water for plot irrigation, then write the appropriate code in the questionnaire. Gravity is the appropriate response for any method that relies of water running down a channel or slope, either natural or man-made. Motorized pumps are water lifting devices that are propelled either by diesel, petrol or electricity. An example of a motor pump is the radial flow pump commonly known as centrifugal pump.

Question 20: What was the source of water?
Ask about the source of water for irrigation, and use the appropriate code as listed in the questionnaire.

Question 21: What was the most recent year in which the plot was left fallow?
Fallowing refers to leaving land empty, usually to improve the soil quality. Ask the most recent year the plot was left fallow (the year must be written in 4 digits, example 2005, 2009 etc). If never left fallow, write 0 , and if the respondent does not know, write 98 , and follow the skip codes listed in the questionnaire.

Question 22: For how many consecutive years was this plot left fallow for last time?
Write the number of the consecutive years of which the plot was left fallow.

Example: Suppose a plot was left fallow for 2 years, from 2003 to 2004. It was planted in both 2002 and again in 2005. The answer to question 21 is " 2004 ", and the answer to question 22 is " 2 ".

Question 23: What would the value of this plot be if it were sold today?
Ask the respondent on the worth value of the plot if it was to be sold today. In this question the value should not include the temporary crops recently grown in that plot. However the value of fruit trees and permanent crops should be included. Explain this distinction to the respondent carefully before recording their answer. Be careful to also explain that this information will be used for research purposes only, and that there is no government plan to buy/sell the respondent's plot.

NOTE: The question of land ownership is very important in our society. Here we would like to know how much land is owned by the household and how it was obtained. This question is crucial, so ask it carefully. It is crucial because the head of the household may think that the government has strategies to confiscate his land or, alternatively, to compensate the household if they have only a small plot.

Question 24: What was the ownership status of this plot in the long rainy season 2010?
"Owned" implies that the land cannot be taken without the household's permission. Land that is "used free of charge" might be taken back by the owner or the village leaders at some time in the future.

Question 25: With whom do you co-own this plot?
Ask if the household co-own the plot. Remember that this question is about those responded to plot being co-owned. Use the Network Roster ID to identify the individual or household who co-owns the plot. Example: if I co-own the plot with my brother, I should find his name (or add his name) in the network roster and put his network roster ID (N1, N2, etc.) in Question 25.

Question 26: What share does your household get of the output?
If the plot is co-owned, it is likely that they share all or part of the crops grown. Use the codes listed in the questionnaire to identify the household's share of the output.

Question 27: Did anyone in the household have a title for this land?
If the respondent does not understand what you mean by land title, use the codes in question 28 to explain the different types of titles.

Question 28: What type of title deed your household have for this plot?
For the purpose of this research, the following title deeds are acceptable

- Granted right of occupancy
- Certificate of customary
- Right of occupancy
- Residential license
- Village-government-witnessed/Purchase agreement
- Local-court-certified/Purchase agreement
- Inheritance letter
- Letter of allocation from village gov't
- Official correspondence
- Utility or other bill

QUESTION 29: Who in the household owns this plot?
List up to two owners in order of importance by using the household roster codes.

Question 30: Did the owner/household have the right to sell this plot or use it as collateral?
A household owns a plot if they have the right to farm it without paying rent to anyone else and if the plot has no other owner who can reclaim it. However, often village leaders will not permit households to sell their plots even if they own them. To use a plot as collateral means that you use the plot as a guarantee that you will re-pay a loan from the bank or other source. If you fail to repay the loan, the bank or individual who lent you the money can take the land. There is an unconditional skip on this question to question 36.

Question 31: With whom do you co-rent this plot?
Renting refers to paying money or in-kind payments to the owner of land for the right to use and cultivate it. Question 31 refers to situations where the household rents a plot together with another individual or household. For example, my brother and I both pay rent to the land owner and we cultivate the land together. In this case, I co-rent the plot with my brother.

Question 32: How much did you pay to the plot owner for the use of this land in the long rainy season 2010?

Include all payments relating to the use of the plot during the long rainy season 2010, including cash, payments in terms of crop harvests, other in-kind payments, payments that have not yet been made but are expected to be made in the future, and payments made a long time before but directly for the use of the plot during the long rainy season 2010.

Question 33: What period of time did this payment cover?

Question 32 listed an amount of money paid to rent the land. Question 33 asks whether this payment covered the whole year, only part of the year, multiple years, etc. For example, if the household paid 40,000 TSH in 2009 for the use of the plot in long rainy seasons in 2009, 2010 and 2011, then " 40,000 TSH" should be entered in question 32, and in question 33, there should be a " 3 " in the first column for the number of units and a " 2 " in column 2 , identifying the units.

Question 34: What share of output from this plot did you give as rent, if any, in the long rainy season 2010? If the respondent farms a plot that is owned by someone else, he or she may pay the owner a portion of the crops from the land. This question asks how much of the crop was given to the owner. So if the total value of the crop was $125,000 \mathrm{TSH}$, of which $35,000 \mathrm{TSH}$ was paid to the owner, then the percentage is $90,000 / 125,000$ or $72 \%$.

Question 35: Who owns the plot?
Use the network roster to list the owner of the plot. This question has an unconditional skip to question 37.

Question 36: In which year was the plot acquired?
Ask in which year was the plot obtained, and write year in four digits. If the plot has always belonged to the respondent's household since before he/she was born, list 1900.

Question 37: Would you feel comfortable leaving this plot uncultivated for several months without being worried of losing it?

Sometimes village leaders may want to allocate land to people who need it the most. If a plot is not cultivated, they may decide to give it to someone else. Or another person may take over the land and claim it as their own if it is not being used. Ask the household member if they could leave that plot uncultivated for several months without being worried of losing it.

Question 38: DID THE HOUSEHOLD CULTIVATE THIS PLOT IN THE LONG RAINY SEASON 2010 / LAST SHORT RAINY SEASON?

These are directives to the interviewer. Follow the skip codes as indicated in the questionnaire.

## Organic Fertilizer

Question 39-44 are about the use of organic fertilizer. Organic fertilizers are fertilizers from animal waste products. These questions are only asked once for each plot. In some cases, there may be more than one
crop on a single plot. In this case, give the total amount for all crops on the plot. (The same rule applies to inorganic fertilizers, pesticides, herbicides, etc.)

Question 39: Did you use any ORGANIC FERTILIZER on [PLOT] in the long rainy season 2010?
Ask the respondent if applied organic fertilizer in (PLOT) during the long rainy season 2010/ the last short rainy season. If fertilizer was applied to ANY crop on this plot, answer yes, even if it was not applied to all crops on this plot.

Question 40: What was the quantity of organic fertilizer used?
Ask the respondent the amount of organic fertilizer applied. Write weight in kilograms - converting from traditional or non-standard units as necessary.

Question 41: Was any of this organic fertilizer purchased?
In many cases, the farmer will use organic fertilizer produced by his animals on his farm, or receive manure from neighboring farms free of charge. This question asks if he or she purchased any from a person or commercial provider.

Question 42: How much was purchased?
Ask the respondent the amount of organic fertilizer purchased. Write weight in kilograms - converting from traditional or non-standard units as necessary.

Question 43: What was the total value of organic fertilizer purchased?
Ask the respondent the worth value of the organic fertilizer purchased and record the value in TSHs.

Question 44: Where did you buy most of the organic fertilizer?
Ask the respondent where mostly purchased the organic fertilizer. List the network roster ID of the person or company that sold the fertilizers, listing up to 2 in order of importance.

## Inorganic Fertilizer

Question 45-51 are concerned with the use of inorganic fertilizers such as DAP, urea, etc. Questions 52-57 repeat the previous questions for a possible second type of inorganic fertilizer that was used.

Question 45/52: Did you use any INORGANIC FERTILIZER on [PLOT] in the long rainy season 2010?

Ask the respondent if they used inorganic fertilizer on the (PLOT) during the long rainy season 2010. In question 52, ask if they used any other type of INORGANIC FERTILIZER beyond that which they listed in question 45.

Question 46/53: What type of INORGANIC FERTILIZER did you use?
Ask the respondent the type of inorganic fertilizer that they used, using the codes listed in the questionnaire.

Question 47/54: What quantity of this inorganic fertilizer did you use?
Ask the respondent the amount of organic fertilizer purchased. Write weight in kilograms - converting from traditional or non-standard units as necessary.

Question 48/55: Did you receive a voucher / certificate for any of this (fertilizer)?
The government is starting a new program in some areas of the country to help people pay for fertilizer by using vouchers. These vouchers would be supplied by the Ministry of Agriculture, Food Security, and Cooperatives (MAFC) and can be redeemed at authorized agro-dealers. This question is aimed at measuring the percentage of the population that is participating in the new program.

Question 49/56: What was the total value of inorganic fertilizer purchased?
Ask for the total value of the inorganic fertilizer purchased. If the respondent used a voucher, record only the amount that the respondent actually spent, not the total value of fertilizer received.

Question 50: Why did you choose to use this specific type of inorganic fertilizer?
Ask the respondent the reason they chose to use this fertilizer. Code 1 refers to a professional consultation, such as advice received from an agricultural extension agent, and NGO outreach program, or other similar program. Code 2 means that the respondent chose to purchase this fertilizer because he or she received a voucher for that type. Code 3 would be based on the normal practices of the farmer. Code 4 would be if the respondent talked to friends, neighbors or other farmers in his community. If the farmer chose to use this fertilizer for a reason not listed above, use code ' 5 ' and write the reason in words.

Question 51/57: Where did you buy most of the INORGANIC fertilizer?
This question asks the name of places where the household has purchased the inorganic fertilizer that they used. Use the Network Roster to record the responses, indicating up to 2 in order of importance.

## Pesticides / Herbicides

Question 58-63 concern the use of pesticides/herbicides.

Question 58: Did you use any pesticide/ herbicide on [PLOT] in the long rainy season 2010?
Ask the respondent if used pesticides/herbicides on (PLOT) during the long rainy season 2010. Pesticides are chemicals that are used to kill insects or other small animals that damage the crop or the harvest. Herbicides are chemicals that are used to kill weeds and other unwanted plants that grow on the plot. Fungicides are also included in this question and are used to kill fungus that might grow on plants.

Question 59: What type of pesticide/herbicide did you apply?
Ask the respondent the type of pesticide/herbicides that he or she used, and use the codes in the questionnaire. If the respondent used more than one type, chose the MAIN or most important type.

Question 60: What quantity of this pesticide/herbicide did you use?
Ask the respondent the amount of pesticide/herbicide used. If the respondent applied the herbicide/pesticide more than once, you should record the total amount of the applications taken together. Indicate the correct amount and unit using the codes provided in the questionnaire.

Question 61: What was the total value of pesticide/herbicide purchased?
Ask the respondent to give the total worth value of the pesticide/herbicide purchased. If the respondent purchased MORE pesticides/herbicide than was used, list the price of the full amount purchased. (For example, a farmer may purchase 50 kg for 100,000 , but only use 10 kg this season. List 10 kg used for question 60 , but list the full price of 100,000 for question 61.)

Question 62: Why did you choose to use this specific type of pesticide/herbicide?
Ask the respondent the reason they chose to use this pesticide/herbicide. Code 1 refers to a professional consultation, such as advice received from an agricultural extension agent, and NGO outreach program, or other similar program. Code 2 means that the respondent chose to purchase this pesticide/herbicide because he or she received a voucher for that type. Code 3 would be based on the normal practices of the farmer. Code 4 would be if the respondent talked to friends, neighbors or other farmers in his community. If the farmer chose to use this pesticide/herbicide for a reason not listed above, use code ' 5 ' and write the reason in words.

Question 54: Where did you buy most of the pesticides/ herbicides?
This question asks the name of places where the household has purchased the inorganic fertilizer that they used. Use the Network Roster to record the responses, indicating up to 2 in order of importance.

## Inputs on Credit

Questions 64-69 refer to inputs the household may have received on credit. This section intends to determine the availability of loans for agricultural activities. Loans may be in terms of cash or in-kinds (example seeds, inorganic fertilizers, organic fertilizers, pesticides or any other input) for the purpose of agricultural production. Loans may be repaid in cash, in the form of a portion of the harvested crops, or in exchange for labour.

Question 64: Did you receive any seeds, fertilizers, pesticides or herbicides for [PLOT] on credit to be paid later on during the last completed short rainy season?

It is important that you probe in this question. The respondent may not think of the inputs as a loan. However, if they received inputs without paying the FULL price ahead of time, but are expected to repay later or to sell the crops to the person who gave them inputs, this is credit.

Question 65: What were the types of input you received on credit?
Ask which inputs the respondent has received on credit. Probe for further inputs after the first response and list all that apply.

Question 66: How much did you pay up front for these inputs?
Ask the respondent how much paid up front for the combined total of all the inputs listed in question 65.

Question 67: How much did you repay in cash later on for the inputs?
Ask the respondent how much paid later in cash for the combined total of all the inputs listed in question 65. Exclude in-kind labour and goods, as we will ask about these in the next question.

Question 68: How much did you repay in kind later on for the inputs?
This question asks the respondent to indicate how much the repaid in in-kind services for their input loan. Answer choice 1 refers to paying in crops, answer choice 2 refers to paying in labour, and choice 3 includes all other methods.

Question 69: From whom did you receive these inputs on credit?
Ask the respondent who gave these inputs on credit. Use the network roster to record their response, indicating up to two in order of importance.

## Household Labour

This section records each individual household member's labour on the household's plots. You should use the codes from the household roster in the ID line to indicate about which household member you are speaking.

Question 70: During the long rainy season 2010, how many days did [NAME] spend on the following activities on this plot?

Ask the respondent if during the long rainy season 2010, how many days did (NAME) work on the four different types of activities that are listed: "land preparation and planting," "weeding," "ridging, fertilizing and other non-harvest activities," and "harvesting." For each individual in the household that participated in these activities, write his/her code from the household roster in the appropriate column, and indicate how much time was spent on the given activity for each listed household plot.

Example: Consider a household consisting of Mr. Juma, roster ID 01, and his wife, roster ID 02. On their main plot (M1), Mr. Juma worked for 10 days on land preparation and 4 days on planting, and 13 days on weeding on their main plot. His wife worked for 7 days on land preparation, and 5 days on

|  | 70. <br> Katika msimu wa kilimo wa masika 2010, ni kwa siku ngapi [JINA] alifany a kazi zifuatazo |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G | Kusafisha shamba na kupanda? |  |  | Kupaliila |  |  |
| $\begin{aligned} & \mathrm{E} \\ & \mathrm{R} \\ & \mathrm{E} \\ & \mathrm{~S} \\ & \mathrm{H} \\ & \mathrm{O} \end{aligned}$ |  | ID: <br> 02 | ID: |  | $\begin{gathered} I D: \\ 02 \end{gathered}$ | ID: |
| M1 | 14 | 12 |  | 13 |  |  |
| M2 |  | 7 |  |  | 3 |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | planting. In addition, his grandchild Ali (who lives in a different household) assisted them on land preparation for 14 days, 4 days for planting and 10 days for weeding. On their secondary plot (M2), the wife spent 5 days preparing the land, 2 days planting and 3 days weeding. Ali assisted his grandmother with the weeding, working for 3 days with her.

NOTE: For the non household member who worked on plots without payments (eg Ali who lives in other household but has helped his grandparents), the information should be filled in Question 72, as hired labour, even though Ali does not get paid.

Question 71: Did you hire any labor to work on this plot in the long rainy season 2010?
Ask the respondent if the household did employ any person to work in the plots for payments during the long rainy season 2010. This should include anyone that worked on the plot from outside the household, even if they were not paid.

Question 72: During the long rainy season 2010, how many days did your household have hired labor for this plot for [...]?

Ask the respondent during the long rainy season 2010, how many days did the household hire a person to work in the plot for the four listed activities, "land preparation and planting," "weeding," "ridging, fertilizing and other non-harvest activities," and "harvesting." This information is divided into categories, man days, woman days, child days, and total wages paid.
"Man days" equals the total number of men working times the number of days they worked.

For example, on my first plot (M1) suppose I hired 5 people to work on my first plot only to do land preparation and planting and that I paid each of them 2,000 per day per adult. If I hired 2 men and 2 women and 1 child, and Man A worked for 3 days, Man B worked for 2 days, Woman $C$ and her child each worked for 7 days, and Woman D worked for 1 day, then the following information should be entered. The child was not paid. On my second plot, the children of my cousins did all the land preparation and weeding. There are 6 of these children, and they each worked 4 days each on land preparation, 4 days each on planting, and 5 days each on weeding. They are the children of my cousin so I do not have to pay them, as my children will also assist his household in the fields.

| $\begin{gathered} \mathrm{G} \\ \mathrm{E} \\ \mathrm{R} \\ \mathrm{E} \\ \mathrm{~S} \\ \mathrm{H} \\ \mathrm{O} \end{gathered}$ | 72. Katika msimu wa kilimo wa masika 2010, ni kwa siku ngapi kaya iliajiri mtu katika shamba kwa ajili ya [...]? JUMUISHA PIA MALIPO KWA NJIA YA VITU |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kusafisha shamba na kupanda? |  |  |  | Kupaliia |  |  |  |
|  | W/WAKE SIKU KAZI | W/MUME <br> SIKU KAZI | watoto <br> SIKU KAZI | JUMLA YA MALIPO (TSH) | WIWAKE SIKU KAZI | WIMUME SIKU KAZI | watoto SIKU KAZI | JUMLA YA MALIPO (TSH) |
| M1 | 5 | 8 | 7 | 26,000 | 0 | 0 | 0 | 0 |
| M2 | 0 | 0 | 48 | 0 | 0 | 0 | 30 | 0 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Note: if a household hired equipment in addition to the people, such as a man with a plow for three days at a cost of TSH 30,000, this should not be recorded here. This information will be entered in section 11, 'Agricultural Equipment'.

## Short Rainy Season (Section 3A)

Question 73-83 in SECTION 3A are different from section 3B (Question 73-76).

This is a question to the enumerator asking when the last completed rainy season was. You should refer to question 9 in section 2 for the answer.

Section 3A Question 74: Did you cultivate this plot in the short rainy season 2009?
This includes fruit trees and other permanent crops from which the household may have harvested during the short rainy season. Follow the skip codes indicated in the questionnaire.

Section 3A Question 75: What was the main crop cultivated on this plot in the short rainy season 2009? This question asks the respondent to identify the main crop cultivated on this plot during the short rainy season 2009. If more than one crop was planted on this plot, identify the most important or main crop. Following this question there is an unconditional skip to the next plot.

Section 3A Question 76: Did you have use of this plot in the short rainy season 2009?
This question asks if the household had use of this plot during the short rainy season 2009. It is not necessary that the household actually owns the plot, just that they had permission to use it during the short rainy season 2009 as they do today.

Section 3A Question 77: How did you acquire this plot for the long rainy season 2010?
If the household did not have use of the plot during the short rainy season 2009 , this question asks the respondent how they came to have use currently. Following this question there is an unconditional skip to the next plot.

Section 3A Question 78: How did you use this plot during the short rainy season 2009?
Ask the respondent how he/she used the plot during short rainy season 2009. Following this question there is an unconditional skip to the next plot.

Section 3A Question 79: Did you cultivate this plot in the short rainy season 2010?
This includes fruit trees and other permanent crops from which the household may have harvested during the short rainy season.

Section 3A Question 80: What was the main crop cultivated on this plot in the short rainy season 2010? This question asks the respondent to identify the main crop cultivated on this plot during the short rainy season 2009. If more than one crop was planted on this plot, identify the most important or main crop. Following this question there is an unconditional skip to the next plot.

Section 3A Question 81: Did you have use of this plot in the short rainy season 2009?

This question asks if the household had use of this plot during the short rainy season 2009. It is not necessary that the household actually owns the plot, just that they had permission to use it during the short rainy season 2009 as they do today.

Section 3A Question 82: Why did you not have this plot (owned or cultivated) in the short rainy season 2010?

Use the codes listed in the questionnaire to identify the proper response. Following this question there is an unconditional skip to the next plot.

Section 3A Question 83: How did you use this plot during the short rainy season 2010?
Ask the respondent how he/she used the plot during short rainy season 2009. Following this question there is an unconditional skip to the next plot.

## Short Rainy Season (Section 3B):

Begin by filling in the crop flap. Section 3B should include ALL plots owned or cultivated by the household, in both short and long rainy season. Most of section $3 B$ is identical to section $3 A$, however the beginning and end are different.

## Section 3B Question 1b: ENUMERATOR: DID YOU ALREADY LIST THIS PLOT ABOVE IN 3A?

Remember, you will REPEAT the plots from 3A here in 3B. You should answer yes if the plot was already listed in section 3A. In this case you will skip the first half of 3B.

NOTE: Questions 2-38 in Section 3B are about the plot in general. They don't refer to a specific season. However, questions $38-72$ refer to the short rainy season specifically. It is possible, for example, that a household used inorganic fertilizer on a given plot the long rainy season but not in the short rainy season. So these questions are repeated in the long and short season for the same plots.

## Section 3B Question 73: ENUMERATOR: DID YOU ALREADY LIST THIS PLOT ABOVE IN 3A?

This repeats question 1 b . You should answer yes if the plot was already listed in section 3A. In this case you will skip to the next plot.

## Section 3B Question 74: WHAT YEAR WAS THE LAST COMPLETED SHORT RAINY SEASON?

This repeats the information from question 9 in Section 2.

Section 3B Question 75: Why did you not have this plot (own or cultivate) during the long rainy season 2010?

Respondents will only reach this question if the plot was owned/farmed in the short rainy season 2009 but NOT owned or farmed in the long rainy season 2010. This should be rare. List the explanation for this, using the options listed. Perhaps the plot was sold after short rainy season 2009 so not owned during long rainy season 2010, etc.

Section 3B Question 76: How did you acquire this plot for the short rainy season 2010?
Respondents will only reach this question if the plot was owned/farmed in the short rainy season 2010, but NOT owned or farmed in the long rainy season 2010. This should be rare. Ask them how they acquired use of the plot for short rainy season, since they did not have it during long rainy season.

## Section 4. Crops by Plot

In section 3, one line referred to one plot. In section 4 one line refers to a specific crop on a specific plot. If the household grows multiple crops on the same plot, they should be listed separately (for example, maize and beans on the same plot will be on different lines). If the household grows the same crop on different plots (for example, cassava on two plots) these should be on different lines.

NOTE. Section four is about annual crops. Do NOT include fruits, trees, cassava or any other perennial crops.

Begin by filling in the flap. Use the flap to make sure you keep the correct plot-crop combination on each line.

In section 4A, list all crops cultivated in long rainy season 2010. This includes all crops listed in section 2A and/or 3A. For each plot, list all crops grown in long rainy season on a separate line.

In section 4B, list all crops cultivated in the relevant short rainy season. This includes all crops listed in section 2B AND all crops for which you said "yes" to question 36 in section 3B. For each plot, list all crops grown in short rainy season on a separate line. (There is an example on page 102.)

Column one: List all plots and their respective ID codes, see section of table A and B
Column two: List of all crops cultivated during the last short/long rainy season


Plot 2


Question 1: Was (crop) planted in entire area of plot?
This question asks if the crop planted on the entire plot, or if just in part. In the above example, in plot 1, maize and beans are not planted on the entire plot area - they are planted on separate halves of the plot. In plot 2, both maize and beans are planted on the entire crop area.

Question 2: Approximately, how much of the plot was planted with [CROP)
Ask what percentage of the plot was planted with (crop). In plot 1 above, maize would be planted on $50 \%$ and beans would be planted on $50 \%$.

Question 3: Why didn't you plant the entire plot with [CROP]?
There are many reasons why the household did not plant the entire plot with a certain crop. In the example above, the reason would be code 1, 'was divided' because the plot was divided into maize and bean sections. Other reasons could include a lack of money or equipment, or natural disasters. Choose the most appropriate reason and use codes in the questionnaire.

Question 4: Was cultivation intercropped?
Intercropped means that two or more types of crops were grown mixed together in a single area of the plot. In the above example, plot 1 is not intercropped (it would be called 'pure stand'), while plot 2 is intercropped.

Question 5: What is the reason for this intercropping?
Household have different reasons for intercropping. Use the codes listed in the questionnaire to choose the most appropriate reason.

## Harvest

Question 6: Did you harvest any [CROP] on this plot in the long rainy season 2010?
This question asks if any crop was harvested during the long rainy season 2010. Record yes even if the entire crop was destroyed after the harvest.

Question 7: Why didn't you harvest any [CROP] on this plot?
'Not mine to harvest' would be the most appropriate response if the crop grown on this plot does not belong to the household, and therefore cannot be harvested by household members. 'Still in plot' would be the most appropriate response if the crop is still in the field and not yet ready to be harvested.

Question 8: What was the area harvested in the long rainy season 2010?
Ask the area (acres) of the plot harvested during 2010 long rainy season. Verify that this area is not greater than the total area of the plot listed in section 2.

Question 9: Was area harvested less than area planted?
If the household suffers losses, the area harvested may be smaller than the area planted.

Question 10: What was the reason it was less than the area planted?
Use codes beside of Question 10 to identify the most appropriate response.

Question 11: What was the first and last month of the harvest period?
Write the start and finish month of the harvest. Write 0 if yet finished harvesting on the finishing part. Note: this does NOT refer to the start and finish of the season (planting to harvesting). It only refers to when the household started harvesting and when they finished harvesting.

Question 12: Have you finished the harvest?
Even if the household is in the process of harvesting, it would not be considered complete until the entire crop from an individual plot has been harvested. Remember this is separated by crops and plots, so if the maize harvest is completed for one plot but not the other, the completed plot should be marked as complete and the other plot as incomplete. Similarly, if one crop is completely harvested from an individual plot but the other crops grown on this plot are still in the field, mark the completed crop complete, and the others as incomplete.

Question 13: How many more days do you expect the harvest to last?
This question should be asked for the individual crop on the individual plot. For example, the question could ask "how much longer do you expect the maize harvest to last on Shamba Nyumbani?"

Question 14: What fraction of the crop remains to be harvested in this period?
Ask the respondent to get the fraction in percentage, and express this percentage in two digits.

Question 15: What was the quantity harvested?
This question asks the respondent for the quantity harvested from the individual crop on the individual plot. It is very important that this measure be expressed in kilograms. This means you must convert all local currency units into kilograms before leaving the EA.

Question 16: What is the estimated value of the harvested crop?
Ask the respondent to estimate the value of the harvest recorded in question 15 at the time of that harvest. They should answer this question even if they did NOT sell any of this crop.

## Losses

Question 17: Were there any losses of crops before the harvest?

Losses refer to any crops that were destroyed by disease, animals etc.

Question 18: What was the cause of these losses?
Ask the respondent the reasons for such loss. Common reasons include pests, animals, theft, natural disasters etc. Use the codes as listed in the questionnaire.

## Seeds

Question 19: Did you purchase any SEED for [CROP] in the long rainy season 2010?

Question 20: Did you receive a voucher/certificate for any of the (seed)?
The government is starting a new program in some areas of the country to help people pay for seeds by using vouchers. These vouchers would be supplied by the Ministry of Agriculture, Food Security, and Cooperatives (MAFC) and can be redeemed at authorized agro-dealers. This question is aimed at measuring the percentage of the population that is participating in the new program.

Question 21: What was the total value of seeds purchased?
Ask for the total value of the seeds purchased. If the respondent used a voucher, record only the amount that the respondent actually spent, not the total value of seeds received.

Question 22: Where did you buy most of the seed?
The respondent should mention the service provider who sold/gave seeds - use the network roster ID. If the seeds were purchased from the same place as, say, fertilizer, make sure the network roster IDs match the ones used in Section 3 for the fertilizer questions. List up to two in order of importance.

Question 23: What type of seed did you purchase?

Question 24: What type of improved seed did you purchase?
If the respondent purchased improved seeds he/she may have been told the specific name of the seed type or brand by the dealer.

## Section 5. Crop Production and Sales

Section 5A refers to crops cultivated during the long rainy season, and section 5B refers to crop cultivated during the short rainy season. All the crops listed in previous sections should also appear in this section. No crops that do not appear in early sections should appear here. This will be verified by the data entry program and a callback must be done in the event that this is done incorrectly.

## Sales

Question 1: Did you sell any of the [CROP] produced in the long rainy season 2010?
Indicate if the respondent sold any of the [CROP] produced during the long rainy season 2010. If yes, code 1 and continue to the next question. If no, code 2 and skip to Question 20.

Question 2: What was the quantity sold?
Indicate the amount sold in kilograms. If the respondent gives a measure in local units, this measure must be converted into kilograms before you leave the EA. You should verify that the amount sold of each crop is not greater than the amount harvested on all plots.

Question 3: What was the total value of sales?
Write the amount of money received from sales in TSH.

Question 4: To which persons, firms or institutions did you sell most of the [CROP]?
Ask the respondent to list up to two buyers, in order of importance, of the [CROP] using the network roster on the last page of the questionnaire. Note that this might not always be an individual customer, but rather a place, such as the local market in the case of produce (such as tomatoes, onions, etc).

Question 5-9 ask about sales to customer \#1 and questions 10-14 ask about sales to customer \#2. These questions are the same for both customers. If the respondent sells to only one customer, the questions for customer 2 should be left blank.

Question 5/10: What quantity of [CROP] did you sell to [CUSTOMER \#1]?
Ask the respondent the amount that he or she sold to the first buyer. Indicate the amount in kilograms.

Question 6/11: What was the total value of these sales to [CUSTOMER \#1]? Indicate the total value of these sales (the price paid by the first buyer to the respondent) in TSH.

Question 7/12: During which month did you sell most of the [CROP] to [CUSTOMER \#1]?
Ask the respondent in what month most of the sales occurred. This may be easy (such as with a crop that is sold all at once), or very difficult (such as with tomatoes which can be sold many times throughout the year). You should probe to capture the best information from the respondent.

Question 8/13: Approximately how many transactions took place while selling [CROP] to [CUSTOMER \#1]? This question asks the number of times this crop was sold to the customer. Again, if the crop was sold all at once, the response would be ' 1 '. If many times, you should try to get the best estimate possible. For example, if the harvest took place 40 days ago, and the respondent sold beans in the market every day since that time to an average of 3 people per day, then a good estimate would be 120 transactions.

Question 9/14: Who in your household decided what to do with these earnings?
This question asks the respondent who in the household makes the decisions related to the sales of the crop. You should use the codes listed in the household roster. Some household spending decisions are made as a joint decision from the head and spouse (therefore you should use code 01 and 02 ), some decisions are made by the head only (01) or the spouse only (02), or by another household member. Use the roster codes as appropriate.

Question 15: Did you transport [CROP] for sale?
Ask if he/she transported crop for the purpose of selling into other markets. Transportation could be walking, on a bicycle, on a truck, etc. A complete list is found in question 18.

Question 16: What is the average distance you transported [CROP] for sale?
Ask the respondent how far he has sent the crops for the purpose of selling. Record the distance in kilometers. If the respondent gives you the name of a place, ask them to indicate that distance to that place in kilometers.

Question 17: How many times did you transport [CROP] for sale during the long rainy season 2010? Ask the respondent how frequently he or she undertook transporting their crops to market. This response should be logically consistent with the number of transactions listed in questions 8 and 13.

## Question 18: How did you transport [CROP]?

Ask the respondent to identify how they transported the good to market. If they used more than one method, probe to find out which method is the most important. Use the codes listed in the questionnaire.

If the respondent gives a method that is not listed in the questionnaire, mark 5 "other" and write down the method in words.

Question 19: How much did you pay to transport [CROP] during the long rainy season 2010?
Ask the respondent the total amount that he or she had to pay to transport their crops during the long rainy season 2010. If they transported their crops more than once, record the total price of all the trips.

## Losses

Question 20: Was any portion of the production lost post-harvest to rotting, insects, rodents, theft, etc? Some part of the crop may be lost after the harvest but before the crops can be sold, possibly due to rotting, or to being eaten by insects or rats, or by theft. This question does not include loses before the harvest, such as being insects or birds while still in the field.

Question 21: What was the reason for the loss?
If more that one reason exists, probe to find out which reason was the most important. Use the codes listed in the questionnaire. If the respondent gives a reason that was not listed on the questionnaire, code 5 "OTHER" and write the reason in words.

Question 22: Out of ten units of [CROP], how many were lost?
This response should be an integer between 1 and 10. For example, if a maize farmer lost 5 out of every 10 ears of maize (or 50\%) to birds before they could be sold, then 5 should be the response. If the farmer lost 3 out of 10 (or $30 \%$ ), 3 should be the response. If the respondent gives a percentage that does not easily translate, $25 \%$ for example, round the number to the nearest integer (in this case 3 ) and record that response.

Question 23: What was the value of this lost crop?
Ask the value of harvest was lost in TSH. The respondent should estimate if they are not sure.

## Crop Residue

Question 24: What was done with the residue from this crop?
This question asks what was done with the residue after the crop was harvested (the stalk, inedible leaves, etc.) If the respondent sells the residue, ask the follow up questions as listed. In all other cases, skip to question 28.

Question 25: What was the quantity sold?
Record the quantity sold in kilograms - converting from local units if necessary.

Question 26: What was the total value of the sales?
Record this value in TSHs. If there were multiple sales, record the total amount.

Question 27: To which persons, firms or institutions did you sell most of the residue from this [CROP]? Use the network roster to record up to two buyers in order of importance.

## Storage and Harvest

Question 28: Do you have any of the harvest from the long rainy season 2010 in storage now?
Ask the respondent if there is any crop in the storage facility, either at home or at another location.

Question 29: How much of the harvest do you still have in storage?
Indicate what amount of the crop storage is still in storage at this time. This amount should be recorded in kilograms, not in local units.

Question 30: What is your main method of storage?
Ask the respondent what the main type of storage facility that they use for storing their fruit. Use the codes listed in the questionnaire. If more than one type of storage facility is used, probe to find out which kind is used most. If the respondent lists a type of storage facility that is not included in the list, code 8 "OTHER" and write the type of storage facility in words.

Question 31: Did you do anything to protect the stored crop?
This question asks if the respondent took any steps to protect the crop from rotting or pests.

Question 32: What did you do?
Indicate the method that the respondent used to protect the crop. Use the codes listed on the questionnaire. If the respondent gives a method that is not included on the list, code 3 "OTHER" and write the name of the method in words.

Question 33: When you store [CROP], what is usually the main purpose of storing it?
Ask the respondent the main reason for storing the crop using the codes listed on the questionnaire. If the respondent gives a reason that is not listed on the questionnaire, code 4 "OTHER" and write the reason in words.

## Section 5B repeats the questions asked in Section 5A for crops cultivated during the short rainy season.

## Section 6. Permanent Crops by Plot

Section 6 is very similar to section 4. One line refers to a specific crop on a specific plot. If the household grows multiple permanent crops on the same plot, they should be listed separately. If the household grows the same permanent crop on different plots (for example, cassava on two plots) these should be on different lines.
[EXTRA EXPLANATION PROVIDED HERE IN SWAHILI MANUAL]

## 6A. Fruit Trees

This section refers on fruit trees cultivated within last 12 months in the respective plot. List all fruit trees on the household's land. Common examples of fruit trees are passion fruit, banana, mango, papaya and oranges. The complete list of codes for fruit trees are listed on the last page of the questionnaire. Be sure to probe carefully if the respondent gives you the name of a fruit not on this list. In many cases this is the local name for a fruit that is in fact on the list. If possible, ask to see the fruit when visiting the respondent's field to take GPS measurements, or to find this type of fruit in the local market, to try to identify its name.

## Column 1:

Write the ID code of the plot as indicated in the sketch, example M1, M2, M3 etc

## Column 2

Write the ID code of the crop grown in the plot listed in the first column

Question 1: PLEASE LIST ALL PLOTS CULTIVATED DURING THE LAST 12 MONTHS. FOR EACH PLOT, LIST ALL FRUITS CULTIVATED.

Ask the respondent to list all the types of fruit trees they have on their plots. Remember, the minimum criteria for mango, avocado, passion, guava, orange, mandarin, lime/lemon, jack fruit is one tree, and the minimum number for banana and papaya is four trees.

Question2: How many of these plants/ trees are on this plot?
Write the number of trees present in the plot listed.

Question3: In what year were most of these plants/ trees planted?
Record the year in 4 digits in which the fruit trees were planted. If the trees were planted at multiple times, record the year in which the largest portion was planted. If the trees were planted before the respondent was born, list 1900.

Question 4: How many trees/ plants were planted during the last 12 months?
Ask about the number of fruit trees planted in the last period of 12 months. These are new trees only.

Question 5: Was cultivation intercropped during the past long rainy season?
Ask if there is a plot in which intercropped were done in the last period of 12 months. Verify that the answers are consistent with what you have previously recorded in the questionnaire. For any plot with more than one crop listed, the answer should be yes.

Question 6: What was the reason for intercropping?
Write the relevant code from the questionnaire.

Question 7: What was the last completed production period for the [FRUIT]?
This question asks about the production cycle of the fruit. Indicate the month and year in which the last fruit season started (when the first fruits appeared) and the year and month in which the last fruit season ended (when the harvest was completed). If production is continuous, use the last 12 months to indicate the season.

Question 8: What was the total amount of [FRUIT] harvested in the past 12 months? Record the fruit harvest in kilograms - converting from local units if necessary.

Question 9: Were there any losses of [FRUIT] before the harvest?
This includes only losses that occurred while the fruit was still on the trees.

Question 10: What was the cause of these losses?
Write the relevant code as indicated in the questionnaire.

## 6B: Permanent Crops

Permanent crops are crops which grow continuously for many years and can be harvested many times. They do not need to be planted every year like annual crops. Cassava is considered an annual crop because
it can be harvested every 6 to 12 months depending on the variety. Other examples of common permanent crops are pineapples, coconut, sugar cane, cashew nuts and pigeon peas.

## All of the questions in 6B are identical to 6A.

## Section 7. Permanent Crops by Crop

NOTE: All permanent and fruit crops that are listed in section 6 should appear in section 7. No permanent or fruit crops should be listed in section 7 that did not appear in section 6 . This will be verified by the data entry program and a callback must be done in the event that this is done incorrectly.

Question 1: LIST ALL FRUIT TREES/PERMANET CROPS AS REPORTED IN SECTION 6A.
This question should not be asked to the respondent. Copy the list from section 6 . No crops that do not appear in section 6 should appear in section 7 .

Question 2: Did you sell any of the [FRUIT] collected? Indicate if the respondent sold any of the fruit harvest. Code 1 for yes and continue with the next question. Code 2 for no and skip to Question 6.

Question3: What was the total quantity of (fruit/crop) sold? Ask respondent the amount of [FRUIT] harvested and sold. Record the amount in kilograms, not in local units.

Question 4: What was the total value of [FRUIT] sold?
Write the total value in TSH of [FRUIT] sold. In some cases the respondent may have sold the crop in small amounts over a long period of time. In this case he or she should estimate the total amount sold over the last 12 months and record this amount in shillings.

Question 5: Where did you sell most of the fruit?
Indicate where the respondent sold the majority of their fruit crop. List up to two places using the network roster on the last page of the questionnaire.

## Losses

Question 6: Was any portion of the production lost post-harvest to rotting, insects, rodents, theft etc? Some part of the crop may be lost after the harvest but before the crops can be sold, due to rotting, or to being eaten by insects or rats, or by theft. This question does not include loses before the harvest, such as being insects or birds while still on the tree. If the respondent indicates having experienced such loses, code 1 and continue to the next question. If no, code 2 and skip to Question 10.

Question 7: What was the reason for this loss?
Ask for the major reason which caused the loss of crops. If more that one reason exists, probe to find out which reason was the most important. Use the codes listed in the questionnaire. If the respondent gives a reason that was not listed on the questionnaire, code 5 "OTHER" and write the reason in words.

Question 8: Out of 10 units of [FRUIT], how many were lost?
Ask the respondent the portion out of 10 harvested crops were lost. This response should be an integer between 1 and 10. For example, if a mango farmer lost 5 out of every 10 mangoes (or $50 \%$ ) to rot before they could be sold, then 5 should be the response. If the farmer lost 3 out of 10 (or $30 \%$ ), 3 should be the response. If the respondent gives a percentage that does not easily translate, $25 \%$ for example, round the number to the nearest integer (in this case 3) and record that response.

Question 9: What was the value of this lost [FRUIT]?
Write the value (TSH) of the lost [FRUIT]. The respondent should estimate if they are not sure.

Question 10: Do you have any of this harvest in storage now?
Ask the respondent if there is any crop in the storage facility, either at home or at another location. If yes, code 1 and continue with the next question. If no, code 2 and skip to the next fruit on the list.

Question 11: How much of this harvest do you still have in storage? Indicate what amount of the crop storage is still in storage at this time. This amount should be recorded in kilograms, not in local units.

Question 12: What is your main method of storage?
Ask the respondent what the main type of storage facility that they use for storing their fruit. Use the codes listed in the questionnaire. If more than one type of storage facility is used, probe to find out which kind is used most. If the respondent lists a type of storage facility that is not included in the list, code 7 "OTHER" and write the type of storage facility in words.

Question 13: Did you do anything to protect the stored crop?
This question asks if the respondent took any steps to protect the crop from rotting or pests. If yes, code 1 and continue with the next question. If no, code 2 and skip to the next fruit on the list.

Question 14: What did you do?

Indicate the method that the respondent used to protect the crop. Use the codes listed on the questionnaire. If the respondent gives a method that is not included on the list, code 3 "OTHER" and write the name of the method in words.

## 7B: Permanent Crops

All of the questions in 7B are identical to 7A.

## Section 8. Outgrower Schemes \& Contract Farming

Question 1: Did you cultivate any crops, permanent crops or fruit trees as part of an outgrower scheme or contract farming system at any time over the last 12 months? (List crops if received inputs or agreed price in advance with large buyer.)

If a large farmer gave or sold inputs to the respondent (seed, fertilizer, etc.), and promised to buy back their crops, this is contract farming. This is very common for certain commercial crops. Probe about any relationship the respondent may have had with nearby large farms.

## Repeat Questions 2-9 for long rainy season, short rainy season, and permanent crops.

Question 2: What crops were grown as part of an outgrower scheme or contract farming system in the long rainy season 2010?

List those crops grown and their codes in this column. If none, skip to the next section.

Question 3: What farm/company did you work with in this scheme?
See the list of service providers found in the network roster on the last page of the questionnaire. If the farm/company has not been listed, add it to the network roster.

Question 4: What did you agree in advance (before planting) with the buyer as part of this scheme?
Ask for their agreement with the buyer before planting. You should list all that apply. For example, if the respondent agreed with a coffee buyer to produce 120 kilos of grade A robusto coffee at a price of 1500 TSH per kilo, then "CROP SALE PRICE," "AMOUNT YOU PRODUCE," and "QUALITY OF CROP" are all valid. You should indicate numbers 1, 2 and 4 on the questionnaire. If the respondent indicates a term of the agreement that is not listed in the questionnaire, code the response as 6 "OTHER" and write the response in words.

Question 5: Did you sign a written contract with the buyer before planting?
Ask the respondent if they had a written contract before planting. If yes write code 1 , and if no write code 2.

Question 6: Would you say that the buyer complied with the original agreement?

Ask the respondent if the buyer fulfilled the terms of the original agreement as understood by the respondent. If yes, go to Question 8 if no continue to Question 7.

Question7: What were the main problems?
Ask the respondent what are the main reasons that they feel the buyer did not comply with the original agreement. Use the codes listed in the questionnaire. If the respondent indicates a reason that is not included in the list, code 4 "OTHER" and write the reason in words.

Question 8: Would you say that YOU complied with the original agreement?
Ask the respondent if they, as the seller, complied with the agreement with the buyer. If the respondent says they complied, write code 1 then ask next crop. If the respondent indicates that they did not comply with the terms, continue to Question 9.

Question 9: How/why did you break the agreement?
Ask the respondent the reasons for breaching the contract. Use the codes listed in the questionnaire. If the respondent indicates a reason that is not listed on the questionnaire, code 4 "OTHER" and write the reason in words.

This series of questions is then repeats for short rainy season crops (Section 8B) and fruit trees and permanent crops (Section 8C).

## Section 9. Processed Agricultural Products and Agricultural By-Products

This section asks about processed agricultural products and agricultural by-products. The codes for these products are listed on the questionnaire. Note that some of the products appear twice, once under "Agricultural Products" and once under "Agricultural By-Products." If the good was produced purposely for sale this is an agricultural product. For example, if the household pounds maize grain grown on the farm into flour and sells the flour, this would be an agriculture product. If the good is produced as a consequence of processing another good, but is sold anyway, this is an agricultural by-product. An example of an agricultural by-product would be if the husks from the maize production are sold as animal fodder.

It is important for these good to make the distinction between the two. For example, squeezing apple juice for sale in the market from the apples grown on the respondent's farm would be an agricultural product. If the household produced dried apple slices for sale, but before the apple slices can be dried all the juice must be squeezed out, and this juice is then sold in the market, it is an agricultural by-product. The important thing in making the distinction is the primary goal of the production.

Question 1: Did the household process any of the products harvested on the farm in the last 12 months? Probe to make sure that the respondent understands all the possible agricultural products and by-products. If the answer is yes, write code 1 and ask next question, and if the answer is no write code 2 skip to next section.

## Question 2: Crop name

Write the name of the original crop from which the product or by-product comes. Indicate the appropriate crop code, and then mark if a product or by-products is produced.

Question 3: What is the by-product produced from this crop?
Indicate what product or by-product is produced, using the codes listed on the questionnaire - being careful to distinguish between agricultural products and by-products for items that appear on both lists. If the respondent lists a product that does not appear on the list on the questionnaire, decide if the item is a product or by-product and chose the appropriate "OTHER" code. Write the name of the item in words.

Question 4: What is the quantity produced in the last 12 months?

Ask the respondent the amount of product or by-product produced within 12 months, write weight in kilogram/liter. Be careful to convert the amount into either kilograms or liters. For example, if the respondent produced a tonne of fodder, indicate 1000 kilograms.

Question 5: Was any [BY-PRODUCT] sold?
Ask the respondent if any amount of the by-products produced in the past 12 months were sold. If the answer is yes, continue to Question 6, if the answer is no skip to Question 10.

Question 6: How much was sold?
Ask the amount of by products sold by the respondent. Write the amount and the code of the unit in kilogram or liter within 12 past months. Be careful to convert the amount into either kilograms or liters. For example, if the respondent sold a tonne of fodder, indicate 1000 kilograms.

Question7: How much [CROP] did you use as input for the sold [BY-PRODUCT]?
Ask the respondent the amount of [CROP] that was used as inputs for the [BY-PRODUCT]. For example, if 60 kilograms of maize grain was used to produce 20 kilograms of flour, indicate the amount of the input, 60 in this case, on the questionnaire.

Question 8: What were the total sales in shillings?
Ask the respondent for the amount of the sales of each by-product, and write the amount in shillings.

Question 9: Where did you sell most of the [BY-PRODUCT] that you sold?
Ask the respondent where such by products were sold. List up to two places using the network roster on the last page of the questionnaire.

Question 10: Did you incur any other expenses such as labor costs, additional inputs etc in the production of [BY-PRODUCT)?

This question relates to other costs used in production of those products/by products. For example, wages for workers, fuel for machines, etc. If the answer is yes continue to Question 11, if the answer is no go to the next crop.

Question 11: What were the total costs of these additional expenses?
Ask the respondent for the amount spend on the additional expenses listed in Question 10, and record this amount in TSH.

## Section 10A. Livestock

Question1: Did this household own any animals in the last 12 months (cow, goat, chicken etc)?
Ask the respondent if anyone in the household has kept any livestock in the past 12 months. If the answer is yes write code 1 then go to Question2. If the answer is no, write code 2 then go to next section.

Question 2: Did this household own any [ANIMAL] in the last 12 months?
For each [ANIMAL] listed on the questionnaire, ask the respondent if anyone in the household has owned any of the [ANIMAL] in the last 12 months? Livestock or animals should only be those kept at the respective household, not those kept outside of the household by other people. Young animals should also be included (such as chicks in the chicken category, piglets in the pig category, kids in the goat category, etc. The only expectation to this is calves, which have their own categories.) If the answer is no write code 2 then ask next animal. If the answer is yes, continue to Question 3. If the household names a type of animal not included on the list, write the name of the animal in words in row 16 and continue to Question 3.

Question 3: Number of [ANIMAL] owned 12 months ago.
Ask the respondent how many animals they owned 12 months ago. It is important to probe and get this number correct as it will play an important part in the validation checks (making sure that the number of animals coming into the household and those leaving the household balance with the number owned 12 months ago and the number owned now.

Question 4: How many [ANIMAL] does this household currently own?
This question asks the respondent to break down the number of animal owned into three categories, "Indigenous," "Improved Beef," and "Improved Dairy." Record the number of animals that belong in each category. Notice also that some sections are shaded for the improved categories

Born
Question 5: How many [ANIMAL] were born in the past 12 months?
Ask the interviewer on the number of [ANIMAL] born in the last 12 months. In the cases where the box is shaded, do not ask this question to the respondent.

## Purchased

Question 6: Have you bought any [ANIMAL] alive in the past 12 month?
This includes the purchase of any aged animal (including young animals) in the last 12 months.

Question 7: How many [ANIMAL] have you bought alive in the last 12 months?
Record the number purchased, including young animals.

Question 8: What was the total value of these purchases?
Record the total value of the purchases in the last 12 months in TSH.

## Gifts

Question 9: Did you receive any [ANIMAL] as a gift in the last 12 months?
Gifts include both transfers from friend and family members and those from outside organizations such as NGOs.

Question 10: How many [ANIMAL] did you receive as gifts in the past 12 months?
Record the number received as gifts, including young animals.

Question 11: From whom did you receive most of these [ANIMAL]?
Identify the source of the gift using the codes listed in the questionnaire.

Disease
Question 12: Have you lost any [ANIMAL] to DISEASE in the last 12 months?
Ask the respondent if there any animal has died within last 12 months, excluding those that were intentionally slaughtered. If no code 2 , and skip to Question 22. If yes, code 1 and continue to next question.

Question 13: How many [ANIMAL] have you lost to DISEASE in the past 12 months?
Record the number of animals that have died of diseases in the last 12 months.

Question 14: What was the value of these [ANIMAL]s lost to disease?
Ask the respondent to estimate the value of animals which dies of disease in the last 12 months. This amount should be recorded in shillings.

## Theft

Question 15: Have you lost any [ANIMAL] to THEFT in the last 12 months?

Ask the respondent if any animal has been stolen in the past 12 months. If no, code 2 and skip to Question 25. If the answer is yes, code 1 and continue to next question.

Question 16: How many [ANIMAL] have you lost to THEFT in the last 12 months?
Ask the respondent to indicate the number of [ANIMAL] stolen over the past 12 months.

Question 17: What was the value of these [ANIMALS] lost to THEFT?
Ask the respondent to estimate the total value of [ANIMAL] stolen, and record this amount in shillings.

## Sales

Question 18: Have you sold any [ANIMAL] alive in the last 12 months?
This question refers to the sale of any live [ANIMAL] in the past 12 months. Do not include animals that had been slaughtered prior to sale in this question. If the answer is yes, code 1 and continue to question 11. If the answer is no, code 2 and skip to Question 11.

Question 19: How many [ANIMAL] have you sold alive in the past 12 months? Record the number of live [ANIMAL] that have been sold in the last 12 months.

Question 20: What was the total value of sales?
Record the total value of live animal sales in the last 12 months for each type of animal sold.

Question 21: Who in your household decided what to do with these earnings?
This question asks the respondent who in the household makes the decisions related to the sales of this animal. You should use the codes listed in the household roster. Some household spending decisions are made as a joint decision from the head and spouse (therefore you should use code 01 and 02), some decisions are made by the head only (01) or the spouse only (02), or by another household member. Use the roster codes as appropriate.

Question 22: Where did you sell most [ANIMAL] that you sold?
This question refers to the buyer of the live animals sold in the past 12 months. Use the network roster from the last page of the questionnaire to record the buyers.

## Slaughter

Question 23: Did you slaughter any [ANIMAL] in the past 12 months?
This question refers to the slaughter of each type of animal on the list - even the silly ones - like dogs.

Question 24: How many [ANIMAL] did you slaughter in the past 12 months?
Indicate the number of slaughtered animals by the household within the last 12 months.

Question 25: How many of the [ANIMAL] slaughtered did you sell?
For each type of animal that was slaughter, indicate the number of animals that were sold. This question refers only to animals that slaughtered for sale only. Do not include those which were slaughtered for other purposes (such as funerals, vocations, etc.) If none of the animals slaughtered were sold, indicate 0 , and skip to Question 28.

Question 26: What was the total value of the sold slaughtered [ANIMAL]?
Record the total value of sales for each type of animal sold.

Question 27: Who in your household decided what to do with these earnings?
This question asks the respondent who in the household makes the decisions related to the sales of this animal. You should use the codes listed in the household roster. Some household spending decisions are made as a joint decision from the head and spouse (therefore you should use code 01 and 02 ), some decisions are made by the head only (01) or the spouse only (02), or by another household member. Use the roster codes as appropriate.

## Labour

Question 28: In principal, who is responsible for keeping [ANIMAL]?
Ask the respondent the roster number of household members primarily responsible for the keeping of each type of animal.

Question 29: Who in your household provided labour for feeding/watering of [ANIMAL]? Use the household roster ID codes for up to two household members in order of importance.

Question 30: Who in your household provided the labour for selling the animals and animal products?
Use the household roster ID codes for up to two household members in order of importance.

Question 31: Who in your household mainly provided labour for grazing of [ANIMAL]?
Use the household roster ID codes for up to two household members in order of importance.

Question 32: Did you hire any labor to help you with the [ANIMAL] in the last 12 months?
This question asks the respondent if they hired any labor from outside the household to help with the [ANIMAL] in the last 12 months. Include both those laborers that were paid in cash and those paid with inkind payments. If any labor was hired, code 1 and continue to the next question. If no labor was hired, code 2 and skip to question 34.

Question 33: What was the total cost of this labor for [ANIMAL] in the past 12 months?
Record the amount paid to labor from outside the household that assisted with each type of animal. This amount should be recorded in shillings. Therefore the value of in-kind payments will have to be estimated in shillings.

## Fodder

Question 34: Did you purchase any fodder for your [ANIMAL] in the last 12 months?
Include only fodder purchased outside of the household. If fodder was purchased, continue to next question. If no fodder was purchased, skip to Question 36.

Question 35: What was the total cost of this fodder for [ANILMAL] in the last 12 months?
Record the total cost of fodder over the last 12 months purchased for each type of animal.

## Vaccinations

Question 36: What kind of diseases did [ANIMAL] suffer in the last 12 months?
Ask the respondent if the [ANIMAL] has suffered from any disease in the past 12 months. Use the codes listed in the questionnaire to code these responses, recording up to 4 responses.

Question 37: Are your [ANIMAL] vaccinated?
Ask the respondent if the [ANIMAL] has been vaccinated. If all of the [ANIMAL] have been vaccinated, code 1. If only some of the [ANIMAL] have been vaccinated, code 2 . If all or some of the animals have been vaccinated, continue to the next question. If none of the animals have been vaccinated, code 3 and move on to the next row.

Question 38: Where did you vaccinate on your [ANIMAL]?
Indicate where the [ANIMAL] was vaccinated, using the codes listed on the questionnaire. If the respondent lists a place that is not included on the list, code 4 "OTHER" and write the name of the place in words.

Question 39: Against which diseases did you vaccinate your [ANIMAL]?
Ask the respondent against which types of diseases the [ANIMAL] was vaccinated. Use the codes listed in the questionnaire, recording up to 4 responses.

## Section 10B. Livestock By-Products

This section asks about products that are produced by the raising of different types of animals. Be sure to make the distinction between traditional and improved cow milk, and traditional and improved chicken eggs. As there are many different produces that can be produced, and these things may vary by region, many items might not be on the list. Rows 10 to 12 are available to record products that do not appear on the list. Write the name in words and continue with the section. There is also a section on the bottom of the page that asks about services that can be provided by certain types of animals.

## Goods

Question 1: Did your household produce any [PRODUCT] in the last 12 months?
Ask respondent if the household produced each of the items on the list, making sure to distinguish between improved and traditional varieties. Additional products not appearing on the list should be added in columns 10, 11 and 12.

Question 2: During the last 12 months, for how many months did your household produce any [PRODUCT]? This question asks for how many months out of the year the household produced the [PRODUCT]. For example, if the chickens only lay eggs for 8 out of 12 months, the response to this question should be 8 . Or, if the household only spends two months a year working on skins and hides, the response to this question should be 2.

Question 3: During these months, what was the average quantity of [PRODUCT] produced per month? This question estimates the production of [PRODUCT] for an average month of production. These measurement should be in standard international units (such as liters or kilograms), not in local units. Note also that there is a unit labeled "pieces." This should be used only where appropriate. For example, a household can produce 6 skins (or "pieces"), but it cannot produce 6 pieces of honey or milk. Liquid measures should always be recorded in liters.

Question 4: Did you sell any of the [PRODUCT] that you produced in the last 12 months?
Code 1 if the household sold [PRODUCT] in the last 12 months. Code 2 if none of the product was sold, and skip to the next row.

Question 5: How much of the [PRODUCT] produced did you sell in the last 12 months?

This question estimates the total sales of [PRODUCT] in the last 12 months. These measurement should be in standard international units (such as liters or kilograms), not in local units. Note also that there is a unit labeled "pieces." This should be used only where appropriate. For example, a household can sell 6 skins (or "pieces"), but it cannot sell 6 pieces of honey or milk. Liquid measures should always be recorded in liters.

Question 6: What was the total value of sales of [PRODUCT] in the last 12 months?
Ask the respondent the total value of sales of each [PRODUCT] in the last 12 months. This value should be recorded in shillings.

Question 7: Where did you sell most [PRODUCT] that you sold?
Ask the respondent to whom most of the [PRODUCT] was sold. Use the network roster to indicate up to two responses in order of importance.

Question 8: Who in your household decided what to do with these earnings?
This question asks the respondent who in the household makes the decisions related to the sales of this animal. You should use the codes listed in the household roster. Some household spending decisions are made as a joint decision from the head and spouse (therefore you should use code 01 and 02 ), some decisions are made by the head only (01) or the spouse only (02), or by another household member. Use the roster codes as appropriate.

## Services

Traction / Draught Power services and Sire services are two ways that the household can use their animals to earn income. If the household uses their animals in any other way to provide a service and earn income, list this service in line 3.

Question 9: Did your household sell any of the following agricultural services in the last 12 months? Indicate yes or no as appropriate and follow the skip codes in the questionnaire.

Question 10: During the last 12 months, how many times did your household sell service?
This question records the number of individual times that the household sold the indicated service.

Question 11: What was the total value of sales of [SERVICE] in the last 12 months?
Indicate the total value in TSH of all the times the household sold the agricultural service?

Question 12: Where did you sell most of the [SERVICE]?
Use the network roster to indicate up to two locations in order of importance.

Question 13: Who in your household decided what to do with these earnings?
This question asks the respondent who in the household makes the decisions related to the sales of this service. You should use the codes listed in the household roster. Some household spending decisions are made as a joint decision from the head and spouse (therefore you should use code 01 and 02), some decisions are made by the head only (01) or the spouse only (02), or by another household member. Use the roster codes as appropriate.

## Section 11. Farm Implements \& Machinery

Question 1: How many [ITEM] does the household own?
Indicate how many of each [ITEM] the household owns. If the household does not own any of the item, code 0 and skip to Question 3.

Question 2: What is the value of the [ITEM] if sold?
This question asks the respondent to estimate the worth of the [ITEM] now, not when the item was purchased. For example, if a household has owned an item for many years, it may be worth much less now than when the household bought it. This question asks the respondent to estimate the value of the item now if they sold it.

Question 3: Did the household own [ITEM] during the last agricultural season?
This question asks, even if the household does not own [ITEM] now, did they own any during the last agricultural season. Some items may have been bought or sold during the year, but it is important to know if the household owned the item for the last season (about which we have asked the agricultural production questions.) If yes, continue with the next question. If no, skip to Question 6.

Question 4: Did you use [ITEM] in the last agricultural season?
Similar to Question 3, this question asks if the household used the item. The household can own agricultural equipment but not use it, or the household may not own agricultural equipment but use them in agricultural activities. It is important to know whether the household had access to and used the item. If the answer is yes, skip to Question 6. If the answer is no, continue to the next question.

Question 5: What was the reason for not using [ITEM]?
Ask the respondent why the household did not use the equipment it owns for farming activities during the last agricultural season. Use the codes listed on the questionnaire. If the respondent gives a reason not on the list, code 5 "OTHER" and record the reason in words.

Question 6: Did your household rent or borrow any [ITEM] for use in the last agricultural season?
Ask the respondents if they rented or borrowed the equipment and used it for farming activities in the last agricultural season. If the answer is no, skip to the next item. If the answer is yes, continue with the next question.

Question 7: How many [ITEM] did the household rent or borrow in the last agricultural season?
Record the number of items that the household rented or borrowed in the last agricultural season.

Question 8: Where did your household rent or borrow [ITEM] from last agricultural season?
Record from whom the household rented or borrowed the equipment. Use the network roster on the last page of the questionnaire.

Question 9: How much did your household pay to rent or borrow [ITEM] last agricultural season?
Ask for the amount of money that was spent for hiring the (equipment) in the last agricultural season. If the respondent made in-kind payments for the use of this equipment, estimate value of these payments and record the total in shillings.

## Section 12. Extension

Question 1: Did you receive advice for your agricultural/livestock activities from any of the following sources in the past 12 months?

The question relates only to advice on agricultural and livestock activities. Do not include other types of training or information, such as women's health or child nutrition. If answer is yes, write code 1 and then proceed to the next question. If answer is no, write in code 2 then go to the next [SOURCE].

Question 2: Did you receive any advice from [SOURCE] about...?
This question asks the different types of advice that the household may receive from the [SOURCE]. If yes, code 1, and if no, code 2 . For example, perhaps a household received advice about increasing maize production and marketing from the government, about raising livestock and vaccinations advice from an NGO, and no other advice. Row 1 "Government extension" should have 1's in columns A and C, and row 2 "NGO" should have 1's in columns E and F. All the other boxes in this question should have 2's. If the respondent indicates a source that is not on the list, code 5 "OTHER" and record the source in words.

Question 3: How would you rate the advice received?
Ask the respondent on his opinion about the quality of the advice he/she received. Use the codes indicated in the questionnaire.

Question 4: Did you pay anything for order to receive the advice?
Ask the respondent if they were required to pay anything for the advice they received. If yes, code 1 and continue to the next question. If no, code 2 and skip to question 6.

Question 5: How much did you pay?
Ask for the amount, in TSH, that the respondent was required to pay for the extension advice that they received.

Question 6: How many times did someone from [SOURCE] visit your farm in the past 12 months? Indicate the number of visits received from each [SOURCE] to the household. Do not include visits made to the village in general, or information sessions given for groups.

Question 7: In the past 12 months, did anyone in your household receive any information about agricultural prices from [SOURCE]?

This question is the same as question 2 but refers specifically to price information. If the respondent indicates a source that is not on the list, code 8 "OTHER" and record the source in words.

Question 8: Did you pay anything in order to receive the advice?
This question is the same as question. 4 but asks specifically about price information.

Question 9: How much did you pay?
This question is the same as question 5 but asks specifically about price information.

UNLESS A FISHERY QUESTIONNAIRE IS REQUIRED, THE INTERVIEW IS NOW OVER. PLEASE THANK THE RESPONDENT AND REMEMBER TO INDICATE THE END TIME OF THE INTERVIEW.

## Part III: Fisheries Questionnaire

## General Instructions

Households that have engaged any fishing or fish trading in the last 12 months are identified in the Module V-2 (Qn 7) of the Household Questionnaire, and MUST be administered the Fishery Questionnaire.

You need the completed Household Roster (Module B) to be able to complete the Fishery Questionnaire.

The content of the Fishery questionnaires is as follows:

| Content | Modules |
| :--- | :---: |
| Survey information | A |
| Fisheries calendar | B |
| High season | C |
| HH Labour | D |
| Fishing Labour | E |
| Input | F |
| Output | G |
| Gear Rented Out | H |
| Trading |  |
| Low season | I |
| HH Labour | J |
| Fishing Labour | K |
| Input | L |
| Output | M |
| Gear Rented Out | N |
| Trading |  |

The questionnaire asks about fishing during the high season and during the low season.

## Module B: Fisheries Calendar

This section asks the respondent about the fishing activity undertaken by their household during the calendar year. Mark each month of the calendar for a typical year with "H" for high season, "L" for low season and "NF" if little or no fishing typically takes place. If, for example, if the month of March is typically considered as part of the high season, but the respondent didn't fish during this March because of illness, the respondent should still indicate " H " for high season in the blank below the month of March. If the respondent says there are no distinct high or low months, record H (High) for all months in which any fishing takes place.

Below the calendar there is a question for the enumerator and should not be read to the respondent. This question asks about the level of comprehension of the respondent. You should mark yes if the respondent was able to tell you which months are typically high season versus low season months. If the respondent did not understand, or if all months are basically the same, you should mark no in this section.

# Module C: Household Labour (Last High Season) 

List every member of the household who was engaged in fishing-related activities (fishing, fish processing, or fish trading) during any of the HIGH months reported in Module B. Do not include those members that worked only during the low season, information on these members will be included in a later section of the questionnaire. In this section you should ask all the questions across (1-4) for row 1 before moving on to row 2.

Qn 1-2 are similar to those in the labour section of the household questionnaire for estimating the amount of time a household member spends engaged in fishing. You should use common sense and estimation techniques to ensure that the respondent correctly understands the question. For example, if the respondent indicated the high fishing season is 5 months long, it cannot be that a household member works 50 weeks during the high season. By using these estimation checks, you can collect better data by ensuring the respondent understands well. Note that every household member listed in this module should be either a full-time or part-time fisher.

Qn 1: How many total weeks was [NAME] a full-time fisher during the last HIGH fishing season? During those weeks, approximately how many days per week did [NAME] fish? During those days, approximately how many hours per day did [NAME] fish?

Ask the interviewee to estimate the number of WEEKS, DAYS PER WEEK, and HOURS PER DAY the household member worked as a FULL-TIME fisher during the last HIGH season. Record the total number of weeks, the number of days in one week, and the number of hours in one day worked. Note that a full-time fisher spends $90 \%$ of their working time fishing. If the HH member was not a full-time fisher, write ZERO in all three columns and ask the next Qn .

Qn 2: How many total weeks was [NAME] a part-time fisher during the last HIGH fishing season? During those weeks, approximately how many days per week did [NAME] fish? During those days, approximately how many hours per day did [NAME] fish?

Ask the interviewee to estimate the number of WEEKS, DAYS PER WEEK, and HOURS PER DAY the household member worked as a PART-TIME fisher during the last HIGH season. Record the total number of weeks, the number of days in one week, and the number of hours in one day worked. Note that a parttime fisher is engaged primarily in non-fishing activities, but spends some time fishing. If the HH member was not a part-time fisher, write ZERO in all three columns and ask the next Qn.

Qn 3-4 use definitions of fish processing and fish trading that are written in the questionnaire and that should be explained to the respondent before this question is answered. The most important distinction between these two categories is that fish processing refers to fish caught directly by household members and fishing trading refers to fish caught by people outside the household but sold by household members. Note that households can engage in both of these activities if, for example, a household member has a place in the market and sells both the household's own catch and fish caught by a neighbour.

Qn 3: How many total weeks did [NAME] engage in fish processing during the last HIGH fishing season? During those weeks, approximately how many days per week did [NAME] process fish? During those days, approximately how many hours per day did [NAME] process fish?

Ask the interviewee to estimate the number of WEEKS, DAYS PER WEEK, and HOURS PER DAY the household member did fish processing work during the last HIGH season. Record the total number of weeks, the number of days in one week, and the number of hours in one day spent processing fish. Note that fish processing is defined as selling directly to consumers or fish traders: (i) fresh fish caught by the household and/or (ii) processed fish caught by the household, which may have been subject to techniques such as smoking, sun-drying, and salting. If the HH member did not engage in fish processing during the last HIGH season, write ZERO in all three columns and ask the next Qn.

Qn 4: How many total weeks did [NAME] engage in fish trading during the last HIGH fishing season? During those weeks, approximately how many days per week did [NAME] trade fish? During those days, approximately how many hours per day did [NAME] trade fish?

Ask the interviewee to estimate the number of WEEKS, DAYS PER WEEK, and HOURS PER DAY the household member traded fish during the last HIGH season. Record the total number of weeks, the number of days in one week, and the number of hours in one day spent trading fish. Note that fish trading is defined as selling (in wholesale or retail) fresh or processed fish bought from other fishers or fish processors. Selling fish caught by the household should not be considered as fish trading but as fish processing. If the HH member did not engage in fish trading during the last HIGH season, write ZERO in all three columns and ask the next Qn.

## Module D: Fisheries Labour (Last High Season)

Qn 1: During the last HIGH fishing season, did you share labour or expenses with anyone else in a partnership arrangement (excluding paid labour)?

Ask the interviewee if they took part in a fishing partnership arrangement during the last HIGH season. Note that in a partnership arrangement, 2 or more fishermen will share work tasks and input supplies or expenses, and will divide the resulting catch amongst themselves. Partnerships are distinct from hired labour in that a partner does not directly pay another partner to work; instead, they share responsibilities, resources, and profits. If the answer is Yes, write 1 and ask the next Qn, if No write 2 and skip to Qn 6.

## Qn 2: How many partners did you have during the last full HIGH season?

Ask the interviewee the number of members in their partnership arrangement.

Qn 3: What percentage of the total input expenses were you responsible for (including boat rental, licenses, bait, tackle, petrol, nets, etc.)?

Ask the interviewee to estimate what proportion (in percent) of the total expenses they provided, either through money or in-kind contributions.

Qn 4: What percentage of the labour did you provide (either by yourself, through members of your family, or those that you personally hired)?

Ask the interviewee to estimate what proportion (in percent) of all labour they contributed by working themselves, assigning family members to work, or personally paying for hired labour.

Qn 5: What percentage of the catch was allotted to you (either to be sold or consumed)?
Ask the interviewee to estimate what proportion (in percent) of the total catch was allocated to them.

Qn 6: How many fishing men and/or children did you hire during the last HIGH fishing season? How many weeks did each of these labourers work for you during the last HIGH fishing season?

This next set of questions deals with hired labour. Ask the interviewee the number of adults and the number of children they hired to do fishing work during the last HIGH season and the number of weeks each hired labourer worked. Record the total number of adults and children hired and the number of weeks worked by one adult or one child. If distinct groups of labourers were hired, record the different groups in separate rows and write the number of weeks each group worked, accordingly. You can record
up to a maximum of 5 different groups that worked differing amounts of weeks. If hiring was done jointly with a partner, record the TOTAL labour hired for the entire boat, not just the interviewee's share. If no labour was hired, record ZERO in all columns and ask Qn 7.

Example 1: If the household employs 3 men throughout the entire high season to work on the boat (and assuming our hypothetical high season is five months), then the first line of D14 would have " 3 " in the column for "number of adults" and the second column would have " 20 " (the number of weeks in 5 months).

In addition to these three men, the household also hires 4 men and one boy of 13 (that we classify as a child) for one week at the beginning of the high season to repair the fishing nets. Since the time frame this group of 4 men and one boy worked is different from the 3 people hired throughout the high season, we use the next row to record their time. The 4 men should be included on the next line, with " 4 " in the first column and " 1 " (one week) in the second column, followed by the boy, with a " 1 "in the third column and a " 1 " (1 week) in the $4^{\text {th }}$ column.

The responses for Qn 6 should look like this:

| HIRED LABOUR |  |  |  |
| :--- | :--- | :--- | :--- |
| 6. <br> How many fishing men and/or children did you hire during the last HIGH <br> fishing season? |  |  |  |
| NUMBER OF <br> ADULTS | NUMBER OF <br> WEEKS/ADULTS | NUMBER OF <br> CHILDREN | NUMBER OF <br> WEEKS/CHILD |
| $\mathbf{3}$ | $\mathbf{2 0}$ |  |  |
| $\mathbf{4}$ | $\mathbf{1}$ | $\mathbf{1}$ | $\mathbf{1}$ |
|  |  |  |  |

## Qn 7: Did you pay these workers a fixed wage?

Ask the interviewee whether their hired labour received a fixed wage. If the answer is Yes, write 1 and ask the next Qn, if No, write 2 and skip to Qn 9.

Qn 8: What was each of the workers paid per week?

Ask the interviewee what wage they paid adult and child hired labourers PER WEEK. Record the weekly wage separately for adults and children in the appropriate columns. If the respondent paid a daily wage to labourers, it is necessary to either ask the respondent for the total weekly value, or to ask the respondent how many days are typically worked in a week and multiply. Only the weekly value should be reported in the questionnaire.

Qn 9: As part of the remuneration for hired workers, did you pay these hired workers with fish as a share of the boat catch?

Ask the interviewee if their hired labourers received fish from the boat's catch as part of their pay. If Yes, write 1 and ask the next Qn, if No, write 2 and skip to Qn 11.

Qn 10: On average per week, what quantity of fish did you pay to each hired workers during the last HIGH fishing season?

Ask the interviewee to estimate the average amount of fish they paid to hired labourers during the last HIGH season. Record the weekly quantity separately for adults and children in the appropriate columns. If the respondent cannot estimate the quantity of fish given to each individual, ask for the TOTAL quantity of fish paid to hired adults and TOTAL quantity paid to hired children and divide by the number of adult or child labourers, as noted in Qn 6. If the respondent cannot estimate the separate quantities given to hired adults and children, ask for the TOTAL quantity of fished paid to ALL labourers and divide by the sum of adult and child workers from Qn 6. Record this same average amount in both the Adult and Child columns.

Qn 11: As part of the remuneration for hired workers, did you pay these hired workers with cash as a share of the boat revenue?

Ask the interviewee if their hired labourers were paid with cash from the boat's revenue. If Yes, write 1 and ask the next Qn, if No, write 2 and skip to Qn 13.

Qn 12: On average per week, how much cash as a share of the boat revenue did you pay to each hired worker during the last HIGH fishing season?

Ask the interviewee to estimate the average amount of cash they paid to hired labourers during the last HIGH season. Record the weekly amount separately for adults and children in the appropriate columns. If the respondent cannot estimate the quantity of cash given to each individual, ask for the TOTAL cash paid to hired adults and TOTAL cash paid to hired children and divide by the number of adult or child labourers, as noted in Qn 6. If the respondent cannot estimate the separate amounts given to hired adults and children, ask for the TOTAL amount of cash paid to ALL labourers and divide by the sum of adult and child workers from Qn 6. Record this same average amount in both the Adult and Child columns.

Qn 13: During the last HIGH fishing season, did you pay the hired workers any other in-kind benefit such as meals, cigarettes, etc.?

Ask the interviewee to estimate the CASH VALUE of any in-kind benefits paid to hired labour on a WEEKLY basis. Record the weekly cash amount per worker for Adults and Children separately in the appropriate columns.

## Module E: Fisheries Input (Last High Season)

In this module you should ask all the questions across within each section (Fishing Gear, Boats/Engines, or Other Costs ) for row $A$ before moving on to row $B$.

Qn 1-6. This section asks a series of questions about a number of different types of fishing techniques practiced here in Tanzania. Note that different areas may have local names for these techniques and the interviewer should make sure to properly identify the techniques practiced by the respondent. The following table may help in the identification of fishing gear:

## Table E1: FISHING GEAR USED IN TANZANIA

Gear ID 1 \&2: Beach Seines. These include Mosquito net, Chambo seine, Kambuzi seine, and Matemba seine. Similar in construction except for headline length and mesh size.

Gear ID3: Long-lines : Passive gear consists of a strong length of cord with mono-filament traces and hooks attached at intervals. The hooks are baited with pieces of fish. The long-line is then weighted to the bottom and is generally set overnight and lifted following morning. Long-line hooks are generally larger than those on handlines. Handlines: Consist of mono-filament nylon with hooks attached and at the bottom of the line a weight is attached. The hooks are baited with earthworms or Usipa depending on fish being targeted.

Gear ID 4: Gill nets: Rectangular gear usually surface set or bottom set and used normally as passive gear. Set in the morning and retrieved the following morning. But at times this net may be used as active gear in open-water operated like chilimira net; slowly dragged behind two boats; set in shallow water and fish chased into it by pounding the water-chiombera.

Gear ID 5: Fish Traps Mono: Generally funnel-valve made of bamboo set in shallow river or lake areas to catch chambo and predators like Mlamba overnight. The fish trap may be used with a weir or fence, which serves to guide the fish into the trap.

Gear ID 6: Cast Net: Conical shape with footrope weighted with small stones. Generally used by two people, one paddles the other casts while standing in front of the canoe indicating to the paddler in which direction he wishes to be propelled. Immediately prior to the net being cast, the paddling ceases. As soon as the thrown net sinks to the bottom, the canoe is propelled forward so that the cast net is retrieved almost vertically.

Gear ID 7: Large Fish Trap: Wooden box with a lattice construction that allows water to pass through. The box has one entry point in the middle that allows fish to enter, but prevents them from leaving. A weight is attached to the box and food is kept inside to attract the fish.

Gear ID 8: Night boat fishing: One large boat is surrounded by smaller boats. The smaller boats put out lanterns to attract the fish toward the larger boat to be caught.

Qn 1: Did any household member involved in fishing activities during the last HIGH fishing season use any [FISHING GEAR]?

Ask the interviewee if any fisher in the household used the fishing gear listed ( $\mathrm{A}-\mathrm{J}$ ). If Yes, write 1 and ask next question in section. If No, write 2 and skip to the next row.

Qn 2: How many [FISHING GEAR] were operated by your household during the last HIGH fishing season? Ask the interviewee how many of this type of fishing gear were used by the household during the last HIGH season.

## Qn 3: How many [FISHING GEAR] are owned by your household?

Ask the interviewee how many of this type of fishing gear were owned by the household during the last HIGH season.

Qn 4: If you or any member of your household engaged in fishing had to purchase a [FISHING GEAR], how much would you have paid during the last HIGH fishing season?

Ask the interviewee how much one unit of this type of fishing gear would have cost to purchase during the last HIGH season.

Qn 5: How many units of [FISHING GEAR] did you or any member of your household purchase during the last HIGH fishing season?

Ask the interviewee how many units of this type of fishing gear were bought by the household during the last HIGH season. Write ZERO if none were purchased.

## Qn 6: How much did your household pay to rent [GEAR] for use in the last HIGH season?

Ask the interviewee how much in total the household paid to rent this type of fishing gear to use during the last HIGH season. Note that this is asking for the total amount paid for all units of this type that were rented, not the per unit rent price. Write ZERO if none were rented. After completing Qn, proceed to next row and ask Qn 1.

Qn 7-14 deal with boats and engines.

Qn 7: Did you or any member of your household involved in fishing activities during the last HIGH season use any [BOAT \ENGINE]?

Ask the interviewee if any household member used this type of boat/engine to fish during the last HIGH season. If Yes, write 1 and ask next Qn, if No, write 2 and skip to the next row.

Qn 8: How many [BOAT/ ENGINE] were operated by your household during the last HIGH fishing season? Ask the interviewee how many of this type of boat/engine were used by the household during the last HIGH season.

## Qn 9: How many of [BOAT/ ENGINE] are owned by your household?

Ask the interviewee how many of this type of boat/engine the household owns.

Qn 10: If you or any member of your household engaged in fishing had to purchase a [BOAT / ENGINE] how much would you have paid during the last HIGH fishing season?

Ask the interviewee how much one unit of this type of boat/engine would have cost to purchase during the last HIGH season.

Qn 11: How many units of [BOAT/ ENGINE] did you or any member of your household purchase during the last HIGH fishing season?

Ask the interviewee how many units of this type of boat/engine were bought by the household during the last HIGH season. Write ZERO if none were purchased.

Qn 12: How much did your household pay to rent [BOAT/ ENGINE] for use in the last HIGH season?
Ask the interviewee how much in total the household paid to rent this type of boat/engine to use during the last HIGH season. Note that this is asking for the total amount paid for all units of this type that were rented, not the per unit rent price. For example, if the household rented two dugouts, record the total Tsh paid to rent the two dugouts. In the Unit column, write 1 if the rental price is per DAY, write 2 if the price is per WEEK, and write 3 if the price is per SEASON. Write ZERO if none were rented.

Qn 13: What were the total costs of fuel and oil for [BOAT/ ENGINE] operated during the last HIGH fishing season?

Ask the interviewee how much they paid in total for the fuel and oil for all units of this type of boat/engine that were used during the last HIGH season. Record the cost in Tsh in the appropriate column. In the Unit column, write 1 if the fuel/oil cost is per DAY, write 2 if the cost is per WEEK, and write 3 if the cost is per SEASON. Write ZERO if none.

Qn 14: What was the total cost of maintenance for [BOAT/ ENGINE] operated during the last HIGH fishing season?

Ask the interviewee how much they paid in total to maintain all units of this type of boat/engine that were used during the last HIGH season. Record the cost in Tsh in the appropriate column. In the Unit column, code 1 if the maintenance cost is per DAY, code 2 if the cost is per WEEK, and code 3 if the cost is per SEASON. Write ZERO if none. After completing Qn, move to next row and ask Qn 7.

Qn 15-16 deal with other fisheries input costs. After completing information for all the rows listed ( $\mathrm{A}-\mathrm{L}$ ), ask interviewee if they incurred any other input expenses, but do not include purchase, rental, or operating costs of fishing gear, boats/engines, or hired fishing labour costs, which were already accounted for in previous questions. If there are any new input costs, record in Row M labelled "Other".

## Qn 15: Did you purchase any of the following items during the last HIGH fishing season?

Ask the interviewee if they bought or paid for the item listed during the last HIGH season. If Yes, write 1 and ask next Qn, if No, write 2 and skip to the next row.

## Qn 16: What were the costs during the HIGH season?

Ask the interviewee how much they paid for this input during the last HIGH season. Record the cost in Tsh in the appropriate column. In the Unit column, write 1 if the input cost is per DAY, write 2 if the cost is per WEEK, write 3 if the cost is per SEASON, and write 4 if the cost is per YEAR. After completing the Qn, move to next row and ask Qn 15.

# Module F: Fisheries Output (Last High Season) 

Qn 1: Check Module C. Were any household members engaged in fishing in the last high season, according to questions 1 or $\mathbf{2 ?}$

Enumerator should refer to Questions 1 and 2 in Module $C$ to check whether any household members were engaged in full-time or part-time fishing during the last HIGH season. If Yes, write 1 and ask Qn 2, if No, skip to Module G.

Qn 2: Please list up to five main species of fish that you or any member of your household have landed as a fisher during the last HIGH fishing season.

This question lists a number of different types of locally caught fish with their corresponding codes. Note that some fish might have different local names and it is important that the respondent knows exactly what type of fish about which is being asked. Ask the interviewee which species of fish their household catches and record up to five of these, prioritizing the main species. Record both the fish name and code in the appropriate columns.

## Qn 3: Where do you mainly fish for [FISH/SPECIES]?

Ask the interviewee for the location where they usually fish for each fish species. Write the name of the location and then refer to the location code list to record its corresponding code.

Qn 4: How much [FISH SPECIES] did you, other members of your household and/or any hired fishers catch in TOTAL during the last HIGH fishing season?

Ask the interviewee what quantity of fish they caught, with the help of other household members and hired labour, during the last HIGH season. Record the number caught and the corresponding unit code from the code list. If no fish were caught, write " 0 ".

Qn 5: How much [FISH SPECIES] did you and/or other members of your household preserve for later sale in TOTAL during the last HIGH fishing season? What was the method you used to preserve the [FISH/SPECIES]?

Ask the interviewee to estimate the TOTAL quantity of fish they preserved to sell later on during the last HIGH season, and what processing method(s) were used to preserve the fish. Record the total quantity of fish preserved and the corresponding quantity unit code for up to two different processing methods. Record the appropriate code for the processing method used. If only one processing method was used,
leave the second set of processing columns blank. Note that these figures should only reflect fresh and/or processed fish that were caught by household members or their hired labourers.

Qn 6: How many weeks have you or any member your household landed [FISH SPECIES] during the last HIGH season?

Ask the interviewee to estimate the number of weeks in which they or another household member landed this type of fish during the last HIGH season.

Qn 7: How much [FISH SPECIES] did you, other members of your household and/or any hired fishers catch on average per week during the last HIGH fishing season?

Ask the interviewee to estimate the AVERAGE quantity of this type of fish that they or another household member caught in a week during the last HIGH season. Record the appropriate unit code for the quantity of fish.

Qn 8: How many weeks have you or any member your household processed (smoked, dried, frozen, etc) [FISH SPECIES] during the last HIGH season?

Ask the interviewee to estimate the number of weeks they or another household member spent processing this type of fish during the last HIGH season.

Qn 9: How much [FISH SPECIES] did you and/or other members of your household preserve for later sale on an average week during the last HIGH fishing season?

Ask the interviewee to estimate the AVERAGE WEEKLY quantity of fish they preserved to sell later on during the last HIGH season, and what processing method(s) were used to preserve the fish. Record the average quantity of fish preserved per week and the corresponding quantity unit code for up to two different processing methods. Record the appropriate code for the processing method used. If only one processing method was used, leave the second set of processing columns blank. Note that these figures should only reflect fresh and/or processed fish that were caught by household members or their hired labourers.

Qn 10: For how many weeks did you sell [FISH SPECIES] during the last HIGH fishing season?
Ask the interviewee to estimate the number of weeks they or another household member spent selling this type of fish during the last HIGH season.

Qn 11: How much [FISH SPECIES] did you and/or other members of your household sell on average per week during the last HIGH fishing season? During the weeks of operation, what was the average price per quantity unit?

Ask the interviewee to estimate the AVERAGE WEEKLY quantity of fish they sold, the average sale price, and what processing method(s) were used to preserve the fish during the last HIGH season. Record the average quantity of fish sold per week and the corresponding quantity unit code for up to two different processing methods. Record the appropriate code for the processing method used and the average price for the quantity unit of fish sold. If only one processing method was used, leave the second set of processing columns blank. Note that these figures should only reflect fresh and/or processed fish that were caught by household members or their hired labourers.

Qn 12: How much [FISH SPECIES] caught by you and/or other members of your household during the last HIGH fishing season were kept on average per week for household consumption?

Ask the interviewee to estimate the AVERAGE WEEKLY quantity of fish they kept for household consumption during the last HIGH season, and what processing method(s) were used to preserve the fish. Record the average quantity of fish kept per week and the corresponding quantity unit code for up to two different processing methods. Record the appropriate code for the processing method used. If only one processing method was used, leave the second set of processing columns blank. Note that these figures should only reflect fresh and/or processed fish that were caught by household members or their hired labourers.

Qn 13: Overall, during the last HIGH fishing season, what share of the total [FISH SPECIES] catch did you keep for your own family consumption?

Ask the interviewee to estimate the proportion of their total catch that was kept for home consumption during the last HIGH season. Be sure to read out the five listed responses to the interviewee.

Qn 14: ENUMERATOR: FOR EACH SPECIES, THE AMOUNT LANDED / WEEK SHOULD BE APPROXIMATELY EQUAL TO THE AMOUNT SOLD PER WEEK + PRESERVED + SELF-CONSUMED PER WEEK. IF NOT, ASK THE RESPONDENT TO ADJUST HIS/HER ESTIMATION AND INDICATE BELOW THE REASON FOR THE DISCREPANCY BETWEEN THE TWO CATCH ESTIMATES.

This question provides a consistency check between the values recorded in Qn 7 and the sum of Qn 9, 11, and 13. The enumerator should check that for each fish species, the following equation holds true:

| Qn 7 | Qn 9 <br> AMOUNT <br> LANDED / WEEK | $=$Qn 11 <br> AMOUNT SOLD $/$ <br> WEEK | + | +AMOUNT <br> ARESERVED / WEEK | +AMOUNT SELF- <br> CONSUMED / WEEK |
| :---: | :---: | :---: | :---: | :---: | :---: |

If the figures for all species approximately fit the equation, write 1 and go to the next module. If the figures do not match this equation, write 2 , ask the interviewee why the numbers do not add up correctly, and ask
them to adjust their estimations. Note the change and the reason for the mismatched numbers in the box labelled "Text".

## Module G: Fisheries Gear Rented Out (Last High Season)

Qn 1: During the last HIGH fishing season, did your household rent out any [GEAR] to other fishers?
Ask the interviewee whether they rented out any of the fishing gear types listed to other fishers last HIGH season. If Yes, write 1 and ask next Qn, if No, write 2 and skip to next fish gear item. If the respondent answers No to all types of fish gear, skip to next module.

## Qn 2: How many [GEAR] did your household rent out during the last HIGH fishing season?

Ask the interviewee to recall the number units of each type of fishing gear that they rented out during the last HIGH season.

Qn 3: How much in total did your household receive for renting out these [GEAR] to other fishers during the last HIGH fishing season?

Ask the interviewee to estimate the TOTAL amount of money received for renting out each type of fishing gear listed. Note this is the total amount for all units rented, not the per unit fee. If they were paid in-kind, try to estimate the Tsh value of the in-kind payments.

## Module H: Fish Trading (Last High Season)

## Qn 1: ENUMERATOR: CHECK MODULE C. WERE ANY HOUSEHOLD MEMBERS ENGAGED IN FISH TRADING IN THE LAST HIGH SEASON, ACCORDING TO QUESTION 4?

The enumerator should refer to Qn 4 in Module C to find out whether any household members were trading fish during the last HIGH season. If Yes, write 1 and ask next Qn, if No, write 2 and skip to next module.

Qn 2: Please list up to five main species of fish that you or any member of your household sold as part of your fish trading business.

This Qn is similar to Qn 2 in Module F. Ask the interviewee which species of fish their household traded during the last HIGH season and record up to five of these, prioritizing the main species. Record both the fish name and code in the appropriate columns.

Qn 3: During the last HIGH fishing season, how much [FISH SPECIES] did you or any member of your household purchase from other fishers and/or fish processors on average per week as part of your fish trade business? During the weeks of operation, what was the average price per packaging unit?

Ask the interviewee to estimate the AVERAGE WEEKLY quantity of fish they bought to sell in their trading business and the average sale price per unit they paid. Be sure to differentiate between the different processing types for each species of fish and record figures for up to two different processing types. Write the average quantity of fish purchased per week and the corresponding quantity unit code for. Also write the appropriate code for the fish's processing method and record the average price for the quantity unit of fish purchased. If only one processing method was used, leave the second set of processing columns blank.

Qn 4: During the last HIGH fishing season, how much [FISH SPECIES] did you or any member of sell on average per week as part of your fish trade business? During the weeks of operation, what was the average price per packaging unit?

Ask the interviewee to estimate the AVERAGE WEEKLY quantity of fish they sold in their trading business and the average sale price per unit. Be sure to differentiate between the different processing types for each species of fish and record figures for up to two different processing types. Write the average quantity of fish sold per week and the corresponding quantity unit code for. Also write the appropriate code for the fish's processing method and record the average price for the quantity unit of fish sold. If only one processing method was used, leave the second set of processing columns blank.

Qn 5: Did your household have any costs for [COST ITEM] in relation to your fish trading activities during the last HIGH season?

Ask the interviewee whether they had to pay for each of the cost items 1-6 listed in order to conduct their fish trading during the last HIGH season. If Yes, write 1 and ask next Qn, if No, write 2 and skip to next cost item. If respondent answers No for all cost items, skip to Qn 7. If there is a cost item that is not listed, it should be listed in row 6.

Qn 6: How much did your household have to pay for [COST ITEM] on a weekly basis during the last HIGH season?

Ask the interviewee to estimate the amount paid PER WEEK for each cost item during the last HIGH season.

## Qn 7: ENUMERATOR: REFER TO MODULE B: FISHERIES CALENDAR. IS THE ANSWER TO QUESTION 2 "YES"?

The enumerator should refer to the fisheries calendar in Module B to see whether the household was involved in fishery activities during the LOW season. Check the answer to Qn 2. If the answer is "Yes" or " 1 " then write 1 and ask next Qn, otherwise write 2 and end the questionnaire.

Qn 8: Did you or anyone in your household do any fishing or fish trading during the last LOW season?
Ask the interviewee whether they or anyone in their household conducted any fishery activities during the last LOW season. If Yes, write 1 and go to the next module, if No, write 2 and end the questionnaire.

# Module I: Household Labour (Last Low Season) 

This section is identical to Module C and should only be asked for low season activities

## Module J: Fisheries Labour (Last Low Season)

This section is identical to Module D and should only be asked for low season activities.

## Module J: Fisheries Input (Last Low Season)

This section is identical to Module E and should only be asked for low season activities.

## Module K: Fisheries Output (Last Low Season)

This section is identical to Module F and should only be asked for low season activities.

## Module L: Fisheries Gear Rented Out (Last Low Season)

This section is identical to Module G and should only be asked for low season activities.

## Module M: Fish Trading (Last Low Season)

This section is identical to Module H and should only be asked for low season activities.

## Part IV: Community Questionnaire

## General Instructions

The community questionnaire collects information that should be common for all households in the area. It should be administered at the same time as the household questionnaires are being administered in the enumeration area (EA).

The "community" is defined as the village in rural areas and the mtaa in which the EA is located in urban areas. You should administer the questionnaire to a group of local leaders. In rural areas this should include the village chairperson and the VEO, as well as other members from the village council. In urban areas you should interview the mtaa chairperson and possibly other local leaders. In both cases you should interview the ward executive officer.

## Section CB: Access to Basic Services

In Qn 1, for each of the services listed ( $a-x$; $a a-a f$ ), find out whether it is available in the community. Record the cost of travel by public transportation in Tsh from the village centre to the site where the service is provided in Qn 2. Record the distance in km between the village centre and service site in Qn 3. Finally, record the name of the service provider or institution in Qn 4.

## Section CC: Investment Projects

In Qn 1, for each of the investment projects listed $(a-n)$, find out whether it was implemented either in 2009 or 2010. Note the total amount of money allocated to this project in Qn 2. Note the total amount of money that was contributed by community members for this project in Qn 3 and how this community money was raised in Qn 4. If funding came from any of the programs or institutions listed in the code box, circle their codes in Qn 5.

## Section CD: Land

In Qn 1, record the acreage of land and percent of total land that is used for each of the categories listed.
For Qn 2 and 3, find out whether the community has a Certificate of Village Lands and if so, when it was
issued. Qn 4-7 deal with major land-related events. Find out whether any of the listed events took place, and if so, when. Record the number of people affected by the given event and how much money each household received as compensation.

## Section CE: Agriculture

Record the number, membership, and functions of any farmers cooperative groups that exist in the community in Qn 1-4. In Qn 5-8, note the availability and prices of improved maize seed within and outside of the village. In Qn 9-11, note the number and membership of SACCOS within the community. Finally, in Qn 12 - 15, ask community members to rate the performance of the last vuli rains and the 2010 masika rains.

## Section CF: Demography and Family Issues

In Qn 1 and 2, record the number of households that have either moved in or out of the community in the past 12 months. In Qn 3, note the languages other than Swahili that are spoken in the community, and in Qn 4, note how members of this community trace their descent. Qn 5 and 6 deal with the incidence of divorce in the community and Qn 7 asks about polygamy. Note rights of inheritance in Qn 8-9.

## Section CG: Governance

Qn 1-3 ask about the frequency of village assemblies. Qn 2-8 deal with the operations of tribunals in this community.

## Section CH: Water and Sanitation

In Qn 1, note the percentage of community members who have access to piped water in their home. Use the code lists to note: the most common drinking water source in Qn 2, the main reason people are not connected to piped water in Qn 3, the most common type of toilet facilities in Qn 4, and the main reason why people are not connected to sewer networks in Qn 5. Qn 6-9 deal with the availability of pit emptying
services. In Qn 9 and 10, record the average length of a water service connection in this community and the cost of a connection.

## Section CI: Roster of Community Leaders

Find the community leaders as detailed in Qn 1 of the module. In private, ask each leader to answer Qn 114.

## Section CJ: Market Prices

In this section record the market prices of the items listed in both the community market and in the district capital. If district prices have already been recorded in another community questionnaire, enter the cluster ID of that questionnaire at the top of the market prices table and skip the district prices section. Be sure to note the location of the source of the prices and its GPS coordinates.

## Part V: Tracking Forms

## Tracking Protocol

The tracking activity in the field consists of the followings steps:

1. Revisiting the location of each NPS Year 1 household, equipped with Form T-O Preprinted Household Roster. Form T-O consisted of the household roster of the target household pre-filled with information obtained from 2008/2009 NPS, household contact information from NPS Year 1 Section T-1, information on the respondent for the governance section, and information on the plots listed by the household during the last survey.
2. Identifying whether the whole household has moved from the original dwelling and all members still reside together ("intact"). If the whole household has moved intact, you must complete household tracking form T-1. Form T-1 is the form used to collect information about the new location of the household.
3. Identifying whether any of the household member has moved from the original dwelling. For any member of the household who has moved, you must complete individual tracking form T-2. Form T-2 is the form used to collect information about the location of the household member who has moved.
4. Finding the new location of household or individual using all information available in T-1, T-2, and other additional information from the supervisor/tracking coordinator in the headquarters.
5. Interviewing the tracked household/individual in the new location.

## Form T-0 Preprinted Household Roster

Form T-0/Preprinted Household Roster is the NPS household roster prefilled with information from Year 1 of the NPS and contact information from NPS Year 1 Section T-1.

## Respondent for form T-0

The respondent for form T-0 is anyone who is able to answer the household roster. Household head is the preferred respondent. If the household head is not available, the spouse or any adult household members can be the respondent. There is a space on the top right of the T-0 form to record the roster number of the respondent for this form. You should use the old roster number (that from the 2008/2009 roster which is listed below). On this form and on question 6 are the only times that you will use the old roster numbers in all other cases in the household questionnaire you should use the new roster numbers. In certain rare cases, such as a household where all the adult members have died, form T-0 maybe completed by another well-informed person in the village. In this case, indicate ' 99 ' in the box and write a thorough description in words in the comment box on the second page of T-0.

## The following information is preprinted on form T-0, based on the information from NPS Year 1

## 1. Geographic information

This information should match your current location rather than the original. If, for example, the household has moved to the neighboring EA, you should fill in the EA number of the EA in which you are now doing the interview, not the original location.
2. Name of the head of the household from NPS Year 1

It is important to note that when you visit the household for the current NPS (NPS 2010/2011), the household may be headed by a different person from the one who was the head of the household in Year 1.

## 3. Full household ID from NPS Year 1

This is the 14-digit HHID assigned for the household in Year 1.
4. Phone number of HH Head

This is the number that you can use to contact the household head before visiting the household of if you have problems finding the household.
5. Location / Description

This is the description of the house or of the location of the household that was recorded by the enumerator during the visit in Year 1 of the NPS. This is preprinted on the T-0 so it is easier for you to locate the household.
6. Form Number

This information is pre-filled on the questionnaire. It related to the number of pages of the T-0 form. In almost all cases the household will have less than 12 members and this will say 'form 1 of 1.' In the case of a household with 14 members, for example, there would be two form T-0s. The first page, 'form 1 of 2 ' would have roster information for members 1 to 12 . Members 13 and 14 would appear on the second page, 'form 2 of 2 '. This box lets you know how many forms to expect and which form you are missing if you do not have them all.

## 7. Respondent for $\mathbf{T}-\mathbf{0}$

In this question you should write the roster number from the list below of the person that is providing the information on T-0. Generally it will be the head of the household or spouse. In all cases this respondent must be older than 15 years. In some cases of households that have moved or members that have dies, it may be necessary for people outside the household to provide the information for T-0. In this case you should write '99' in this box, then provide a detailed description of the respondent in the comments box on the second page. For example, 'information was provided by Mr. Matumbo, who lives in the household next door to the original location.'
8. Reference person within the community

This is the person within the community to be contacted to help enumerator find the household. You should contact this person if you have problems finding the household and this person may be able to help you.

## 9. Reference outside within the community

This is the person from outside the community who you can contact if the reference person in the community is not available or cannot offer much help.

## 10. Phone number(s) for HH members

These numbers can also be used to contact other household if you have problems finding the household.

## If any of the above questions are blank, it is because they were not collected by the enumerator in the previous round. You must therefore proceed with the information provided.

## 11. Prefilled HH Rosters

The roster is filled with information about the individuals who were household members of the household in NPS Year 1. Information that is prefilled: name, sex, month and year of birth, age in the year of the NPS 2010/2011, and relationship to the household head at Year 1 of the survey.
12. A box listing which individual was the respondent for section $H$ (Governance) in NPS Year 1

The current (NPS 2010/2011) household questionnaire, Section H, has an interviewer check to identify whether the person answering the section H is the same person answering section H in NPS

Year 1. During Section H interview, you must check the T-0 form to see who answered section H in Year 1.

## 13. Pre Filled Plot Roster

The plot roster is filled with information about the plots listed by the household in NPS Year 1. Information that is prefilled: name of plot, plot description/location, and the plot number in the previous survey.

Below is an example of a "blank" T-0, as you will receive it from your supervisor. The areas shaded in dark gray are those that you will need to complete with the household.


## Administering Form T-0

Equipped with Form T-0, you must visit the original dwelling of the NPS panel household and see whether any household member from the NPS panel household still resides in the dwelling. Sometime the village chairman or officials will say that everyone in the household has moved away. Unless you are directed to the new location and can immediately establish contact with the household, you must insist that you visit the original dwelling location anyway just to confirm that no household members still reside in the dwelling.

If indeed all of the household members have moved together to a new dwelling, you do not complete the Form T-0 and instead proceed with form T-1.

## HOUSEHOLD ROSTER

If at least one household member listed in the Form T-0 is found, then the Form T-0 should be administered to the household where the individual belong to. Columns 1-5 in form T-0 need to be confirmed and columns 6-8 need to be completed in order to determine which members still reside with the reference household ("current household") and which ones have moved, and whether an individual needs to complete form T-2.

## Column 1-5

As soon as one person listed on the prefilled household roster is confirmed to still be a household member, you must start completing form T-0. Remember to proceed line by line, starting from the first person listed on the roster. Column 1-5 must be confirmed. Take note of any difference in names, sex, month and year of birth. Note that column 5 is the age in 2010, based on the information collected in NPS Year 1. You should not just copy this information into the new questionnaire. In some cases, the name will be spelled wrong, or the age will be wrong, or even in rare cases the gender. You should record the correct information on the new household roster. Note that this change will trip a consistency check in the data entry program. You must note that there was a mistake that you have corrected in the "comments" section of the household questionnaire so that your supervisor knows you have not made a mistake.

## Column 6

After column 1-5 is confirmed for the person, Question 6 asks whether the person is currently a member of the household. Probe to make sure that the individual is indeed still a household member, following the definition of household member that is used by the NPS. If the answer is 'yes', then follow the skip to question 8. If the individual is no longer a member of the household, you proceed with question 7.

## Column 7

The question in column 7 asks where the person currently lives. If the person has died, choose code 8. Other codes are related to how far the person has moved. The complete codes are:

1 Same village - if the person still lives in the same village
2 Same ward - if the person lives in a different village, but same ward
3 Same district - if the person lives in a different ward, but same district
4 Same region - if the person lives in a different district, but same region
5 Tanzania - if the person lives in a different region, but still in Tanzania
6 Neighboring country - if the person lives in a neighboring country
7 Another country - if the person lives abroad and not in a neighboring country
8 Died - if the person has died

## Column 8

Column 8 is the interviewer check to determine whether the person should be listed in the household roster in the Household Questionnaire, or whether Form T-2 have to be completed, and, having a T-2, whether the person should be tracked locally. The complete codes are as follows:

1 if the person is still a member of the household. No Form T-2 is needed for this person.
2 if the person has died. No form T-2 is needed for the person.
3 if the person has left the household, over 15 years old, and live within 1 hour of the original EA.
Complete Form T-2 interviews about this person. This person must be tracked and interviewed before the team leaves the EA.

4 if the person has left the household, over 15 years old, and live over 1 hour from the original EA. Complete Form T-2 interviews about this person. This person will be tracked at a later time.

5 if the person has left the household, but younger than 15 years old. Complete Form T-2 interviews about this person.

After form T-0 is completed, each and every member of the household listed in the T-0 form has to satisfy one of the following:

1. Present in the household and will be entered into the blank roster of the household in the Household Questionnaire
2. Has T-2 form completed about him/her
3. Has died

There cannot be any single case where an individual who was listed in T-0 who has not died who does not appear in any of the household rosters and any of the T-2 forms. If the individual does not fall into one of
these categories, this will be flagged by the data entry program and a callback to the household will be necessary.

## EXAMPLE

At the time of the first survey, this household had seven members. The household head was Ally Juma, this wife was Asha Hassan, his four children, Mohamed, Fatuma, Jamila and Saidi, and this father, Ally Rashid. When you return to the household you learn that there have been some changes. The oldest son, Mohamed, has gotten married and now lives in his own household in the same EA. The oldest daughter, Fatuma, has gone to Morogoro to attend administrative school. The younger two children still live in the household. The Ally Juma's father has died. The completed household roster section of T-0 would appear as below. You would now need to fill out a T-2 for Mohamed and then arrange to interview him and his new household before leaving the EA. You would also need to fill out a T-2 for Fatuma. When you complete the household roster, you should make sure that Ally Juma, Asha Hassan, Jamila and Saidi all appear in the household roster, and that Ally Rashid appears in Section S, Deaths.


## RESPONDENT FOR GOVERNANCE SECTION

Below the household roster is a box to identify the respondent for the governance section. It should be the same person that answered the questions in the last round of the survey. Columns 9-11 give you his/her name, gender and age. Column 12 asks you to fill in their new roster number. You should wait to do this
until after you have completed the new household roster. Below is an example of a blank section. You should fill in the number in question 12 after you have completed the new household roster.

## RESPONDENT FOR GOVERNANCE SECTION

| 9. <br> NAME | 10. <br> SEX | 11. <br> AGE | 12. <br> CURRENT ROSTER NUMBER <br> WRITE '99' IF NO LONGER IN HHD |
| :--- | :--- | :--- | :--- |
| ALLY JUMA | $\mathbf{1}$ | $\mathbf{2 9}$ |  |

## PLOTS

The final section on T-0 is the plot tracking box. This should be answered similarly to the individual tracking box above. Columns $13-15$ give you the identifying details of the plot and will be pre-filled. If one of these boxes is blank it is because the interviewer in the last round of the survey did not enter this information. You should complete columns 16-19 for each of the plots. If in any case the respondent does not know, record '99' and include comments in the box at the bottom of the page.

## Column 16

If the household still has this plot, mark ' 1 ' in the questionnaire. You do not have to ask any further questions about this plot but you must ensure that it is listed on the new questionnaire. Failure to do so will necessitate a callback.

## Column 17

This question is identical to question 82 in section 3 A . It asks for the main reason why the household no longer owns or cultivates one of the plots that it previously had in the last survey.

## Column 18

If the plot was sold, record the amount for which it was sold. Covert any in kind payments into cash and record the total.

## Column 19

If the plot was taken, redistributed by the village authorities, or given away, record the amount of any compensation that the household received. Covert any in kind payments into cash and record the total.

## EXAMPLE

Ally Juma's situation with his plots has also changed. At the time of the last survey, he had three plots, 'Shamba la Ziwani', 'Shamba la Mtimbwilimbwi', and 'Shamba la Nyumbani'. At the end of 2009, he sold 'Shamba la Ziwani' for TSH 550,000. With this money he bought a new plot, which he calls 'Shamba la

Mkole'. Additionally, as a wedding gift, he gave his son 'Shamba la Mtimbwilimbwi'. The completed T-0 plot roster appears below. You will notice the new plot, 'Shamba la Mkole' is not listed. It will appear only in the new agricultural questionnaire.


|  | OTS |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 13. <br> PLOT <br> NUMBER IN <br> 2008/2009 | 14. PLOT NAME | 15. LOCATION / DESCRIPTION | 16. <br> Does the household still control this plot? <br> YES.. 1 <br> ?NEXT PLOT <br> NO . . . 2 | 17. <br> Why did you not have this plot (ow ned or cultivated) anymore? <br> SOLD IT. . . . . . . . . . 1 <br> ABANDONED.......... 2 wNEXT PLOT <br> faken. . . . . . . . . . . . 3 w19 <br> REDISTR. BY <br> VILLAGE.......... . 4 w19 <br> GIVEN AWAy........ 5 w19 <br> Stopped Renting/ <br> SHARECROPPING. . 6 wNEXT PLOT | 18. <br> How much did you received when you sold plot? <br> ?NEXT PLOT TSH | 19. <br> How much compensation did you receive? <br> IF NONE, WRITE '0' <br> ?NEXT PLOT TSH |
| 1 | M1 | SHAMBA LA ZIWANI | KARIBU NA BONDE JENGWE | 2 | 1 | 550,000 |  |
| \| 2 | M2 | LA MTIMBWILIMBWI | KARIBU NA KIJIJINI | 2 | 5 |  |  |
| 3 | M3 | LANYUMBANI | KARIBU NA NYUMBA YAKE | 1 |  |  |  |
| 4 |  |  |  |  |  |  |  |
| 5 |  |  |  |  |  |  |  |
| ${ }^{6}$ |  |  |  |  |  |  |  |
| 7 |  |  |  |  |  |  |  |
| 8 |  |  |  |  |  |  |  |
| 9 |  |  |  |  |  |  |  |
| ${ }^{10}$ |  |  |  |  |  |  |  |
| 11 |  |  |  |  |  |  |  |
| 12 |  |  |  |  |  |  |  |

[^0]
## Form T-1 Household Tracking Form

Form T-1 is the form used to collect information about the new location of the household, if the whole household has moved from the original dwelling (if all members moved away together).

Question 1-2: These questions record the identifying information for the target household. You should write the name of the head of the household as it was during the 2008/2009 survey, even if this person has died or left the country. His or her name will be used to confirm the 14 digit code used to link the households.

Questions 3-6 (INTERVIEWER INFORMATION): These questions record information on the interviewer. Note question 6 which asks for the form number out of the total number of forms. If only one form is completed, the response to this question would be ' 1 ' of ' 1 '. If two or more forms are completed, it should be ' 1 ' of ' 2 ' or ' 2 ' of ' 2 ' for example. You may need to adjust the total number of forms after you finish the questionnaire if it is necessary to complete more.

## Respondent for form T-1

Respondent for form T-1, the informant, could be anyone who has good knowledge about the new location of the household. It can be relatives of the household, neighbors, friends, former employer of a member of the household, or former teacher, or community leaders. You must find the best informant and if necessary interview multiple informants to get a more complete picture of the household whereabouts. In some cases, there can be more than one informant (and more than one form T-1) for each target household.

## Questions 7-17 (INFORMANT IDENTIFICATION)

These questions collect information about the informant who is being interviewed for form T-1. The information collected are: name, address, location note, telephone numbers, village, ward, district, and region where informant lives. There is no reason that any of this information is missing because this is about the informant who is being interviewed by the enumerator. Question 17 asks about the relationship between the informant and the household head or with any other member of the household.

## Guidelines on how to fill in information about the location of household/individual in T-1 and T-2:

1. If possible, address should record street address (including building or unit number), name of the village/town.
2. Location note should describe the house or the location (for example, " 100 m north from the village office, the house with green door").
3. Place of work (if applicable) should record the name of the firm, office, store, organization, etc. the person is working for. If the person is a mobile worker (for example, mobile trader), place of work should describe the area where the person usually operates.
4. Phone numbers can be of land line or mobile phones. Phone numbers should be verified, to make sure they are still valid. Verification must be done with care so not to disturb the flow of interview or creating a sense of mistrust with the respondent. Circle " 1 " after the phone number has been verified, and " 2 " if the phone number is never verified.
5. The names of village, ward, district, and region need to be asked and written down, even though you may not know the official codes.

Questions 18-28 (CURRENT ADDRESS OF TARGET HOUSEHOLD): These questions ask about the new location of the household. This will be the first information that will be used by the enumerator/tracker that will try to contact the household in its new location. It is very important to get every little detail about this information, as much as the informant can provide. Follow the guidelines described earlier to get the location information.

Questions 29-39 (CURRENT LOCATION OF OTHER HOUSEHOLD MEMBERS): These questions ask about the address and location of another member of the household. This question is relevant if some household members are known to have moved to different locations. Follow the guidelines described earlier to get the location information of this other household member. These questions also ask whether the other household member's location is in the same village as the household head's.

Questions 40-50 (CONTACT INFORMATION OF IMFORMANTS IN NEW LOCATION): These questions collect information about another person that could be an informant in the new location: the destination area informant. For example, the target household has moved to Dar-es-Salaam. Then, this question collects information about a person who is also in Dar-es-Salaam who may have good knowledge about the household's whereabouts. The purpose of this question is so that when an enumerator goes to Dar-esSalaam to try to find the household, he/she can contact this destination area informant who may be able to help the enumerator find the household.

Questions 51-62 (CONTACT INFORMATION FOR WORK/SCHOOL IN NEW LOCATION): These questions collect information about a contact in the work place or school of the destination area informant. Follow the guidelines described earlier to get the location information. Obtaining information about the work place or school is very important since in some cases it is easier for the tracker/enumerator to reach the informant at these places than at the residence.

Questions 63-74 (CONTACT INFORMATION FOR WORK/SCHOOL IN NEW LOCATION): These questions collect information about anyone else in the new location that works or goes to school with a household member in the new location, and can provide the enumerator with information about the household whereabouts. Follow the guidelines described earlier to get the location information of this potential informant.

## Question 75-86 (CONTACT INFORMATION OF IMFORMANTS IN ORIGINAL LOCATION):

These questions collect information about who else in the area can provide the enumerator with information about the household whereabouts. Follow the guidelines described earlier to get the location information of this potential informant.

Question 86 (MAP): Use space in question 86 to draw a sketch that will help in finding the household new location. The sketch has to be simple, easy to read, and useful. For example, if a route to the household is drawn, it does not have to start from the original EA, it can show the route to the household from a known landmark.

## INFORMATION ASSESSMENT

At the end of T-1 interview, your supervisor will have to make the first assessment of whether the information is sufficient to find the household. The code is as follows:

1 if the information is sufficient to find the household, and the household has moved within one hour of the original EA. You or your team must contact and interview the household before the team leaves the EA.

2 if the information is sufficient to find the household, and the household has moved more than one hour from the original EA. In this case, your supervisor is responsible to make judgment that:
a) The information is indeed sufficient. If not, you must complete another form T-1 by interviewing other potential informants (for example, the person listed in Question L).
b) The new location is indeed more than one hour from the EA (out of reach for local tracking). If not, the household must be contacted and interviewed before the team leaves the EA

3 if the information is not sufficient to find to the household. In this case you must complete another form T-1 by interviewing other potential informants (for example, the person identified in Question 75).

You will have to complete as many form T-1s as necessary until you have sufficient information to locate the household in their new location. Remember, it might be your team that has to track the respondent in their new location!

## Form T-2 Individual Tracking Form

Form T-2 is the form used to collect information about the new location of an individual who has left the household (the tracking target).

## Form T-2s must be completed before the team leaves the EA.

Question 1-3: These questions record the identifying information for the target household. You should write their name, the 14 digit identification code and the two digit roster ID code from 2008/2009. All this information will be found on the T-0 form.

Questions 4-7 (INTERVIEWER INFORMATION): These questions record information on the interviewer. Note question 7 which asks for the form number out of the total number of forms. If only one form is completed, the response to this question would be ' 1 ' of ' 1 '. If two or more forms are completed, it should be ' 1 ' of ' 2 ' or ' 2 ' of ' 2 ' for example. You may need to adjust the total number of forms after you finish the questionnaire if it is necessary to complete more.

## Respondent for form T-2

Respondent for form T-2, the informant, could be anyone who has good knowledge about the new location of the tracking target. It can be relatives of the tracking target, neighbors, friends, former employer, former teacher, or community leaders. You must find the best informant and if necessary interview multiple informants to get a more complete picture of the tracking target's whereabouts. In some cases, there can be more than one informant (and more than one form T-2) for each tracking target.

Questions 4-17 (INFORMANT IDENTIFICATION): Question A collects information about the informant who is being interviewed for form T-2. The information collected are: name, address, location note, telephone numbers, village, ward, district, and region where informant lives. There is no reason that any of this information is missing because this is about the informant that is being interviewed by the enumerator. Question 17 asks about the relationship between the informant and the tracking target.

Question 18-20 (PREVIOUS CONTACT WITH TRACKING TARGET): This question asks when the last time the informant was in contact with the tracking target. This information is useful to know how recent the information is. Ask also what mode of contact was used the last time the informant has some contact with the tracking target. Frequency of contact between the informant and the tracking target since the target moved is asked. If informant is in frequent contact with the tracking target (more than once a month)
choose 1. If they are in contact but less than once a month (maybe once in three months) choose 2. If informant and the target don't have regular contact, choose 3. If there has been no contact since the target moved, choose 4.

Questions 21-36 (CURRENT LOCATION OF TRACKING TARGET): These questions ask about the location of the tracking target. This information will be the first information that will be used by the enumerator/tracker that is going to contact the tracking target in his/her new location. It is very important to get every little detail about this information, as much as the informant can provide. For example, you can ask the informant what he/she would do if he/she needs to contact the tracking target. Any phone numbers, email addresses, etc. Follow the guidelines described earlier to get the location information of the tracking target. Question 25 asks the informant to describe some prominent features near the location of the tracking target that will make it easier for anyone who will track the target to find him/her. It can be a well-known factory in the area, or mosque, church, school, natural landmarks (river, highway junctions). Question 35 asks why the tracking target moved from the original location. Question 36 asks when the tracking target left the original location and question 37 asks when the individual move into the new residence. Question 38 asks the informant to list the places that the tracking target lived in after leaving the original location and before moving into the new residence. For example, maybe the tracking target lived for a relative in the new location before getting his/her own place. This relative then is a potential informant.

Questions 39-51 (CONTACT INFORMATION FOR SCHOOL / WORK IN NEW LOCATION): These questions ask about whether the tracking target is currently in school or working. If the tracking target is currently in school, and if the answer is "yes", collects information about the school. You must ask the name of the school as complete as possible. Ask for a name of a teacher/the principal there, the phone number of the school or the teacher/principal, and the address of the school. If the tracking target is not in school, follow the skip to question 45. If the tracking target is currently working, and if the answer is "yes", collects information about the place of work. You must ask what the current work/profession of the tracking target is, name of workplace, name of supervisor (if applicable), phone numbers of the place of work, and address. If the tracking target is not currently working, follow the skip to question 52.

Questions 52-60 (TRACKING TARGET IDENTIFICATION): Questions 52-60 asks about places that are frequented by the tracking target, either in the original location or in the new location. Which mosques or churches did the respondent go to in the original area, or they are going to in the new location? Are there any particular restaurants, food-stalls, bars, clubs, prayer group that the target often attended? Is there any particular hairdresser, or barber he used to go to? Write down the names and addresses of these places in great detail. These are all places where you or the tracker can find potential informants who know about 195
the tracking target. Question 53 asks for any other names the tracking target may use, such as maiden names, Christian names, nicknames, etc. Different informants may know the tracking target by different names. Question 54 asks for any other characteristics that may help identify the tracker. For example what kind of tattoos and where the tracking target has. Does the target have any particular hairstyle, eyeglasses? Is there any particular way the respondent walk, talk? How would the informant describe what the tracking target looks like for someone who's never met the tracking target?

Question 55 asks when, to the informant's knowledge, the tracking target last visited the village. What was the purpose of the visit? Business? Visiting family? Religious holiday? Whom did the target met during that visit. This information is useful to find out other potential informants. Questions 57-58 ask when, to the informant's knowledge, the tracking target will visit the village again. What will be the purpose of the visit? Business? Visiting family? Religious holiday? Whom will the target meet during that visit? Question 60 asks about the name of the spouse of the tracking target, if the target is married. If possible get the full name of the spouse before they are married to get the surname. It is possible that people in the destination area do not know about the tracking target but know about the spouse or the relatives of the spouse.

Question 61-89 (CONTACT INFORMATION FOR POTENTIAL INFORMANTS): These questions ask for up to 3 names of an influential people either in the original EA or in the new location who can lead enumerators to find this person. (The name of the potential informants is asked in questions 61, 71 and 81). For example, is there anyone that the tracking target looks up to, or have high respect for in the original or in the new location? You may then ask this person to help you find the target, or he/she may contact the target him/herself and persuade the target to establish contact with you or your team.

Question 90 (MAP): Use space in question 90 to draw a sketch that will help in finding the household new location. The sketch has to be simple, easy to read, and useful. For example, if a route to the household is drawn, it does not have to start from the original EA, it can show the route to the household from a known landmark.

## Supervisor Check

At the end of T-2 interview, your supervisor will have to make the first assessment of whether the information is sufficient to find the household. The code is as follows:

1 if the information is sufficient to find the tracking target, and the target moved within one hour of the original EA. You or your team must contact and interview the target's household before the team leaves the EA.
if the information is sufficient to find the target, and the target moved more than one hour from the original EA. In this case, your supervisor is responsible to make judgment that:
a) The information is indeed sufficient. If not, you must complete another form T-2 by interviewing other potential informants.
b) The new location is indeed more than one hour from the EA (out of reach for local tracking). If not, the target must be contacted and interviewed before the team leaves the EA

3
if the information is not sufficient to find to the target. In this case you must complete another form T2 by interviewing other potential informants

Form T-1 and Form T-2 are the main tools used to find where households and individuals have moved. You must complete the tracking forms with a single goal in mind: to make sure that the information collected will be sufficient to find the movers. Think about what if, two months from now, you will be asked to find the household/individual using only the forms. Will you be able to do the job using the forms? If not, then your task of completing these forms properly is not done.

## Tracking Examples

Below are the types of cases possible, and some examples on how to deal with each case.

## Case 1: At least one household member is found living in the original dwelling

1. Complete Form T-0 to see whether any household members have moved or died
2. For anyone who has moved, conduct T-2 interview(s) and follow instructions in column 8 of the T-0.
3. Proceed with the Household Questionnaire.

## EXAMPLE 1

NPS Household was: John (ID 01), Christina (ID 02, his wife), and Michael (ID 03, their son, age 9). In 2010, all three members still live in the same dwelling with 5 family members who moved in with them.

1. Complete Form T-O. John is the respondent (or Christina).
2. You do not need to complete either form T-1 or T-2 as all of the original members are still present in the household.
3. Proceed with the household questionnaire with John as the head of the household.

## EXAMPLE 2

NPS Household was: Ali (ID 01), Amina (ID 02, his wife), and Khamis (ID 03, their son, age 17). In 2010, Ali and Amina have moved together to another region. Khamis still lives in the original dwelling.

1. Complete Form T-O. Khamis is the respondent.
2. Complete Form T-2 for Ali and Form T-2 for Amina.
3. Proceed with the household questionnaire. Khamis may or may not be the head of the household. Use the same rules that would apply for completing any household roster.

## EXAMPLE 3

NPS Household was: Frank (ID 01) and Joyce (ID 02, his sister). In 2010, Frank still lives in the original dwelling with his new wife and baby. Joyce has moved to the city to take a job at a bank.

1. Complete Form T-0. Frank is the respondent.
2. Complete Form T-2 for Joyce.
3. Proceed with the household questionnaire with Frank as the head of the household.

Case 2: No household members are not found in the original dwelling. All members live together (intact) in a new location more than 1 hour from the original location.

1. Do not complete Form T-0.
2. Complete Form T-1 interview.

## EXAMPLE 4

NPS Household was: Juma (ID 01), Mariam (ID 02, wife), Rehema (ID03 child), Happy (ID 04 child). In 2010, Juma and Mariam moved with their children to a village in another district (5 hours by car) after Juma inherited land there.

1. Complete Form T-1 for the household.
2. Do not contact household while the team is in the EA since it is too far. The interview team in this household's new location will complete the T-0 form and conduct this interview.

Case 3: No household members are found in the original dwelling. All members live together (intact) in a new location, and the new location is still within one hour of the EA.

1. Do not complete Form T-0 at the original dwelling. You will complete this form when you arrive at the new location.
2. Complete Form T-1 interview with the best informed informant. If possible, ask this respondent to bring you to the new household. (Though even in this case you must complete a T-1 form, even if it contains only minimal information.)
3. Contact and interview the household while the team is still in the EA.

## EXAMPLE 5

NPS Household was: Mohamed (ID 01), Salum (ID 02, brother). In 2010, Mohamed and Salum moved together to a new location in the same village.

1. Complete Form T-1 for the household.
2. Contact and interview the household while the team is still in the EA.

Case 4: No household members are found in the original dwelling. Not all members are still living together. At least one household member 15+ years of age resides in a new location that is still within one hour of the EA.

1. Complete Form T-1 for the household still within reach of the EA.
2. Contact and interview the household member that is still living within one hour of the EA. You should complete T-0 with this household, as well as T-2 forms for the other household members that are no longer living nearby.

## EXAMPLE 6

NPS Household was: Samuel (ID 01), Anna (ID 02, wife), James (ID 03, son age 20), Peter (ID 04, son age 14). In 2010, Samuel moved to another town, Anna moved back to her mother in another region, James moved out of dwelling but still resides in or near the EA, and Peter moved with Anna.

1. Complete Form T-0 (probably with James).
2. Contact and interview James' household while the team is still in the EA.
3. Complete Form T-2 for Samuel.
4. Complete Form T-2 for Anna.
5. Complete Form T-2 for Peter even though we have been told that he now lives with Anna.

## EXAMPLE 7

NPS Household was: Said (ID 01), Aisha (ID 02, wife), Musa (ID 03, son age 28), Aziz (ID 04, son age 12). In 2010, Said and Aisha moved to another town. Musa moved in with his uncle but still resides in or near the EA. Martin moved in with his grandfather but still resides in or near the EA.

1. Complete Form T-0 (probably with Musa).
2. Contact and interview Musa's household while the team is still in the EA. Musa's uncle will now be the head of Musa's current household.
3. Complete Form T-2 for Said.
4. Complete Form T-2 for Aisha.
5. Complete Form T-2 for Aziz even though we have been told that he now lives with Aisha.

Case 5: No household members are found in the original dwelling. Not all members are still living together. No member 15+ years of age resides in a new location that is still within reach of the EA. At least one hh member under 15 resides in a new location that is still within the reach of EA.

1. Complete T-1 for the location where most of the household members now live. If all live separately, complete for head or spouse. Use the child's new household or other well-informed source to supply the information.
2. Do not administer the household questionnaire to the child's household. Only those households with at least one adult member are eligible for local tracking.

## EXAMPLE 8

NPS Household was Emmanuel (ID 01), Grace (ID 02, wife), Agnes (ID 03, daughter age 8). In 2010, Emmanuel and Grace have gone to Dar es Salaam to look for better jobs. Agnes remains with her grandmother in the village and attends school.

1. Complete T-1 for Emmanuel and Grace.
2. Complete T-2 for Agnes. Do not administer the household questionnaire to Agnes' new household.

## EXAMPLE 9

NPS Household was: Godfrey (ID 01), Zuhura (ID 02, wife), William (ID 03, son age 2). In 2010, Godfrey and Zuhura have both died, and the baby has gone to live with a grandmother in another household in the EA.

1. Complete T-2 for William.
2. Complete T-0 with the village chairman, grandmother, or other best informed respondent. Do not complete the household questionnaire with the new household of the child.

## Case 6: No household members are found in the original dwelling. Not all members are still living together. No member 15+ years of age resides in a new location that is still within reach of the EA.

1. Complete T-O using the best informed source in the village.
2. Complete T-2 forms for all household members.

## EXAMPLE 9

NPS Household was: Hassan (ID 01), Fatuma (ID 02, wife), Baraka (ID 03, son age 25), Ismali (ID 04, son age 24). In 2010, Hassan has died, Fatuma has returned to her home village to live with one of her daughters, Baraka has gotten married and moved to another region, and Ismali has won a scholarship to study in England.

1. Complete T-0 for the household using the village chairman.
2. Complete T-2 for Fatuma.
3. Complete T-2 for Baraka.
4. Complete T-2 for Ismali.

## Case 7: All members are deceased.

This is a rare case that occurs mainly with elderly respondents living alone. Be very wary of informants that tell you entire families have died. In one case during piloting, the interviewer was told all three members had died, when in fact they were living in another part of the village. Investigate thoroughly with multiple neighbors and other family members living outside the household before coming to the conclusion that all members have died.

1. Complete T-0 with the village chairman or other informant best able to give information.

## Part VI: GPS Measurements

## GPS Directions

These directions are excerpted from the Owner's Manual from the 'eTrex HC series' (Garmin Ltd 2007).

## Tips and Shortcuts

- To quickly return to the Main Menu from any page, press the MENU key twice.
- To extend battery life, turn off GPS when not using the eTrex for navigation. Decrease the level of the display's backlight by quickly pressing and releasing the POWER key.


## Installing Batteries and Lanyard

The eTrex operates on two AA batteries (not included). Use Alkaline, NiMH, or Lithium batteries.

## To install the batteries:

1. Remove the battery cover by turning the locking ring $1 / 4$ turn counter-clockwise and pulling the cover loose.
2. Insert the batteries observing the proper polarity.

Remove the batteries when you do not plan to use the unit for several months. Data stored is not lost when the batteries are removed.

## To install the lanyard:

1. Place the loop of the lanyard through the slot at the base of the unit.
2. Route the strap through the loop, and pull tight.

## Operating the eTrex

## Understanding Terms

Select - move the highlighted area on the screen up, down, left or right with the ENTER/ROCKER key to select individual fields.
Key - when you are directed to press a key, press and quickly release the key.
Field - the location on a page where data or an option can be shown or entered.
On-screen button - use the ENTER/ROCKER key to select a button, and press it in to ENTER.
Scroll bar - when viewing a list of items too long to appear on the screen, a scroll bar appears next to the list. To scroll through a list, press up or down on the ROCKER, or use the In and Out keys.
Default - the factory setting saved in the unit's memory. You can change the settings, and revert to the factory settings when you select Restore Defaults.

## Manual Conventions

In this manual, when you are instructed to select an item, small arrows ( $>$ ) appear in the text. They indicate that you should highlight a series of items on the screen using the ROCKER, and press in to ENTER after each item. For example, if you see "select Service > Show Info," you should highlight Service, and press ENTER. Then highlight Show Info, and press ENTER again.

## Key Functions

## IN/OUT Zoom Keys

From the Map page, press to zoom the map in or out. From any other page, press scroll up or down a list or move a highlighted slider.

## MENU/FIND key

Press and release to view the Options Menu for a page. Press and hold to display the Find Menu.

## ENTER/ROCKER key

Rock up or down or right or left to move though lists; highlight fields, on-screen buttons, or icons; enter data; or move the map panning arrow. Press in and release to enter highlighted options and data or confirm on-screen messages. Press in and hold at any time to MARK your current location as a waypoint.

## QUIT/PAGE key

Press to cycle through the main pages.

## POWER key

Press and hold to turn on or off. Press and release for backlighting or to view time, date, and battery capacity.

## Turning on the eTrex

To turn the eTrex on and off:
Press and hold POWER

## Adjusting the Backlight

## To adjust the backlight level:

1. Press and quickly release the POWER key.
2. Press up on the ROCKER to increase the brightness and down to decrease.
3. Press ENTER or QUIT to close.

## Initializing the GPS Receiver

The first time you turn on your eTrex, the GPS receiver must collect satellite data and establish its current location. To receive satellite signals, you must be outdoors and have a clear view of the sky.

## To initialize your eTrex:

Hold the unit in front of you facing the sky. While the GPS receiver is searching for the satellite signals, a "Locating Satellites" messages is replaced by an "Acquiring Satellites" message until enough signals are acquired to fix its location.

If the unit cannot establish a satellite fix, a list of solutions appears. Highlight the appropriate solution, and press ENTER.

## The Status Bar and Date and Time

The Status Bar and Date/Time Window appear below the backlight adjustment slider when you press and release POWER.

Power to the unit is provided by batteries or from auxiliary source. Power status is shown on the Main Menu and the Status Bar. The Battery Power icon shows the remaining power as the battery is depleted. The external power icon is shown when the unit is powered externally.

Satellite signal status is shown when searching for or acquiring satellites, a 2D fix is attained and a 3D fix is attained.

## Basic Operation

This section explains some of the more common operations you can perform with your eTrex, including creating and using waypoints, using the Find Menu, and how to create and use tracks and routes.

## Creating and Using Waypoints

Waypoints are locations or landmarks you record and store in your GPS. You can add waypoints to routes and even create a Go To directly to the selected waypoint.

You can create waypoints using three methods. Press ENTER while at a location, create a waypoint on the Map page, or enter coordinates for a waypoint manually.

## Marking Your Current Location

Press in and hold the ROCKER to quickly mark your current location creating a new waypoint. You must have a valid position (2D or 3D) fix to mark your current location.

## To mark you current location:

1. Press and hold ROCKER (MARK) until the Mark Waypoint page appears. A default three-digit name and symbol are assigned to the new waypoint.
2. To accept the waypoint with the default information, highlight OK.

OR
To change any information, select the appropriate field, and press ENTER to open the on-screen keypad. After entering and confirming your changes, select OK.

## Using Tracks

The Tracks feature creates an electronic bread crumbs trail, or 'track log' on the Map page as you travel. The track log contains information about points along its path.

The track log starts recording as soon as the unit gets a location fix. The percentage of memory used by the current track log appears at the top of the Tracks page.

## To clear the track log:

1. Press MENU twice to open the Main Menu.
2. Select Tracks.
3. Select the Clear button. A confirmation message appears.

## To set up a track log:

1. Press MENU twice > Tracks.
2. Select Setup.

- Wrap When Full - the track log records over the oldest data with new data.
- Record Method - distance records track points after a specified distance is traveled. Time creates track points after a specified time has elapsed. Auto (recommended) allows you to choose from five intervals.
- Interval - records a track according to the Record Method and Interval. Enter a specific distance, time, or frequency.
- Color - select the color of the active track on the map.

To save the entire track log:

1. Press MENU twice > Tracks.
2. Select Save. A message appears asking you if you want to save the entire track.
3. Select Yes to save the track.

To save a portion of the track log:

1. Press MENU twice > Tracks.
2. Select Save.
3. Select No to save only a portion of the track log.
4. Use the ROCKER to move the pointer to the point on the track line that you want to be the beginning point, and press ENTER.
5. Repeat to select an ending point. Select OK.

## To view a track on the map:

On the Saved Tracks page, select Map. A map showing the entire track appears. Begin and End markers and waypoints are added to the track.

To calculate the area of a track:

1. With the Track Log page open and the Track Log on, press MENU.
2. Select Area Calculation, and press ENTER.
3. Press ENTER to start the area's calculation. As you move and define the area's boundaries, a Stop button appears on the page.
4. When finished defining the area, press ENTER and select Save.

## Part VII: Appendices

## Random Number Table

Instructions for using this table:
Enter the household number in the column labeled "Household". You should record every household you interview in this sheet, starting at the top of the page and proceeding in line by line in chronological order. To choose an individual to answer the section on 'Governance', count the number of adults (over 18) in the household and read down that column until you come to the line of the household you are interviewing.

To choose the appropriate gift to give the respondent, read down the $3^{\text {rd }}$ column. 1=Radio, $2=$ Bed net, $3=$ Hoe.

Number of Adults

|  | Household |  |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 |  |  | 1 | 2 | 2 | 2 | 5 | 2 | 1 | 7 | 1 | 7 | 3 | 8 |
| 2 |  |  | 1 | 1 | 2 | 4 | 1 | 2 | 1 | 1 | 9 | 9 | 7 | 7 |
| 3 |  |  | 1 | 1 | 3 | 4 | 3 | 6 | 6 | 7 | 5 | 9 | 5 | 3 |
| 4 |  |  | 1 | 2 | 2 | 2 | 3 | 5 | 4 | 3 | 3 | 3 | 11 | 10 |
| 5 |  |  | 1 | 2 | 3 | 2 | 1 | 4 | 5 | 6 | 2 | 5 | 7 | 2 |
| 6 |  |  | 1 | 1 | 1 | 4 | 1 | 1 | 5 | 3 | 8 | 10 | 7 | 10 |
| 7 |  |  | 1 | 1 | 3 | 3 | 3 | 3 | 4 | 7 | 9 | 3 | 4 | 3 |
| 8 |  |  | 1 | 1 | 1 | 4 | 2 | 6 | 1 | 3 | 4 | 6 | 2 | 5 |
| 9 |  |  | 1 | 2 | 3 | 1 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 3 |
| 10 |  |  | 1 | 2 | 3 | 4 | 5 | 3 | 7 | 2 | 7 | 3 | 4 | 3 |
| 11 |  |  | 1 | 1 | 1 | 1 | 4 | 2 | 6 | 6 | 5 | 2 | 3 | 11 |
| 12 |  |  | 1 | 1 | 3 | 4 | 3 | 3 | 1 | 2 | 1 | 1 | 1 | 11 |
| 13 |  |  | 1 | 1 | 1 | 3 | 3 | 4 | 7 | 1 | 2 | 2 | 11 | 1 |
| 14 |  |  | 1 | 2 | 3 | 4 | 2 | 2 | 6 | 4 | 2 | 2 | 10 | 6 |
| 15 |  |  | 1 | 1 | 3 | 3 | 5 | 3 | 2 | 3 | 5 | 3 | 9 | 6 |
| 16 |  |  | 1 | 2 | 2 | 3 | 4 | 6 | 3 | 1 | 7 | 9 | 6 | 11 |
| 17 |  |  | 1 | 1 | 1 | 4 | 2 | 4 | 2 | 7 | 3 | 8 | 5 | 1 |
| 18 |  |  | 1 | 1 | 3 | 4 | 5 | 6 | 2 | 4 | 7 | 1 | 2 | 12 |
| 19 |  |  | 1 | 2 | 2 | 4 | 3 | 3 | 1 | 6 | 5 | 5 | 11 | 7 |
| 20 |  |  | 1 | 2 | 1 | 1 | 4 | 2 | 1 | 2 | 6 | 4 | 10 | 5 |
| 21 |  |  | 1 | 1 | 2 | 2 | 5 | 1 | 1 | 3 | 8 | 4 | 9 | 11 |



Number of Adults

|  | Household | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 34 |  | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 5 | 10 | 8 | 8 |
| 35 |  | 1 | 2 | 2 | 4 | 4 | 2 | 6 | 8 | 6 | 2 | 1 | 2 |
| 36 |  | 1 | 2 | 2 | 4 | 3 | 6 | 2 | 2 | 6 | 2 | 7 | 5 |
| 37 |  | 1 | 2 | 1 | 2 | 3 | 3 | 1 | 4 | 6 | 2 | 9 | 6 |
| 38 |  | 1 | 1 | 3 | 2 | 2 | 3 | 6 | 8 | 1 | 3 | 8 | 6 |
| 39 |  | 1 | 1 | 1 | 2 | 1 | 4 | 3 | 1 | 1 | 7 | 11 | 7 |
| 40 |  | 1 | 1 | 1 | 3 | 2 | 5 | 6 | 3 | 1 | 4 | 9 | 11 |
| 41 |  | 1 | 2 | 3 | 2 | 2 | 5 | 4 | 7 | 1 | 3 | 7 | 10 |
| 42 |  | 1 | 2 | 3 | 4 | 5 | 6 | 2 | 6 | 4 | 2 | 7 | 10 |
| 43 |  | 1 | 1 | 2 | 2 | 5 | 1 | 6 | 2 | 4 | 10 | 8 | 3 |
| 44 |  | 1 | 2 | 3 | 2 | 4 | 2 | 1 | 5 | 5 | 7 | 8 | 5 |
| 45 |  | 1 | 2 | 2 | 1 | 5 | 3 | 7 | 7 | 6 | 3 | 4 | 10 |
| 46 |  | 1 | 2 | 1 | 2 | 2 | 5 | 6 | 1 | 3 | 2 | 2 | 4 |
| 47 |  | 1 | 1 | 2 | 2 | 4 | 2 | 3 | 2 | 2 | 1 | 11 | 6 |
| 48 |  | 1 | 2 | 3 | 1 | 1 | 6 | 1 | 2 | 3 | 9 | 3 | 2 |
| 49 |  | 1 | 2 | 3 | 1 | 3 | 2 | 7 | 6 | 5 | 10 | 4 | 8 |
| 50 |  | 1 | 2 | 2 | 3 | 2 | 4 | 2 | 2 | 4 | 3 | 9 | 4 |
| 51 |  | 1 | 1 | 2 | 4 | 4 | 6 | 5 | 4 | 3 | 2 | 6 | 4 |
| 52 |  | 1 | 1 | 3 | 4 | 3 | 4 | 2 | 8 | 5 | 6 | 8 | 3 |



Number of Adults

|  | Household | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 84 |  | 1 | 2 | 2 | 2 | 5 | 4 | 6 | 7 | 4 | 9 | 9 | 4 |
| 85 |  | 1 | 1 | 3 | 3 | 2 | 4 | 2 | 3 | 5 | 8 | 11 | 10 |
| 86 |  | 1 | 2 | 3 | 1 | 3 | 1 | 6 | 3 | 7 | 7 | 1 | 8 |
| 87 |  | 1 | 1 | 1 | 1 | 3 | 5 | 4 | 5 | 4 | 8 | 6 | 9 |
| 88 |  | 1 | 1 | 2 | 3 | 3 | 2 | 1 | 5 | 1 | 5 | 3 | 5 |
| 89 |  | 1 | 2 | 1 | 1 | 5 | 2 | 5 | 3 | 6 | 10 | 6 | 11 |
| 90 |  | 1 | 1 | 2 | 1 | 1 | 5 | 5 | 4 | 3 | 4 | 11 | 11 |
| 91 |  | 1 | 1 | 2 | 4 | 3 | 4 | 1 | 2 | 9 | 2 | 10 | 7 |
| 92 |  | 1 | 1 | 2 | 3 | 2 | 6 | 6 | 7 | 2 | 1 | 6 | 3 |
| 93 |  | 1 | 1 | 1 | 4 | 5 | 5 | 6 | 1 | 8 | 3 | 1 | 6 |
| 94 |  | 1 | 1 | 3 | 3 | 5 | 5 | 2 | 5 | 1 | 2 | 4 | 7 |
| 95 |  | 1 | 1 | 3 | 4 | 5 | 1 | 3 | 5 | 8 | 1 | 8 | 7 |
| 96 |  | 1 | 1 | 3 | 1 | 4 | 1 | 2 | 6 | 1 | 8 | 6 | 6 |
| 97 |  | 1 | 1 | 2 | 2 | 5 | 4 | 5 | 5 | 4 | 9 | 8 | 4 |
| 98 |  | 1 | 1 | 3 | 1 | 5 | 3 | 2 | 6 | 5 | 5 | 6 | 9 |
| 99 |  | 1 | 1 | 2 | 3 | 3 | 5 | 2 | 4 | 5 | 8 | 6 | 5 |
| 10 0 |  | 1 | 2 | 3 | 4 | 2 | 1 | 4 | 1 | 7 | 5 | 1 | 9 |

## TASCO Occupation Codes

## For Section E, questions 16, 31, and 45:

## MAJOR GROUP 1: LEGISLATORS, ADMINISTRATORS AND MANAGERS

11 LEGISLATORS AND ADMINISTRATORS
111 LEGISLATORS
112 SENIOR GOVERNMENT EXECUTIVE
113 VILLAGE LEADERS
114 SENIOR ADMINISTRATORS OF SPECIAL-INTEREST ORGANISATIONS
12 COMPANY DIRECTORS AND CORPORATE MANAGERS
121 COMPANY DIRECTORS AND NON-GOVERNMENT CHIEF EXECUTIVES
122 SPECIALISED MANAGERS AND SENIOR ADMINISTRATORS
123 PRODUCTION AND OPERATIONS MANAGERS AND SENIOR ADMINISTRATORS
13 SMALL BUSINESS MANAGERS AND MANAGING SUPERVISORS
131 SMALL BUSINESS MANAGERS AND MANAGING SUPERVISORS

## MAJOR GROUP 2: PROFESSIONALS

21 PHYSICAL, MATHEMATICAL AND ENGINEERING SCIENCE PROFESSIONALS
211 PHYSICAL SCIENTISTS AND RELATED PROFESSIONALS
212 MATHEMATICIANS, STATISTICIANS AND RELATED PROFESSIONALS
213 COMPUTING PROFESSIONALS
214 ARCHITECTS, ENGINEERS AND RELATED PROFESSIONALS
22 LIFE SCIENCE AND HEALTH PROFESSIONALS
221 LIFE SCIENCE PROFESSIONALS
222 MEDICAL AND HEALTH PROFESSIONALS, EXCEPT NURSES
223 NURSING PROFESSIONALS
23 TEACHING PROFESSIONALS
231 COLLEGE, UNIVERSITY AND HIGHER EDUCATION TEACHING PROFESSIONALS
232 SECONDARY EDUCATION TEACHING PROFESSIONALS
239 OTHER TEACHING AND RELATED PROFESSIONALS 24 OTHER PROFESSIONALS

241 BUSINESS AND ADMINISTRATIVE PROFESSIONALS
242 LEGAL PROFESSIONALS
243 ARCHIVISTS, LIBRARIANS AND RELATED INFORMATION PROFESSIONALS
244 SOCIAL AND RELATED SCIENCE PROFESSIONALS
245 ARTISTIC PROFESSIONALS
246 RELIGIOUS PROFESSIONALS

## MAJOR GROUP 3: TECHNICIANS AND RELATED PROFFESIONALS

31 PHYSICAL, MATHEMATICAL AND ENGINEERING SCIENCE ASSOCIATE PROFFESIONALS
311 PHYSICAL SCIENCE AND ENGINEERING TECHNICIANS
312 COMPUTER ASSISTANTS AND EQUIPMENT CONTROLLERS
313 OPTICAL AND ELECTRONIC EQUPMENT CONTROLLERS
314 SHIP AND AIRCRAFT CONTROLLERS AND TECHNICIANS
315 BUILDING, SAFETY, HEALTH AND QUALITY INSPECTORS
32 LIFE SCIENCE AND HEALTH ASSOCIATE PROFESSIONALS
321 LIFE SCIENCE TECHNICIANS AND RELATED WORKERS
322 MODERN MEDICINE AND HEALTH ASSOCIATE PROFESSIONALS (EXCEPT NURSES)
323 NURSING AND MIDWIFERY ASSOCIATE PROFESSIONALS
324 TRADITIONAL MEDICINE PRACTITIONERS AND FAITH HEALERS

33 TEACHING ASSOCIATE PROFESSIONALS
331 SECONDARY EDUCATION TEACHERS, ASSOCIATE PROFESSIONALS
332 TECHNICAL/VOCATIONAL EDUCATION TEACHERS
333 PRIMARY EDUCATION TEACHERS
334 PRE-PRIMARY EDUCATION TEACHERS
335 SPECIAL EDUCATION TEACHERS, ASSOCIATE PROFESSIONALS
339 OTHER TEACHING ASSOCIATE PROFESSIONALS
34 OTHER ASSOCIATE PROFESSIONALS
341 FINANCE AND SALES ASSOCIATE PROFESSIONALS
342 TRADE BROKERS AND BUSINESS SERVICES AGENTS
343 ADMINISTRATIVE ASSOCIATE PROFESSIONALS
344 GOVERNMENT ASSOCIATE PROFESSIONALS
345 SOCIAL WORK ASSOCIATE PROFESSIONALS
346 CREATIVE AND PERFORMING ART, AND ARTISTIC ENTERTAINMENT,AND SPORTS ASSOCIATE
PROFESSIONALS
347 RELIGIOUS ASSOCIATE PROFESSIONALS
348 OTHER ASSOCIATE PROFESSIONALS

## MAJOR GROUP 4: CLERKS

41 OFFICE CLERKS
411 SECRETARIES, KEYBOARD OPERATORS AND REGISTRY ASSISTANTS
412 NUMERICAL CLERKS
413 MATERIAL RECORDING AND TRANSPORT CLERKS
414 LIBRARY, MAIL AND RELATED CLERKS
415 OTHER OFFICE CLERKS
42 CUSTOMER SERVICE CLERKS
421 CASHIERS, TELLERS AND RELATED CLERKS
422 CLIENT INFORMATION CLERKS AND TELEPHONE OPERATORS

## MAJOR GROUP 5: SERVICE WORKERS AND SHOP SALES WORKERS

51 PERSONAL SERVICE WORKERS
511 TRAVEL ATTENDANTS AND GUIDES
512 HOUSEKEEPING AND RESTAURANT SERVICES WORKERS, INSTITUTIONAL
513 HOUSEKEEPING AND RELATED SERVICE WORKERS, DOMESTIC
514 PERSONAL CARE WORKERS
515 ASTROLOGERS, FORTUNE-TELLERS AND RELATED WORKERS
516 OTHER PERSONAL SERVICE WORKERS
52 PROTECTIVE SERVICE WORKERS
520 PROTECTIVE SERVICE WORKERS
53 SALESPERSONS, DEMONSTRATORS AND MODELS
531 SALESPERSONS AND DEMONSTRATORS
532 STALL AND MARKET SALESPERSONS
533 FASHION AND OTHER MODELS

## MAJOR GROUP 6: SKILLED AGRICULTURAL AND FISHERY WORKERS

61 SKILLED AGRICULTURAL AND FISHERY WORKERS
611 FARMERS AND CROP SKILLED WORKERS
612 ANIMAL PRODUCERS AND SKILLED WORKERS
613 FORESTRY AND RELATED SKILLED WORKERS
614 FISHERY WORKERS, HUNTERS AND TRAPPERS
62 SUBSISTENCE AGRICULTURAL, FORESTRY, FISHERY AND RELATED WORKERS
621 SUBSISTENCE AGRICULTURAL, FORESTRY, FISHERY AND RELATED WORKERS

## MAJOR GROUP 7: CRAFT AND RELATED WORKERS

71 EXTRACTION AND BUILDING TRADES WORKERS
711 MINERS AND BLASTERS, STONE CUTTERS AND CARVERS
712 BUILDING FRAME AND RELATED TRADES WORKERS
713 BUILDING FINISHERS AND RELATED TRADES WORKERS
714 PAINTERS, STRUCTURAL CLEANERS AND RELATED WORKERS
72 METAL AND MACHINERY TRADES WORKERS
721 METAL MOULDERS, WELDERS, SHEET- METAL WORKERS AND STRUCTURAL METAL PREPARERS
AND RELATED WORKERS
722 BLACKSMITHS, TOOLMAKERS AND RELATEDWORKERS
723 MACHINERY MECHANICS AND FITTERS
724 ELECTRICAL AND ELECTRONIC EQUIPMENT FITTERS, INSTALLERS AND REPAIRERS
73 PRECISION, HANDICRAFT, PRINTING AND RELATED TRADES WORKERS
731 PRECISION WORKERS IN METAL, DIAMONDS, PLASTICS, RUBBER, PAPER AND OTHER RELATED MATERIALS
732 POTTERS, GLASS FORMERS AND RELATED WORKERS
734 HANDICRAFT WORKERS IN WOOD, TEXTILE, LEATHER AND RELATED MATERIALS
735 PRINTING AND RELATED TRADES WORKERS
74 OTHER CRAFTS AND RELATED TRADES WORKERS
741 FOOD AND RELATED PRODUCTS PROCESSING TRADES WORKERS
742 CABINET MAKERS, WOOD TREATERS AND
743 RELATED TRADES WORKERS TEXTILE AND GARMENT TRADES
744WORKERS PELT, LEATHER AND SHOEMAKING TRADES
749 WORKERS OTHER CRAFT AND RELATED TRADES WORKERS, NEC

## MAJOR GROUP 8: PLANT AND MACHINE OPERATORS AND ASSEMBLERS

81 INDUSTRIAL PLANT OPERATORS
811 MINING AND MINERAL-PROCESSING PLANT OPERATORS
812 METAL-PROCESSING PLANT OPERATORS
813 GLASS AND CERAMICS KILN AND RELATED PLANT OPERATORS
814 WOOD-PROCESSING AND PAPERMAKING PLANT OPERATORS
815 CHEMICAL-PROCESSING PLANT OPERATORS
816 POWER-GENERATING AND RELATED PLANT OPERATORS
82 STATIONARY MACHINE OPERATORS AND ASSEMBLERS
821 METAL AND MINERAL PRODUCTS PROCESSING MACHINE OPERATORS
822 CHEMICAL PRODUCTS MACHINE OPERATORS
823 RUBBER, PLASTICS AND LEATHER PRODUCTS MACHINE OPERATORS
824 WOOD PRODUCTS MACHINE OPERATORS
825 PRINTING, BINDING AND PAPER PRODUCTS MACHINE OPERATORS
826 TEXTILE PRODUCTS MACHINE OPERATORS
827 FOOD AND RELATED PRODUCTS PROCESSING MACHINE OPERATORS
828 ASSEMBLERS
829 OTHER STATIONARY MACHINE OPERATORS AND ASSEMBLERS
83 DRIVERS AND MOBILE MACHINERY OPERATORS
831 RAILWAY ENGINE DRIVERS AND RELATED WORKERS
832 MOTOR VEHICLE DRIVERS AND RIDERS
833 AGRICULTURAL, EARTHMOVING, LIFTING AND OTHER MOBILE MATERIALS-HANDLING EQUIPMENT OPERATORS
834 SHIPS DECK CREWS AND RELATED WORKERS

## MAJOR GROUP 9: ELEMENTARY OCCUPATIONS

91 SALES AND SERVICES ELEMENTARY OCCUPATIONS
911 STREET VENDORS AND RELATED WORKERS

912 SHOE CLEANING AND OTHER STREET SERVICES ELEMENTARY OCCUPATIONS
913 DOMESTIC HELPERS AND CLEANERS AND RELATED WORKERS
914 BUILDING CARETAKERS AND WINDOW CLEANERS
915 MESSENGERS, WATCHERS AND RELATED WORKERS
916 GARBAGE COLLECTORS AND RELATED LABOURERS
919 OTHER SALES AND SERVICES ELEMENTARY OCCUPATIONS
92 AGRICULTURAL, FORESTRY FISHERY AND RELATED LABOURERS
921 AGRICULTURAL, FORESTRY AND FISHERY LABOURERS
93 LABOURERS IN MINING, CONSTRUCTION, MANUFACTURING AND TRANSPORT
931 MINING AND CONSTRUCTION LABOURER
932 MANUFACTURING LABOURERS
933 TRANSPORT LABOURERS
934 HAND PACKERS, WEIGHERS AND RELATED ELEMENTARY WORKERS

## MAJOR GROUP 0: DEFENCE FORCES

01 DEFENCE FORCES
011 TANZANIA PEOPLE’S DEFENCE FORCES
012 NATIONAL SERVICE (JKT)

## MAJOR GROUP X: WORKERS NOT CLASSIFIED BY OCCUPATIONS

XI NEW WORKERS SEEKING EMPLOYMENT
X11 FRESH GRADUATES AND UNDER-GRADUATES SEEKING EMPLOYMENT
X12 FRESH SECONDARY SCHOOL LEAVERS AND DROPOUTS SEEKING EMPLOYMENT
X13 FRESH PRIMARY SCHOOL LEAVERS AND DROPOUTS SEEKING EMPLOYMENT
X14 FRESH LITERATES SEEKING EMPLOYMENT
X2 WORKERS REPORTING OCCUPATIONS UNIDENTIFIABLE OR INADEQUATELY DESCRIBED
X21 WORKERS REPORTING OCCUPATIONS UNIDENTIFIABLE OR INADEQUATELY DESCRIBED
X3 WORKERS NOT REPORTING ANY OCCUPATION
X31 WORKERS NOT REPORTING ANY OCCUPATION

## ISIC Codes

## ISIC Codes (Rev. 4) for Section E, Questions 17, 32, 46 and 53

A - Agriculture, forestry and fishing
01 - Crop and animal production, hunting and related service activities
02 - Forestry and logging
03 - Fishing and aquaculture
B - Mining and quarrying
05 - Mining of coal and lignite
06 - Extraction of crude petroleum and natural gas
07 - Mining of metal ores
08 - Other mining and quarrying
09 - Mining support service activities
C - Manufacturing
10 - Manufacture of food products
101 - Processing and preserving of meat
102 - Processing and preserving of fish, crustaceans and mollusks
103 - Processing and preserving of fruit and vegetables
104 - Manufacture of vegetable and animal oils and fats
105 - Manufacture of dairy products
106 - Manufacture of grain mill products, starches and starch products
107 - Manufacture of other food products
108 - Manufacture of prepared animal feeds
11 - Manufacture of beverages
12 - Manufacture of tobacco products
13 - Manufacture of textiles
14 - Manufacture of wearing apparel
15 - Manufacture of leather and related products
16 - Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials
17 - Manufacture of paper and paper products
18 - Printing and reproduction of recorded media
19 - Manufacture of coke and refined petroleum products
20 - Manufacture of chemicals and chemical products
21 - Manufacture of basic pharmaceutical products and pharmaceutical preparations
22 - Manufacture of rubber and plastics products
23 - Manufacture of other non-metallic mineral products
24 - Manufacture of basic metals
25 - Manufacture of fabricated metal products, except machinery and equipment
26 - Manufacture of computer, electronic and optical products
27 - Manufacture of electrical equipment
28 - Manufacture of machinery and equipment n.e.c.
29 - Manufacture of motor vehicles, trailers and semi-trailers
30 - Manufacture of other transport equipment

## 31 - Manufacture of furniture

32 - Other manufacturing
33 - Repair and installation of machinery and equipment
D - Electricity, gas, steam and air conditioning supply
35 - Electricity, gas, steam and air conditioning supply
E - Water supply; sewerage, waste management and remediation activities
36 - Water collection, treatment and supply
37 - Sewerage
38 - Waste collection, treatment and disposal activities; materials recovery

39 - Remediation activities and other waste management services
F-Construction
41 - Construction of buildings
42-Civil engineering
43-Specialized construction activities
G - Wholesale and retail trade; repair of motor vehicles and motorcycles
45 - Wholesale and retail trade and repair of motor vehicles and motorcycles
46 - Wholesale trade, except of motor vehicles and motorcycles
47 - Retail trade, except of motor vehicles and motorcycles

## 471-Retail sale in non-specialized stores

472 - Retail sale of food, beverages and tobacco in specialized stores
473 - Retail sale of automotive fuel in specialized stores
474 - Retail sale of information and communications equipment in specialized stores
475 - Retail sale of other household equipment in specialized stores
476 - Retail sale of cultural and recreation goods in specialized stores
477 - Retail sale of other goods in specialized stores
478 - Retail sale via stalls and markets
479 - Retail trade not in stores, stalls or markets
H - Transportation and storage
49 - Land transport and transport via pipelines
491 - Transport via railways
492 - Other land transport

## 4921 - Urban and suburban passenger land transport <br> 4922-Other passenger land transport <br> 4923 - Freight transport by road

493 - Transport via pipeline
50 - Water transport
51 - Air transport
52 - Warehousing and support activities for transportation
53 - Postal and courier activities
I-Accommodation and food service activities
55 - Accommodation
56 - Food and beverage service activities
561 - Restaurants and mobile food service activities
562 - Event catering and other food service activities
563 - Beverage serving activities
J - Information and communication
58 - Publishing activities
59 - Motion picture, video and television programme production, sound recording and music publishing activities
60 - Programming and broadcasting activities
61 - Telecommunications
62 - Computer programming, consultancy and related activities
63 - Information service activities
K - Financial and insurance activities
64 - Financial service activities, except insurance and pension funding
65 - Insurance, reinsurance and pension funding, except compulsory social security
66 - Activities auxiliary to financial service and insurance activities
L - Real estate activities
68 - Real estate activities
M - Professional, scientific and technical activities
69 - Legal and accounting activities
70 - Activities of head offices; management consultancy activities
71 - Architectural and engineering activities; technical testing and analysis
72 - Scientific research and development
73 - Advertising and market research
74 - Other professional, scientific and technical activities

75 - Veterinary activities
N - Administrative and support service activities
77 - Rental and leasing activities
78 - Employment activities
79 - Travel agency, tour operator, reservation service and related activities
80 - Security and investigation activities
81 - Services to buildings and landscape activities
82 - Office administrative, office support and other business support activities
O - Public administration and defense; compulsory social security
84 - Public administration and defense; compulsory social security
P-Education
85 - Education
Q - Human health and social work activities
86 - Human health activities
87 - Residential care activities
88 - Social work activities without accommodation
$R$ - Arts, entertainment and recreation
90 - Creative, arts and entertainment activities
91 -Libraries, archives, museums and other cultural activities
92 - Gambling and betting activities
93 - Sports activities and amusement and recreation activities
S - Other service activities
94 - Activities of membership organizations
95 - Repair of computers and personal and household goods
96 - Other personal service activities
T-Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

97 - Activities of households as employers of domestic personnel
98 - Undifferentiated goods- and services-producing activities of private households for own use
U - Activities of extraterritorial organizations and bodies
99 - Activities of extraterritorial organizations and bodies

## Conversions

Conversion of International Units

| 1 hectare | 10,000 sq meters | (100 $\times 100$ meters) |
| :--- | :--- | :--- |
| 1 hectare | 2.47 acres |  |
| 1 kilometer | 1000 meters |  |
| 1 acre | 4840 square yards | $110 \times 44$ yards |
| 1 mile | 1.61 kilometers |  |

Conversion of Local Units

|  |  | Conversion into Kilograms |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Crop Number | Crop Name | Bag | Tin | Rumbesl |
| 11 | Maize | 100 | 18 | 140 |
| 12 | Paddy | 75 | 15 |  |
| 13 | Sorghum | 100 | 18 |  |
| 14 | Bulrush Millet | 100 | 18 |  |
| 15 | Finger Millet | 120 | 20 |  |
| 16 | Wheat | 75 | 15 |  |
| 17 | Barley | 75 | 15 |  |
| 21 | Cassava | 60 | 12 |  |
| 22 | Sweet Potatoes | 80 | 16 |  |
| 23 | Irish Potatoes | 80 | 16 |  |
| 24 | Yams | 80 | 16 |  |
| 25 | Cocoyams | 80 | 16 |  |
| 26 | Onions | 80 | 16 |  |
| 27 | Ginger | 75 | 15 |  |
| 31 | Beans | 100 | 20 |  |
| 32 | Cowpeas | 100 | 20 |  |
| 33 | Green Gram | 100 | 20 |  |
| 34 | Pigeon Peas | 100 | 20 |  |
| 35 | Chick Peas | 100 | 20 |  |
| 36 | Bambara Nut | 100 | 20 |  |
| 41 | Sunflower | 60 | 12 |  |
| 42 | Simsim | 100 | 20 |  |
| 43 | Groundnut | 50 | 10 |  |
| 47 | Soyabeans | 100 | 20 |  |
| 48 | Caster seeds | 100 | 20 |  |
| 75 | Pineapple | 90 | 18 |  |
| 50 | Cotton | 50 | 10 |  |
| 51 | Tobacco | 70 | 14 |  |
| 53 | Pyrethrum | 60 | 12 |  |
| 62 | Jute | 50 | 10 |  |


|  |  | Conversion into Kilograms |
| :---: | :---: | :---: |
| Crop Number | Crop Name | Bag |
| 44 | Palm Oil | 100 |
| 45 | Coconut | 75 |
| 46 | Cashew nut | 80 |
| 86 | Cabbage | 50 |
| 87 | Tomatoes | 90 |
| 88 | Spinach | 45 |
| 89 | Carrot | 110 |
| 90 | Chilies | 85 |
| 91 | Amaranths | 50 |
| 92 | Pumpkins | 60 |
| 93 | Cucumber | 80 |
| 94 | Eggplant | 70 |
| 95 | Watermelon | 80 |
| 96 | Cauliflower | 50 |
| 52 | Sisal | 130 |
| 54 | Coffee | 55 |
| 55 | Tea | 60 |
| 56 | Cacao | 60 |
| 58 | Wattle | 90 |
| 60 | Sugar Cane | 120 |
| 61 | Cardamom | 100 |
| 71 | Banana | 120 |
| 72 | Avocado | 140 |
| 73 | Mangoes | 130 |
| 74 | Papaw | 100 |
| 76 | Orange | 130 |
| 77 | Grapefruit | 120 |
| 78 | Grapes | 80 |
| 79 | Mandarin / Tangerine | 110 |
| 80 | Guava | 110 |
| 81 | Plums | 110 |
| 82 | Apples | 110 |
| 83 | Pears | 110 |
| 84 | Peaches | 110 |

## Photos of Toilet Facilities

The following are photos of different types of toilet facilities that are referred to in the Housing, Water and Sanitation section.

| Flush toilet (with cistern) | (Photo: not known) |  |
| :---: | :---: | :---: |
| Pour flush toilet | (Photo: Mwalimu Mjaka, Lindi) | (Photo: Anet Anton, Shinyanga) |
| Ventilated Improved pit latrine | Note the pipe in the top left hand corner <br> (Photo by: EEPCO ) | Note the pipe with fly mesh <br> (Photo: UNICEF) |


| Ecosan | Note that there are doors to remove the feaces and a drum to collect that urine which is diverted <br> (Photo: EEPCO) |  |
| :---: | :---: | :---: |
| Improved pit latrine (slab is washable) | (Photo: EEPCO) | (Photo: EEPCO) |
| Improved pit latrine (slab is washable) | Washable slab is inside <br> (Photo by: EEPCO ) | (Photo by: EEPCO) |


| Unimproved pit latrine (slab is not washable) |  | (Photo: WaterAid) |
| :---: | :---: | :---: |

## Photos of Household Water Treatment

The following are photos of different types of methods used to ensure water is safe to drink that are referred to in the Housing, Water and Sanitation section.


## Photos of Erosion Control / Water Harvesting Facilities



Terraces


Vertiver Grass


Water Harvest Bunds


Gabions


Drainage Ditches


[^0]:    COMMENTS

