E.D.I. LTD

Survey Manuals

Volume 1:

The Handwashing Survey Questionnaires

(SCALING UP SANITATION AND HANDWASHING PROJECTS, TANZANIA - Post-intervention Data Collection for the Impact Evaluation in Tanzania)

On Behalf of The World Bank

EDI Ltd (Economic Development Initiatives)

PO Box 393
Bukoba,
Kagera, Tanzania

T: 028 2220059 (General line/Fax)
028 2220078 (Finance)
E: **research@edi-africa.com**
W: **www.edi-africa.com**

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1. INTRODUCTION TO THE SURVEY

1.1. BACKGROUND

In response to the preventable threats posed by poor sanitation and hygiene, the World Bank's Water and Sanitation Program (WSP) has launched two large projects, *Global Scaling Up Handwashing* and *Global Scaling Up Rural Sanitation*, to improve the health and welfare outcomes for millions of people in developing nations.

These projects have been implemented by Local and National governments with technical support from WSP.

- **The Global Scaling up Handwashing project** aims to test whether handwashing with soap behaviour can be generated and sustained among the poor and vulnerable using innovative promotional approaches.

  The primary objectives are *to reduce the risk of diarrhoea in young children and increase household productivity by stimulating and sustain the behaviour of handwashing with soap at critical times.*

  Overall, the project aims to generate and sustain handwashing with soap practices among poor people in four countries, including Tanzania. Handwashing with soap at critical times-such as after contact with faeces and before handling food-has been shown to substantially reduce the incidence of diarrhoea. It reduces health risks even when families do not have access to basic sanitation and water supply.

- **The Scaling up Sanitation project** through an innovative initiative of the Total Sanitation and Sanitation Marketing project (TSSM) aims to generate sanitation demand at scale and increase the supply of sanitation products and services. In an effort to induce improved sanitation behaviour, the TSSM project intervention borrows from both commercial and social marketing fields to bring about the desired outcomes.

One of the objectives of these projects is to learn about and document the health and welfare impacts of the projects. To measure the magnitude of these intervention impacts, the project is implementing an impact evaluation survey using a randomized-controlled experimental design in Tanzania to establish the casual effect of the intervention (treatment) on specific health and welfare outcomes.

The overall purpose of the IE is to provide decision makers with a body of rigorous evidence on the effects of the handwashing and sanitation projects at scale on a set of relevant outcomes. It also aims to generate robust evidence on a cross-country basis, understanding how effects vary according to each country's programmatic and geographic contexts, and generating knowledge of relevant impacts such as child cognitive development, anthropometric measures, anaemia, acute lower respiratory infection, and productivity of mother's time, among many others.

The Impact Evaluation survey will involve several rounds of household and community surveys, the first of which was conducted in approximately 1500 households residing in 5 districts of Tanzania in 2011.

1.1. Overview of the Survey

EDI has been contracted to conduct the first follow-up household and community survey for this impact evaluation. The survey will involve the interview of 3620 Households in 181 wards spread across 9 Tanzanian Districts, or 20 Households per ward, 10 households per village. A list of the Regions, Districts and Wards to be visited can be found in Appendix B.

The team will spend three days in each EA, which will involve:

- Day 1 – The teams will report to the villages and then list all households in the EA and then the Supervisor will conduct the sampling to identify the Households to be visited. The day will end with the team contacting the sampled households to arrange visits.
- Day 2 and morning of Day 3 - Each interviewer is expected to conduct 2 to 3 Household interviews in a day. In these days the supervisor will also conduct the Community Questionnaire as well as conduct quality control visits to some of the Households.

The Survey will involve four tools:

1.1.1. Listing

The first step of the survey in each EA will be a listing exercise, using the Listing Questionnaire. The purpose of the listing exercise is to collect some basic information about every household in the Enumeration Area, households that are eligible for the Household Questionnaires will be asked more questions than those that are not eligible.

At the end of the listing exercise, the Supervisor will collect all of the interviewers listing questionnaires, check them and merge them into one file. With this combined file he/she will select (sample) the households to be interviewed in each EA. These households will be conducted immediately to make interview appointments.

1.1.2. Household Survey

Household interviews will be conducted for 10 sampled households. These households will have been contacted in advance so that they know you are coming. The questionnaire will then be administered which collects general information about the household and in particular collects information on their handwashing and sanitation behaviour and facilities.

Each household visited will be having at least one child below 5 yrs of age and all under five will be measured for anthropometry (Weight, height, head circumference etc) and biometric samples taken and tested.

1.1.2.1. STRUCTURED OBSERVATION

In each EA, two households will also be selected for a structured observation activity, in which you will observe the households activities between 6am and 9am. Whilst you will observe everything that the relevant household member does the focus of the observation will be on their handwashing and related sanitation activities. A day before the house will be physically visited to complete a household roster and make arrangements for visiting the household early the next day.

The introduction/appointment made will have to make sure that there is no priming on the purpose of our visit, so that the target members do not change their normal. At the end of the three hours at the household, the interviewer can decide to immediately complete the interview or have a break before this.

1.1.3. COMMUNITY QUESTIONNAIRE

This questionnaire is conducted at village level with people who have detailed knowledge about the village and its population, such as the VEO or other village leaders. The questionnaire collects information about the accessibility of the village, the services available in the village and its handwashing/sanitation activities.

1.2. SURVEYBE

All of these instruments will be completed using the surveybe electronic software which includes in-built data consistency/validations checks. Surveybe software allows the field teams to upload the data to EDI's data processing team in Bukoba for further examination (data checks will be conducted by both the interviewer and supervisors prior to upload). If necessary, questionnaires and data can be sent back to the field team to be corrected by the interviewer by revisiting the household. However, it is expect that careful completion of questionnaires in the field, before being sent back to Bukoba, will minimize these occurrences.

1.3. YOUR ROLE

The interviewer's role is core to the survey. The Project needs high quality information from the households that you interview and it is your role to make sure the accurate information is collected and recorded.

To ensure that the data is of the highest quality, survey procedures have been developed to make sure that all team members conduct their duties in the same way. These procedures are documented in this manual and are also explained in your training.

1.4. YOUR SUPERVISOR

You will work in a team with three other interviewers and will report to a Supervisor. He/she is there to support and guide you. If you have any problems at all, you must report them immediately to your Supervisor and ask for their advice/instructions.

The Supervisor will also provide you with all necessary materials and instructions for your work and will collect and check your work each day.

Throughout the survey there will be a range of quality control measures in place to make sure that you are conducting your work in line with the proper procedures and that the data you collect is of the highest quality. On a day to day basis you will be monitored by your Supervisor who will assign you with daily tasks and will regularly check your work including:

1. Check all of your interview files;
2. Observing you conduct some interviews;
3. Revisiting some households to verify your work.

In addition, your work will also be checked by the Project Coordinator, Data Processing team and other team members. Remember these people are there to check that our data is of the highest quality BUT they are also there to help and support you. So if you are not sure about something or need help, ASK THEM.

2. THIS MANUAL

The remainder of this manual provides a guide to the whole survey and the survey tools. It is split into 5 sections:

Section A**: The Field Work Procedure –** Introduces the survey team and takes you step by step through all of your tasks in the survey.

Section B**: Survey Techniques** – Describes the key techniques for conducting this survey such as the proper way to conduct an interview and structured observations and how to take biometric and anthropometric measurements;

Section C**: The Listing Questionnaire –** Introduces the Listing Questionnaire and key definitions and concepts that you must understand. The section takes you step by step through the questionnaire providing additional guidance for the questions.

Section D**: The Household Questionnaire -** Introduces the Household Questionnaire and key definitions and concepts that you must understand. The section takes you step by step through the questionnaire providing additional guidance for the questions.

Section E**: The Community Questionnaire -** Introduces the Community Questionnaire and key definitions and concepts that you must understand. The section takes you step by step through the questionnaire providing additional guidance for the questions.

This manual is intended to supplement the interviewer training programme and then to be used by you as a reference throughout the survey.

Section A. The Field Work Procedure

1. Introduction

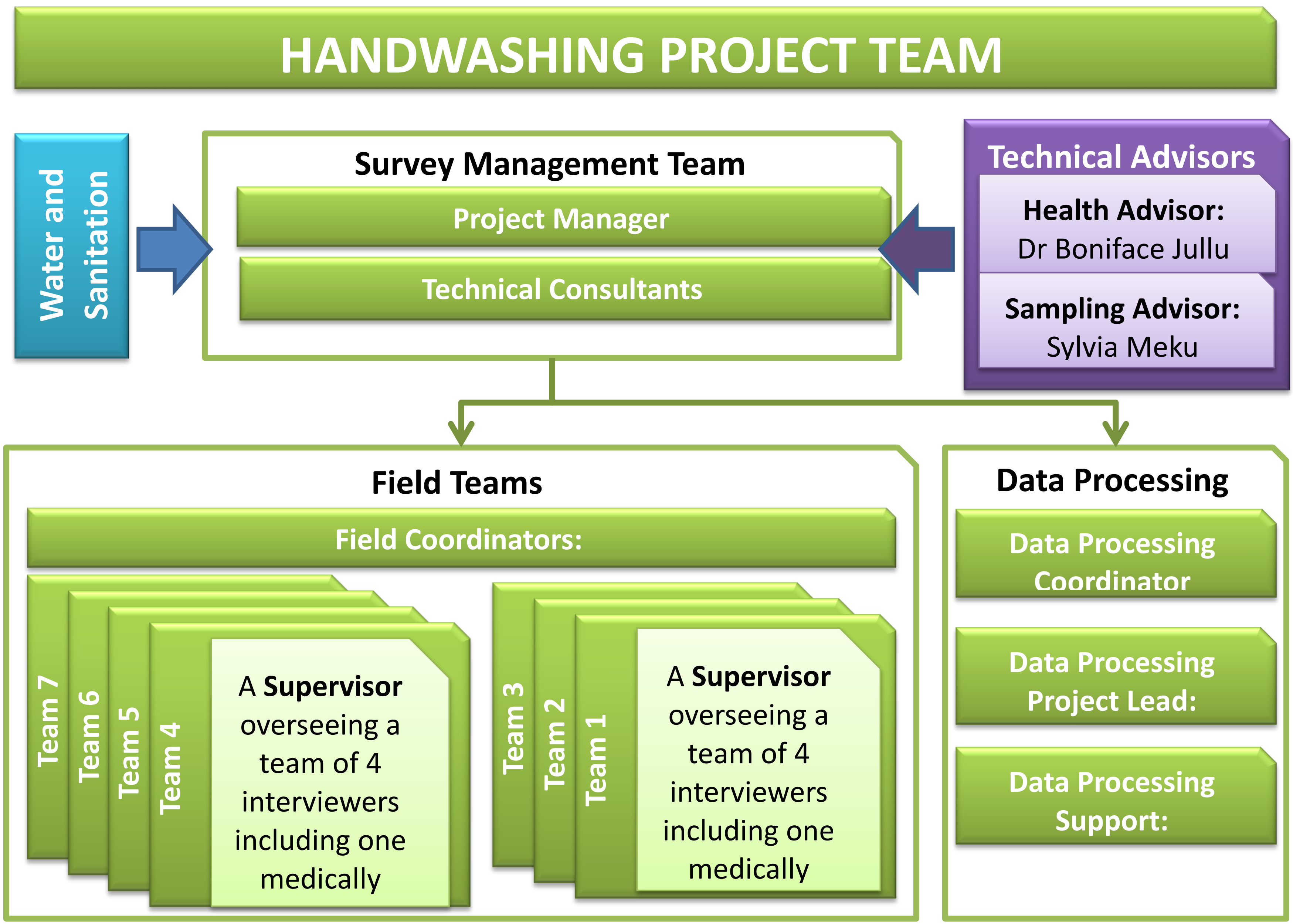
This section:

1. Introduces the project team – so that you know who you are working with and their roles on the survey; and,

2. Outlines the field work procedures for this survey – so that you have a strong understanding of all of the tasks you will need to conduct in each Enumeration Area. These procedures have been developed to ensure that the survey is implemented smoothly and that the data collected is of the highest standard – so it is essential that you learn them completely.

2. Meet The Team

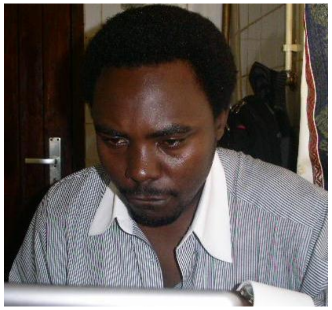
The Diagram below provides an overview of the team structure for this project:


HANDWASHING PROJECT TEAM
Water and Sanitation
Survey Management Team
Project Manager
Technical Consultants
Technical Advisors
Health Advisor:
Dr Boniface Jullu
Sampling Advisor:
Sylvia Meku
Field Teams
Field Coordinators:
Team 7
Team 6
Team 5
Team 4
A Supervisor overseeing a team of 4 interviewers including one medically
Team 3
Team 2
Team 1
A Supervisor overseeing a team of 4 interviewers including one medically
Data Processing
Data Processing Coordinator
Data Processing Project Lead:
Data Processing Support:

Name	Key Roles
 **Respichius D. Mitti** **Project Manager**	The Project Manager plays an integral role in every aspect of the project. To date he has play a leading role in the survey design and in addition is responsible for: **Project Set Up –** To date he has played a lead role in developing project plans and budgets, procuring field equipment, developing and testing the project tools, document the project protocols and manuals, designing the Enumerator Training **Training/Piloting –** Together with the Project Leaders, he will lead the Enumerator training and piloting activities. He will work with colleagues at the end of the training to select those trainees that will be contracted to conduct the survey. **Day to Day Project Management** – Once the field work begins he will oversee the management of the field work (with the Project Coordinator) including overseeing the project budgets, team performance, field plans and project logistics. **Quality Control** – He will also oversee all data collection activities, monitoring both progress and quality of the data collection.
Dr Boniphace Salustian Jullu **Medical Expert**	Dr Jullu is the Project's Medical Advisor. His role on the project is: **Develop Biometric Testing Protocols, Manuals and Training Materials** – To date he has worked with the Project Leaders to develop the protocols, manuals and training materials which define how finger prick blood tests will be conducted during the survey. **Training –** He will be responsible for training the survey team on the correct protocols and procedures for collecting blood samples from survey respondents, handling and disposing of sample materials and what to do if a child is found to be anemic. **Support –** He will provide support throughout the survey and will come to the field to ensure that correct procedures are being followed.

Name	Key Roles
 **Andreas Kutka** **Technical Consultant**  **Amy Kahn** **Technical Consultant**	The Project Leaders are responsible for leading the entire project from the design of the survey, through training of the team and subsequently overseeing the project fieldwork. Their key tasks include: Survey Design - Working with the Water and Sanitation Programme Team, the Project Technical Advisors and the Project Manager, with guidance from EDI's Research Director, the Project Leaders have already lead the design and finalisation of the survey questionnaires, design of the listing and sampling methods, configuration of the questionnaires in surveybe, developed the survey protocols and processes, designed the survey manuals and training materials; Training and Piloting – They will play a leading role in the training of the Field and Data Processing Teams; Overseeing the Data - Once the survey starts, they will be continually monitoring the data flowing from the field and will be providing feedback to the data processing and field teams. Where needed they may also update the survey questionnaires with clarifications and additional validation checks; Liaison with WSP and Other Tasks – They will also be responsible for continually updating our client, preparing reports as required by the client and submitting data as required to the client.

Name	Key Roles
 **Thaddeus Rweyemamu** **Data Processing Coordinator**	The Data Processing team, led by Timothy Kyessy and overseen by Thaddeus Rweyemamu will be responsible for: **Reviewing field data –** They will download the data that the Supervisor submits from the field and export it to the database application. They will then conduct a series of computerised and visual checks on your data. **Feedback –** They will provide timely feedback to the field teams on any problems/issues found in the data and advise on corrective measures. **Reporting –** They will also keep a record of completed EAs and file completed questionnaires, and they will also prepare data collection reports. **Project Tools –** To date they have taken part in the development and testing of the questionnaires, translation and preparation of the Kiswahili versions. **Training –** They will take part in the training of the field teams on field protocols and interviewing skills, data quality, data transfer from field and communication between field teams and Headquarters. **Quality Control –** They will be the overall overseers of data quality. They will make periodic Quality Control visits to the field teams to make sure data is collected according to standard procedures, advise teams on proper practices and circulate QC reports to field teams and project management.

Name	Key Roles
 **Leonard Kyaruzi** **Lead Project Coordinator (a second coordinator will be assigned after training)**	The Project Coordinators play a leading role in planning and overseeing the field work: Already they have developed the survey work plan, conducted the Enumerator and Supervisor Recruitment, lead the Supervisor Training and developed the enumerator training programme. They have also prepared for the field work including procuring and testing field equipment, arranged project logistics, as well as being involved in the testing of the survey instruments. They will also be responsible for: • Leading the Enumerator Training and survey piloting; • Supervising and Supporting the survey field teams • Co-ordination of field activities • Liaison with district officials • Conducting random re-interviews of listing and interview teams • Obtaining information from village leadership on team's conduct • Verification of random sampling
7 Supervisors	The role of the Supervisor will include: • Informing district, ward and village leaders of presence of research team • Planning day-to-day logistics of interview/community profile teams and vehicles • In-field quality assurance • Reviewing all data • Re-interviews and interview attendance to smooth out any idiosyncrasies across Household interviewer techniques/question framing. • Field administrative functions and keeping of field accounts • Leading Community Profile Activities • Conducting community interviews • Collect stool, water, and blood samples • Daily up-loading of data to secure FTP server

Name	Key Roles
28 Interviewers	The role of the Interviewer will be to: • Completing Listing, Household and Community questionnaires • Checking their data • Maintaining professional and courteous relation with respondent
SUPPORT TEAM	
Benjamin Kamukulu **HR/Office Manager**	Benjamin is responsible for all areas of HR Management including Recruitment, Contracts, Leave, Performance Appraisals.
Aris Mgohamwende **Finance Manager**	Aris leads the Finance Department and oversees all areas of financial management including salaries, PAYE, NSSF, allowances and field expenses.
Godian Rutibi **IT Officer**	Rutibi manages EDI's IT resources including UMPCs and field equipment.

3. The Field Work Plan

At the end of the training and before you leave for the field, the Project Coordinator will brief you on the overall project field plan including:

1. Which team you will work in and who your supervisor and fellow interviewers will be.
2. The regions of Tanzania you will be visiting and the length of time you will spend in each region.

3.1. The Field Routine

Each team will spend 2.5 - 3 days in each Enumeration area and will follow the following timetable:

Day	Morning/ Afternoon	Summary of Tasks
1	AM	✓ Report to local officials ✓ Interpret, locate and update EA Maps ✓ Recruit Village guides and Health Assistants ✓ Interviewers deployed for listing Conduct listing exercise
	PM	✓ By 4pm complete listing ✓ Supervisor conducts sampling to identify Households for interview ✓ Upload listing data to HQ ✓ Make appointments for Household and Community Interviews ✓ SO Households contacted to arrange early morning visit and collect additional data.
2	AM	✓ Supervisor assigns Households to Interviewers ✓ Interviewers conduct Household Interview ✓ Interviewers visit SO households to collect initial data and arrange for visit on morning of day 3 ✓ Health Interviewer to travel from HH to HH to collect anthropometric and biometric data, with Local Health Professional
	PM	✓ Interviewers conduct Household Interview ✓ Supervisor Conducts Community Questionnaire ✓ Supervisor collects all interview files and conducts data quality checks ✓ Health Interviewer to travel from HH to HH to collect anthropometric and biometric data, with Local Health Professional
3	AM	✓ Interviewers visit SO households at 6am and then conduct HH interview afterwards ✓ Other Interviewers conduct any remaining Household Interviews ✓ Health Interviewer to travel from HH to HH to collect anthropometric and biometric data, with Local Health Professional ✓ Supervisor collects all interview files and conducts data quality checks
	PM	Move to the next Enumeration Area

It is important that the behaviour of each member of the team is first-class already upon the arrival to the village. This helps in establishing good relationships with the village residents both within and around clusters.

3.2. TRAVEL IN FIELD

Throughout the field work, the Project Coordinator will make arrangements for your 'work-related' travel including travel to the field and a four wheel drive vehicle for each team. It should be noted that field vehicles may only be used for field work and NEVER for personal use. Any employee found to be requesting drivers to make personal trips will be disciplined.

3.3. ACCOMMODATION IN FIELD

Teams are required to either stay in the village or close to the village to be visited. Your supervisor will arrange for the team's accommodation. The accommodation will, if possible, be such where there is an access to electricity for charging, an appropriate space for discussion and for reading the guiding documents such as this manual. Interviewers should pay for all of their food and accommodation from their Per Diem allowance.

3.4. REPORTING

You should be aware that no field work may start in an EA until your Supervisor has reported to the Regional, District and Village level officials.

Prior to the field work starting, officials at District and Regional Government will have been informed of the survey and the arrival of your team. Your Supervisor will also have been provided with a letter of introduction for each village to be visited from the District Government.

As soon as a team arrives in the village, it is important to visit the village leaders before anything else to show this letter and explain the intentions of being there and ask for their support. The VEO, Village chairperson and the kitongoji chairpersons will be the most important leaders to report to.

4. Get Your Equipment Ready

Conducting a survey requires a range of equipment including your handheld computer, anthropometric and biometric equipment, as well as basics like stationery. It is your job to make sure that this equipment is well cared for. During your training, all this equipment will be demonstrated to you and you will have the opportunity to practice using it.

The key equipment and materials you will have includes:

- ✓ Your EDI ID card;
- ✓ This Survey manual;
- ✓ Surveybe Implementer manual;
- ✓ Your handheld Computer together with (instructions for the UMPC can be found in the Appendices of this manual):
    - A Cover
    - A Stylus pen
    - Batteries and/or an external battery pack
    - A bag
    - A screen cleaning tissue
- ✓ GPS
- ✓ Field bag
- ✓ Rain coat
- ✓ Stationeries

In addition, the Enumerator responsible for Biometric and Anthropometric equipment will also carry:

- ✓ Anthropometric equipment
    - Hanging Scales for weighing young children
    - Standing Scales
    - A height board
    - Tape for measuring head/wrist measurements
- ✓ Biometric Equipment and Materials: a full list of this equipment is provided in Chapter B4: Haemoglobin Testing (page 32).

Once you have an item in your possession, it is <u>your own responsibility</u> to take good care of it. It is also your own responsibility to check whether the items you received are in the same condition as in which you handed it over the previous time.

If an object has been handed over, but not in the same condition as the previous time, the item needs to be checked in the list, but a comment about the damage you encountered needs to be made before providing your signature. In case an object is missing, you should NOT check that item in the list and provide a comment about it.

5. Listing

5.1. Preparation

On reporting to a district, the Supervisor/Coordinator will make contact with officials in every village to be visited. Before arriving in the village supervisor make a call to village leader (preferably a VEO – Village executive Officer). The leader will be informed over phone about the visit and asked to prepare persons to assist the exercise preferably kitongoji leaders from kitongoji included in respective EA map.

5.2. EA Maps

The team will be provided with sample EA map for each village visited, which the National Bureau of Statistics in Tanzania (NBS) has provided. The EAs visited during this project are only a few of the approximately 54,000 EAs in Tanzania. The NBS usually runs an EA map-drawing exercise every 10 years parallel to the national census exercise. The most recent exercise was prior the 2002 census thus the maps used in this survey are about 10 years old. Many changes may have occurred during this 10 year period hence there is a big chance that the EA boundaries may have changed.

5.2.1. Importance, types and properties of EAs

In order to clearly identify the survey sample, it is important to have well-defined EAs especially when a listing exercise is involved. Doing so, will help the surveyor operate within the areas which have been selected for the survey. It also helps to avoid:

- ✓ Listing households multiple times. Duplicate listing is time-inefficient and may result in confusion if we want to locate the household
- ✓ Excluding households which are in fact in the EA
- ✓ Including in the sample households which are in fact outside the EA

The NBS has classified EAs into 4 categories:

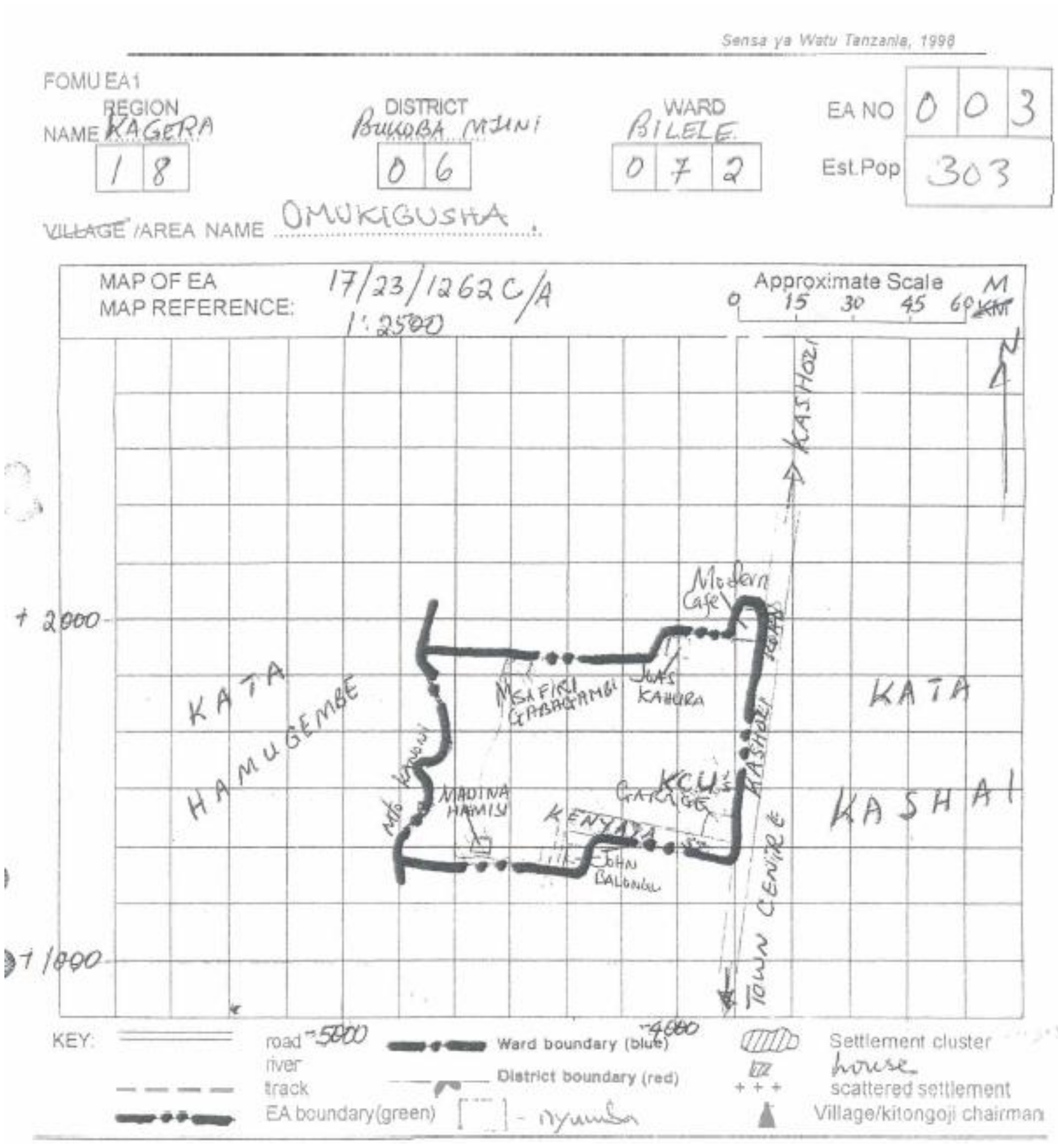
- ✓ **Pure Urban:** EAs, which are located in areas, which have been officially classified as urban. For example, most EAs in Dar es Salaam or Mwanza would fall under this category.
- ✓ **Pure Rural:** EAs, which are located in areas, which have been officially classified as rural. For Example, most EAs in Karagwe or Bukombe would fall under this category.
- ✓ **Mixed EAs:** EAs, which are partly located in a rural area and partly located in an urban area
- ✓ **Community EAs:** These are sometimes called special EAs. They usually do not constitute of households but a special community of people. Some examples are schools, hospitals, army camps and jails. Normally, surveys do not cover these types of EAs unless the survey's target is to study such communities.

As a rule of thumb, EA borders do not interfere nor do they cross villages/mitaa. According to the NBS, the average number of household found in one EA can vary between 60-160 depending on whether it is a rural or urban EA. These estimates should be taken very loosely as they are only averages. You should NOT worry if the number of households you list exceeds the upper estimate since there is a high likelihood that increased massively in the past 10 years. However, you should BE CAUTIOUS if the number of households in your EA is below 60.

5.2.2. EA IDENTIFICATION AND MAP READING

Nationally, EAs are identified using a ten-digit code. The first two digits are region identifiers, the next two are district identifiers, the next three are ward identifiers and the last three are the EA identifiers. For example:

1	8	0	6	0	7	2	0	0	3



Referring from the above table and illustration:

- Every EA in Kagera will have a regional code of 18
- Every EA in Bukoba mjini district will have a district code of 06
- Every EA in Bilele ward will have a ward code of 072

When reading an EA map, you should first make sure that you have the correct EA map for the area you're visiting by checking the title and identification codes. Make sure that you understand the signs indicated on the map by looking at the key. If there are any signs that you do not understand, it is best that you consult your team members as you may miss out on important clues that would assist you in correctly identifying the EA borders.

Identify East by asking your host where the sun rises:

- If EAST is on your right then WEST is on your left, NORTH is in front of you and SOUTH is behind you
- If EAST is on your left then WEST is on your right, NORTH is behind you and SOUTH is in front of you

5.2.3. VERIFY EA BOUNDARIES AND UPDATING THE MAPS

The supervisor will have to verify the map boundaries before deploying the team for listing exercise. Any changes to the maps (landmarks etc) will be updated on all maps prior to starting the listing.

5.3. ON ARRIVAL

On arrival in the village, a supervisor will report to the VEO who will have selected persons to assist the exercise. After introduction, the supervisor will ask the local experts (VEO, VC and Kitongoji leaders to interpret the map)

1. Go through the map description and get the local leader to understand the map;
2. Visit the EA following the map making sure that there are no ambiguities connected with the map;
3. In case landmarks have changed, make sure that the map is updated;
4. Decided on the way to deploy enumerators. Whether all 4 starts from one side of the EA or get split up and start from different parts of the EA.
5. Attach listing guide to each enumerator

5.4. LISTING

The supervisor will then make sure that each enumerator has a copy of updated EA map showing where to start listing.

After ensuring that all enumerators have started listing exercise and mainly at the end of the exercise, the supervisor will randomly visit the area to verify that no households that have been passed without being listed. The supervisor will also check with enumerators to verify that in total more than 15 households have been found with legibility criteria to be included in household sample frame. If a sense of ending up with too few eligible households emerges, immediately the supervisor will have to communicate to the coordinator who will advise on what to do.

5.5. SAMPLING

Once the listing exercise is completed and a supervisor becomes satisfied that the EA has been successfully listed he will copy enumerator's listing data files into his computer for further checking, importing into surveybe designer and exporting from surveybe. Once data export is completed, the supervisor will run a do file for household sampling and creating households to be visited for interview. The do file will typically do the following

1. Advanced data checking – terminating with message in case an error is found
2. Sampling of households – including 10 base households with indication of which are the two to be administered with structured observation and replacement.
3. Updating Household questionnaire for the village.
4. Creating a sample list for supervisor reference

This exercise ends with the supervisor allocating households to enumerators and facilitating appointment communication to selected households. This makes it advantageous if the exercise is completed while still in a village.

6. Household Interviews

On the second day you will begin conducting the Household Interviews, this chapter briefly describes the procedure for conducting interviews, you should also refer to Chapters:

Section B**: Survey** – for guidance on specific interview techniques

Section D**: The Household Questionnaire** – for guidance on the questionnaire content.

6.1. Assignment

On the second two days of the survey you will conduct Household Interviews at households assigned to you by the supervisor. Interviews are ideally conducted in a single visit, but may need more visits, for example if a particular survey respondent is not present at the time of your visit.

Please take into account that you are responsible for interviewing all of the households assigned to you. You and your supervisor need to make sure that you have planned the use of your time well, in order to be able to leave the village in time.

6.2. You and your supervisor

You should always follow the advice and instructions of your supervisor. Your supervisor will assign you your work at the start of each field visit. She/he will carry out the following checks in the field:

- Examining all of your electronic questionnaires to make sure that each interview has been carried out correctly and in full;
- Visiting some of the households that you have already interviewed. He/she will repeat some sections of the questionnaire in order to verify that you recorded that household's answers correctly;
- Observing one or more of your interviews, to evaluate your method of asking the questions. You may or may not be informed of their "sitting-in" beforehand.
- Discussing your work with you, and evaluating your work; she/he will report on your performance to the management team.

Your supervisor is the link between yourself and the project management team. You must inform her/him of any difficulties or problems that you encounter. If you do not understand a procedure, you should ask your supervisor for advice.

6.3. Meeting the Households to Be Interviewed

You should remember that the impression you and your colleagues make on households during the listing exercise will have a huge impact on the willingness of a Household to be interviewed and their attitude during the interview.

The same is also true for how you conduct yourself from the moment you report to their house. Remember you are their guest. A good first impression can be created by being polite, being friendly, good attitude and showing confidence.

When you meet the household you should:

- ✓ First introduce yourself;
- ✓ Explain that you are there to conduct an interview and explain the purpose of the interview;
- ✓ Tell them how long it will take and briefly what is involved.

If the issue is raised, you can inform them that the survey is not concerned in any way with *taxes*, and all the information recorded will be regarded as confidential and covered by the obligation of statistical secrecy.

6.4. Selection of Interpreters

Our goal is to conduct all interviews in Kiswahili. You should make a great effort to encourage the respondent to use Kiswahili, it is better to explain a few difficult questions in another language than to change completely to another language.

If no one in the household speaks Kiswahili well enough to interpret and no one in the team speaks the language of the household, you must ask the household to choose someone (for instance, a friend, neighbour or relative) to interpret for the interview. This person should be someone who speaks Kiswahili well and is trusted by the household, since the questions are confidential.

It is always best to use an interpreter chosen by the household, as this will help to ensure the confidentiality of the interview. If the household does not know anyone suitable, you must inform your supervisor, who will ask the village leaders to designate someone. The person chosen to translate should be a person who is respected and trusted in the community.

You should instruct the translator not to elaborate on the question asked, to be patient with the household members responding, and to remain neutral and professional in attitude toward the questions and answers obtained, and to maintain the confidentiality of the respondent and his or her answers. Avoid having the interpreter suggest answers to the respondent. The interpreter should ask the question as it is, without giving context or interpretation to the respondent. If the respondent does not understand the question then the interpreter should be instructed to communicate the problem to you and you should elaborate on the question as per instructions in this manual.

If you do the translation yourself, you must be very careful to stick to the sense and meaning of the questions as they are written on the questionnaire.

If at all possible, the household interview should be conducted in Kiswahili. This is because great care has been taken to obtain the most precise translation of each question from English into Kiswahili to capture the exact intent and meaning. As soon as another language is used, either by the interviewer, or by someone else designated to serve in this role, the precision of each question in the questionnaire is compromised and an unknown bias may damage the quality of the information obtained.

In summary, certain problems can arise from the use of interpreters:

- It is difficult to know how good the translation is. It is possible that the respondent's friend who speaks Kiswahili does not speak it well enough to translate everything said during the interview, and he will not want to admit it.
- The interpreter may be so familiar with the household that he starts to answer for the respondent without asking the questions. In that case, you must politely remind the interpreter that it is the respondent that has been chosen for the interview, and that it is only his/her answers that you can write in the questionnaire.

6.5. CONDUCTING THE INTERVIEW

It is expected that each interview will last for 2 hours. When conducting the interview you should carefully follow the interview instructions (See Section D) and remember to:

- ✓ Make sure you are interviewing the correct household;
- ✓ Make sure you interview using the interview techniques described in Section B;
- ✓ Make sure you complete all screens and answer all questions;
- ✓ If you feel a response needs clarification add a comment to the question;
- ✓ At the end of each screen remember to click the validate button and make corrections if needed;
- ✓ At the end of the interview remember to validate the whole interview file and make corrections.

6.5.1. ANTHROPOMETRIC AND BIOMETRIC TESTS

One member of your team will be responsible for conducting all the anthropometric and biometric tests.

They will come to your household during your interview to conduct these measurements together with a local assistant from a health dispensary.

If they do not arrive during the interview then they will record the data separately and provide it to you later in the day for input into surveybe.

6.5.2. BIG BROTHER IS WATCHING YOU!

A big advantage/improvement of using a surveybe is that each action the interviewer undertakes is electronically registered. Hence, it can easily be verified whether the interviewer performs his tasks according to requirements.

For instance; whether he follows all questions in the required sequence, at the required speed, at the required moment on the required day, etc. Your work is continuously monitored and evaluated by both your supervisor and the project management team at the head quarters. Therefore, for your own sake, you better listen to the advice given by your supervisor and stick to all instructions lined out in this manual.

6.6. AFTER THE INTERVIEW

After finishing each interview, but before leaving the household, click on the validate entire interview option (in the file menu) to verify that all the sections of the questionnaire have been correctly completed. **YOU SHOULD NOT MAKE ANY CHANGES IN THE COMPLETED QUESTIONNAIRE WITHOUT ASKING THE RESPONDENT THE QUESTIONS AGAIN**, unless your supervisor asks you to do so.

It may be that not all inconsistencies are automatically detected by the program, however. Hence, it is important that you also go through the questionnaire yourself and verify that all sections have been correctly completed. You should do this immediately after each interview, before you hand over your UMPC to your supervisor, and – most importantly – before leaving the village. Otherwise, if you leave the village without checking, and if you have made a mistake, you will have to return to the village – a waste of time and money.

6.7. WRITING COMMENTS

Before leaving the household, you should write comments in the comments box in case something unusual has occurred. This can be of any kind. Note that it is **compulsory to write a comment in the following cases**:

- ✓ If an interpreter was used. You need to confirm whether using an interpreter has influenced the responses of the respondent or not.
- ✓ There is a missing field. This should be avoided, but in case you had been forced to do so, you should explain the reason why in the comments box.
- ✓ There is an unusual response compared to average responses. You are all very intelligent, so we expect you to conduct interviews actively (as opposed to passively). That is, we expect you to think about the responses of the respondent and not to just enter them with your brains on level zero. If you think the response of the respondent is rather unusual (based for instance on previous interviews with other respondents in the village), you should first make sure whether he/she has understood the question properly (without influencing his/her

answer!). In case he/she does not change his/her answer, you should make a comment about this in the comment box.

- ✓ In case a DK answer was given
- ✓ For the household questionnaire, in case there was nothing to comment, you have to write 'ok' in the comment box.

6.7.1. CHECKING YOUR BELONGINGS

Before leaving the household, double check whether you have all the equipment you arrived with, see page 8.

6.8. THANKING THE HOUSEHOLD

Before leaving, thank all the members of the household who took part in the interview.

Although you should make sure to thank the household sincerely, you should try not to stay around in the household longer than necessary.

You should make sure you leave the household as soon as possible, after having thanked the household. In case any household member asks you to stay a bit longer for lunch/drinks, you should thank him kindly for the offer, but refuse accepting it with the excuse that you still have a lot of work to do.

6.9. INCENTIVES

At the end of the interview you should give the main respondent the interview incentive (which is likely to be sugar or soap). You should make sure that they sign the incentive forms to confirm that they have received this gift.

YOU NOW MOVE TO THE NEXT HOUSEHOLD OR IF YOU HAVE COMPLETED ALL ASSIGNED HOUSEHOLDS FOR THE DAY, YOU SHOULD RETURN TO BASE AND CONDUCT YOUR EVENING TASKS.

7. END OF DAY TASKS

7.1. QUESTIONNAIRE REVIEW PROCEDURE

At the end of the day you should review all interviews conducted that day once more to ensure you are 100% confident that the data collected if true and fair.

You will then handover your UMPC to your supervisor who will transfer all recently completed household records onto his/her computer in order to review them.

7.2. EVENING DISCUSSION

At the end of each working day, the supervisor meets with the whole team of interviewers (sometimes individually, if necessary) to discuss all matters which caught any kind of attention on the respective day. During this discussion, you should pay careful attention to what your supervisor has to say. Sometimes a session will be short, sometimes it will be long. In any case, you should keep your concentration until it is finished. You should listen to your supervisor's advice, and follow his/her instructions. In case he/she asks you to adjust your behaviour on the field, for instance your way of conducting interviews, you should take the instructions seriously.

7.2.1. YOUR FEEDBACK DUTIES

The UMPC survey method no doubt has many advantages compared to the traditional survey methods, among them having the possibility of running an immediate automatic validation check procedure.

However, you may encounter inconsistencies/errors/impracticalities during the survey and if you do you should give your Supervisor as much feedback as possible on your experience with it. For example, An error is not spotted by the validation checks or a spelling error etc. Your Supervisor will notify the Project Leaders and they will update the questionnaire and issue a new version.

In order not to forget any (feedback) comments you may have to your supervisor, we advice you to note them down immediately, even during the interview. You can do this in your notebook, or maybe more practically, in the Windows Journal of your UMPC.

7.3. BATTERY CHARGING

The main reason for handing over the UMPC equipment to your supervisor in the evening is that he/she needs 1) to transfer the data from your UMPC to his/her laptop for questionnaire review and later for transfer to the EDI head quarters and 2) to charge the batteries.

The Supervisor is likely to ask Interviewers to assist in charging the UMPC and spare battery packs. He/she will show you how to do this, if needed.

8. SOME IMPORTANT THINGS TO REMEMBER

This section contains a summary of the most important points to remember. You should read these several times, until you know them by heart. Please, take this advice seriously. These points are most important for successful completion of this project. This list is NOT exhaustive, and points will be added during training.

8.1. GENERAL

- Always act professionally and politely during your work. Even in off-duty hours you must remember that you are representing EDI and the WSP, and so must behave properly;

- Always make sure you have all of your equipment and make sure that it is in good working order. Report any problems to your Supervisor;

- Never start working in a EA until your Supervisor has confirmed that the local officials have been informed of our presence;

- Always carry you EDI ID card with you. If you lose it, report the loss to the police and inform the HR Manager so he can send another;

- Always make sure you interview only the Households that you have been assigned;

- Always validate your answers before moving to the next screen;

8.2. USING YOUR HANDHELD COMPUTER (UMPC)

- ALWAYS replace the stylus pen in its holder DIRECTLY after use.
- Always close the Tablet PC Input Panel (keyboard) right after using it. It might hide important information on the screen.
- Do not touch the UMPC screen with your hands while entering data with the stylus pen, since this will hinder the contact between the pen and the screen.
- Each evening, hand over all UMPC equipments to your supervisor, together with your Questionnaire Review Booklet. Sign the daily ‘hand over’ check list each time you do so.
- Always decrease the brightness of the screen (by use of Menu Button, cf. Appendix A) once you have entered the household, in order to safe battery life.
- Always switch off the sound of the UMPC (by use of Menu Button, cf. Appendix A) before visiting the household, since sound may take away the concentration of the respondent.
- You are NOT allowed to use internet on the UMPC.
- Frequently check the remaining battery charge. Do so especially **before** the **interview** starts and try to avoid changing the battery whilst visiting the household.
- NEVER install any program onto the UMPC. NEVER plug in any device other than your supervisor’s USB stick into the UMPC.

- Use the HOLD function of the UMPC in case you want to avoid changes on the screen while not using the UMPC for as short while.
- When you want to change the battery, make sure your UMPC is switched off first.
- Make sure your UMPC is well protected when it rains!

8.3. GENERAL POINTS

- Each time before leaving the household, double check you have all your equipment;
- Remember to fill in EACH enabled (white) field.
- Remember to enter comments for EACH household record. Enter 'ok' if there is nothing to comment.
- Run the validation check procedure EACH TIME BEFORE MOVING ON TO THE NEXT FORM and run the final validation check at the end of the interview.
- Do not waste unnecessary time doing things which are not related to the survey.
- Remember to always thank your respondent for the responses and time he/she has spent on you.
- In order to maintain confidentiality, make sure no outsiders (including the guide and/or village official) are around while interviewing your respondent.

Section B. **Survey Techniques**

1. Introduction

In this section we provide advice and guidance on some key techniques required for implementing this survey, including:

- ✓ General Interviewing Skills/Techniques;
- ✓ Observation Skills;
- ✓ Structured Observation Skills;
- ✓ Biometric Testing Protocols and Procedures; and,
- ✓ Anthropometric Measurements.

This section has been developed to complement your training and you should make sure that you are fully competent in all of these skills before conducting any interview.

2. Interview Skills and Techniques

2.1. Basic concepts of an interview

Survey interviewing is a technique of collecting information from the public by asking some structured questions to the respondent. The interviewer's role is vital to accomplish the survey objectives for three reasons, namely:

- Interviewer plays a major role in getting responses from respondents.
- Interviewer is responsible for initiating and motivating respondent.
- Interviewer should handle parts of the interaction in the interview and interview proceeding in standard procedures, so that there is no bias. She/he is a key to a successful interview by making respondent feel that they have participation in the interview, keeping all secrecy and give sufficient information about the purpose of survey.

To achieve this, the interviewer needs to have good communication skills. Communication skills are the art and science of attaining mutual understanding between two persons or two parties. This can be either verbal or non-verbal. Sometimes the strength of non-verbal communication is underestimated. You should be aware of this when you meet the respondent. Their behaviour towards you can be influenced by:

- Expectation of getting something from the interviewer.
- Suspicious on what does this outsider want from them.
- A feeling of being socially inferior to the visitor.
- Trying not to disappoint his guest.

All these factors can be the reason for respondent not to talk openly and freely.

2.2. Private Nature of the Interview

All of the information collected is ***strictly confidential***

In principle, all of the questions should be asked of the respondent in complete privacy to ensure that his/her answers remain confidential. The presence of other people during the interview may cause him/her embarrassment and influence some of his/her answers.

The only exception to this rule is when a respondent is incapable of answering the questions, due to language difficulties or he/she has problems in remembering things. In these cases, look for someone else in the household who has the best knowledge of the household and the household members activities. But it is important that you interview the household head whenever is possible.

On the other hand, it is often difficult to limit the number of people present during an interview. The visit of an interviewer may be a big event for the household. The household members and the neighbours are bound to be curious. When faced with this situation you should explain to the respondent that the answers are confidential.

You must make effort to ensure no one except household members are present.

Sometimes interviewers feel that it is okay for a respondent's friends to sit in, or be present at, the interview. This is not true. First, the household may have exaggerated the proximity of the person to the household. Second, it may not be true that s/he "knows everything about the household and all of their secrets" as the respondent told you. You will often need to insist that the friend or visitor leave. Sometimes the village/kitongoji chairman may be around (for instance, in case he/she is the interpreter). However, you should make effort to ensure that he/she is NOT present during the interview, because households may change their responses due to the present of the village/kitongoji leader.

How can you do this? During the first meeting in the village with the village leaders and sub village leaders, you need to explain that our interviews must be conducted in privacy. Even the leader must leave.

At the household level, you will need to persuade the respondent of the importance of the interview. Our task is of great importance to our society and to the nation as a whole. You will need to "prepare the ground" for the interview, by explaining that we will be asking personal and confidential information, and that we will guard the confidentiality of this information. By "preparing the ground", we mean that you will carefully explain the purpose of the survey and to create a relationship of mutual respect with the respondent. You can say that you are under instructions not to proceed with the interview in a public way. Finally, you will have to repeat and repeat your arguments until the respondent complies. It will be a big mistake to start the interview with friends or neighbours present.

2.3. Establishing a Trusting Relationship with the Respondents

As much as possible, you should use a conversational tone while you are reading the questions. You must read the questions exactly as stated, but your eye contact with the respondent and your tone of voice is important in establishing a good relationship with the household members. Good eye contact is important, because you are learning about the respondent from his/her eyes, face, and body language. At the end of each question, we encourage you to look at the respondent while you are waiting for his or her reply.

You need to think about the answers you are receiving and weigh them. Does the answer make sense in the context of this household and in the local environment? Most respondents will give truthful answers. However, you need to be on your guard for the respondent who is giving you false information, or who feels he can shorten the interview by either not telling you, or by making up a false story. When probing, you must be both "*mpole na makini*", that is, you must be fully polite, but also firm in your desire to get a good and truthful answer. When a respondent does not give you truthful answers, you must make it clear in a polite way that you understand that the story you are hearing is not the real story, or full story. You may need to point out contradictions that you have understood.

If a respondent observes that you accept his/her first untruthful answers, then you can expect more false answers. As result, you will be recording bad data. Remember that you are there in the household and the village, to get good information that can be used for improving policies. If you accept false stories as answers, then you are failing to collect good quality data. *Remember the respondent is not legally bound to answer your questions it is only by his/her GOODWILL that she/he responds to what you will be asking'*

2.4. OBJECTIVITY OF THE INTERVIEWER

It is extremely important that you should remain absolutely ***NEUTRAL*** about the subject of the interview. Most people are naturally polite, particularly with visitors. Respondents tend to give answers and adopt attitudes that they think will please the visitor. You must not show any surprise, approval or disapproval about the answers given by the respondent, and you must not tell him/her what you think about these things yourself. If he/she asks you for your opinion, wait until the end of the interview to discuss the matter with him/her.

You must also avoid any preconceived idea about the respondent's ability to answer certain questions or about the kind of answer he/she is likely to give.

2.5. SUGGESTION FOR PROFESSIONAL BEHAVIOUR

Remember that you are working on an assignment for the World Bank and Economic Development Initiatives. You must observe the following rules at all times:

- Be courteous towards everyone (the respondent and his/her family and friends, the supervisor, other members of the team and anyone else involved). ***YOUR BEHAVIOUR*** can have a significant influence on the opinions of people in the areas covered by the survey as to the value of the whole project.

- Avoid disturbing or upsetting anyone by ***YOUR BEHAVIOUR***.
- Be properly dressed, so that the respondent will be inclined to trust you, as a reliable and responsible person.
- Exercise patience and tact in conducting the interview, to avoid antagonizing the respondent or leading him/her to give answers that are not accurate.
- Avoid involving yourself in politics and religious discussion in any case, symbols related to a political party or religion should be avoided as much as it is possible. The project covers a large part of the country which exercises different norms and customs. ***Without compromising your freedom of speech and dress, maintain professional at all times.***
- ***Never ever*** discuss the answers given by one household with members of another household or with any other person except the team supervisor and the project management team. The Management team has promised the Government, the village leaders and the household's strict confidentiality and all team members must conduct themselves according to this code.
- Avoid using street jargon such as "poa", "bibi", etc.
- Do not ask for any gifts (e.g. "May I take this mango?"). Do not accept money.

2.6. How to ask questions?

Interviewer's behaviours can influence the respondent's answer. Avoid influencing them; our job is to record respondent's answers.

The way to ask questions:

- Read questions in exactly the way they are formulated in the questionnaire, without adding reducing or changing. Do not use your own words, since this may alter the meaning of the whole question and it can influence your respondent to give a different answer.
- If the respondent doesn't understand, repeat the question slowly, don't explain by your own words.
- Don't change the chronological questions (deviation can change the answer). Always **ask** the questions ***exactly*** as **in the form in which they appear in the questionnaire.** And follow the exact sequence of sections used in the questionnaire.
- Don't pass a question due to previous answers or since you know the answer.
- Don't show your respondent that you are in a hurry or tired. Give them time to think on their response.
- Follow exactly the questions' instructions like skips, brackets and red coloured instructions.

When reading questions you must control voice intonation. This can differ from one interviewer to the other. Avoid a low voice and loudness since that can bore or annoy the respondent.

After reading a question once in a clear and comprehensible manner, you should await the reply. If the respondent does not answer in the reasonable time, he has probably 1) not heard the question; or 2) not understood the question; or 3) does not know the answer. In any case, if there is no answer, repeat the question. If there is still no reply, you must ask whether the question has been understood. If the answer is “No”, you may reword the question. If the difficulty lies in finding the right answer, you should help the respondent to consider his/her reply.

The questionnaire should be completed during the interview. Do NOT record the answers on scraps of paper and transfer them to the questionnaire later. We know you are very intelligent that is why we choose you to work with us, but do not count on your memory for filling in the answers once you have left the household.

2.7. Pace of the Interview

You must determine the pace of the interview. Avoid long discussions of the questions with the respondents. If you are receiving irrelevant or complicated answers, listen to the respondent and then lead him/her back to the original question. Remember that it is you who are running the interview and that you must be on top of the situation at all times.

2.8. Reaction to respondents

There are three reactions that you can come across during the interview.

- Respondents who need courage to talk, who look tired and bored or are in a hurry to give answers.
- People who are very talkative.
- People who can respond by crying.

Strategies:

- For those who look tired or bored and try to respond to many questions by “*I don’t know*” try to keep them interested with the questions. Explain that questions are being asked to many others.
- Those who are very talkative be careful! (Especially with time and getting more information than needed).
- Those who cry give them time to cry, then show sympathy and continue to ask questions.

3. STRUCTURED OBSERVATION

3.1. WHAT IS A STRUCTURED OBSERVATION

Structured observations aim at recording the normal, unaffected behaviour of household members in their daily activities. In structured observations, the observer (you) watches household behaviour without affecting them and records these activities in given categories in a checklist similar to a questionnaire.

As an observer you are like a security camera making a video of the household behaviour without changing their behaviour. You simply observe and document the behaviour as an outsider. As an observer you must not participate in the household activities or influence the household behaviour.

Contrary to conducting an interview, you should also avoid interaction with the participant as much as possible. You must observe and record the activities as objectively as possible and apply the same standards to all households. In the next sections we discuss how to observe behaviour without influencing, how to identify the key activities and record the observations.

3.2. OBSERVING BEHAVIOUR WITHOUT INFLUENCING IT

In structured observations we are trying to record information on how household members behave normally in their everyday activities. **Your key objective as an observer is to observe the household activities while keeping the influence on the activities to a minimum**. As you can imagine, there are many things that can influence the way participants behave while being observed:

- **The presence of an outsider watching the activities**: Often people do different things when somebody is watching their behaviour, especially if this person is a stranger that is not known to the participants. This can be due to the participant trying to make a good impression on the observer or being intimidated by the observer. For example, a person may work much harder than usual if somebody is watching to make the observer think that she or he is a very hard working person.

- **Knowledge about the key activities being observed or the purpose of the structured observation**: People often change their behaviour if they are consciously thinking about their activities or if they know someone is watching certain key activities. This can be due to the participant trying to behave in a "good" or "correct" way, i.e. the way he or she thinks is expected of him/ her. Sometime people may also think they might receive a benefit for behaving the "correct" way. For example, a person knowing that someone is here to watch how often they wash their hands might wash his/her hands much more than normally, just because they try to demonstrate that they have clean hands or may even hope to receive a benefit for washing their hands.

- **Seeing the notes/answers or noting which activities trigger notes to be taken**: Similarly to the point above, participants may change their behaviour when they see the notes the observer is taking, or notice which of their activities triggers the observer to take notes.

In order to minimize your impact on the behaviour of the household while observing it you need to take a couple of things into account:

- **Getting into the household and introduce yourself**: The potential influence you have on the household behaviour begins when you arrive at the household and introduce yourself and the study. Introduce yourself in a way that generates trust but does not reveal the purpose of the study. Be polite when you introduce yourself; be very general when introducing the purpose of the structured observation. Explain to the household that you are here to observe and take notes of the normal every day household activities. Explain the household that they should try to ignore you as much as possible for the next three hours, and just go on with their normal daily activities. Explain that you might follow the household members around. You will only be observing and taking notes. Explain to the household that anything you observe and all your notes are strictly confidential and will not be shared with anyone. They can ask you questions before you begin or after you are finished. Make sure that your presence in the household does not draw the attention of other people outside the household. If you use a village guide to introduce yourself to the household ask the village guide to leave after having introduced you and the study for the duration of the observation.

  Explain to the household that you are interested in the normal daily activities of CHILD and CAREGIVER, and that you will follow them around, observe and take notes for three hours. **<u>Do NOT tell the household that you are here to observe their hand washing behaviour</u>**.

- **Place of observation:** Before you start with the observation, find yourself a place in the household where you can easily observe the household activities you are interested in without obstructing them. If possible try to find yourself a place in the background, which is not in the centre of the activity you are trying to observe. Don't hide yourself; be natural in your choice. If the activities you are trying to observe happen at different places, follow the participant around. Don't follow the participant immediately and too closely, keep some distance.

  In this project you will have to find a place where you are able to observe behaviour before and after food preparation, eating, defecation and child caring activities. Some of these activities may happen outside the house, some inside the house. Follow the CAREGIVER and CHILD if the centre of the activities shifts from inside to outside or vice versa. Do NOT sit next to the latrine or follow the respondent directly to the latrine, try to be in a place form where you can observe if the hands are washed after toileting or defecation. If the latrine is outside the household compound follow to a point so that you can observe the hand washing behaviour.

- **Non-participating observer**: As an observer you are **ONLY** observing but not participating in household activities, and you should try to influence household activities as little as possible. Try to engage as little as possible in any household activities, such as eating or helping with any tasks. If household members are trying to engage with you, be polite and remind them that you are only there to observe their daily activities and that they should try to ignore you as much as possible. Try to not do anything that changes the behaviour of the household members like making phone calls or talking to household members. Do **NOT** use the time for personal things or other tasks, concentrate on the observation. If you notice that you are obstructing the participant from their normal tasks, try to move more in the background; pretend to do something else until they pick up with their normal activities. Participants may feel disturbed when you are closely watching their activities. Try to not show too much attention to their, try to observe indirectly.

- **Observe, do not ask**: In structured observations the **ONLY** way to obtain "answers" is to observe. This is crucially different to conducting a questionnaire. **Do NOT ask any question, even if you were not able to observe the behaviour in one of the key activities**.

  If you were not able to observe if CHILD or CAREGIVER washed their hands, do NOT ask if they washed their hands or not, as this will influence their behaviour during the next critical activity.

3.3. IDENTIFYING THE KEY EXPOSURES

Your objective in the structured observation is to generate an objective picture of the hand washing behaviour of the CHILD and its CAREGIVER. In order to make our observations objective and comparable you will have to identify certain key exposures and note the hand washing behaviour of CHILD and CAREGIVER, every time one of the two is exposed. We are only interested in the hand washing behaviour of the CHILD and the CAREGIVER, not that of any other household member. There are two groups of exposures, first exposures before and after eating or feeding the child, and second after toileting and defecation. The detailed list of exposures:

Eating

• **Before obtaining water from a wide-mouthed storage container**	Does not include taking water from bottles
• **Before cutting or preparing food**	
• **Before serving food**	
• **Before eating**	
• **After eating**	
• **Before feeding child < 5 years old**	
• **Before breastfeeding child**	

Defecation

- **After defecation**
- **After toileting**
- **After cleaning child post-toileting**
- **Bathing**

You must know the above list by heart, as you must immediately recognise a key exposure during the structured observation.

Note that one exposure can be followed directly by another. For example, the CAREGIVER may clean the CHILD after toileting and then start preparing food. Record each exposure individually, so in our example you will have to record the hand washing behaviour once for “After cleaning child post-toileting”, and once for “Before cutting or preparing food”. If the CAREGIVEVER washed his/her hands between, we record the same instance of hand washing twice for different exposures. If CAREGIVER and CHILD start eating together, this counts as two key exposures, one for the CHILD, one for the CAREGIVER.

For EVERY key exposure the key things for you to observe are:

- **Did CAREGIVER or CHILD wash hands?**

If yes,

- **Were both hands washed?**
- **Was any soap used to wash hands, and if so, which kind of soap?**
- **Which was the main method of drying hands?**

3.4. RECORDING THE ANSWERS

EVERY time the CHILD or CAREGIVER is exposed to one of the key exposures you have to make a record of the hand washing behaviour. For EACH instance you must record if hands were washed, if both hands were washed, which soap was used to wash hands, and which was the main method of drying hands. See the details in the Survey Content section.

Remember that the behaviour of the participant may be different if he/she knows for which activities exactly you record the behaviour. It is therefore very important, that you

- Do NOT show the respondent the answer sheet or the answers you have recorded.

- Are discrete when recording the answers. The participant should not be aware of what activity triggers you taking notes.
- Do NOT ask any questions if you could not observe something. Record "COULD NOT OBSERVE" instead.

3.5. FIELD PROCEDURES

For each EA there will be two (out of 10) households in which require the structured observation on top of the normal household questionnaire.

All structured observations will be conducted during the same hours of the day in the early morning (6-9am) and before the household questionnaire. Your supervisor will inform you if you have to do a structured observation for a specific household. Since the structured observation will happen in the early morning, you or one of your team colleagues will visit the household the day before the structured observation and fill in the section "1. Household Members". In this section, the household members which are observed during the structured observation are identified, i.e. the youngest child between 2 and 4 years is (CHILD), and the main caregiver of this child (CAREGIVER).

Explain to the household that you will come back the next day at 6am and follow CHILD and CAREGIVER in their normal daily activities for three hours, and that you will ask some questions to the household head afterwards for around one hour.

The day of the structure observation you will have to arrive at the household early in the morning. Try to be at the household **not later than 6am**. Speak to your supervisor if this is not feasible for any reason.

Once you are at the household, open the correct household interview in the surveybe implementer and go to the structured observation tab. On top of the roster, the names of CHILD and CAREGIVER are displayed. Ensure yourself that **BOTH**, are available for the structured observation. Speak to your supervisor if one of them or both are missing.

Introduce yourself and how the structured observation will work. Remember that you must not tell the household that you will observe their hand washing behaviour. Tell the household that you would like to observe the normal every-day activities of CHILD and it's caregiver for **three hours**, and that you will ask some questions to the household head afterwards for around one hour.

The structured observation begins **ONLY ONCE** the household has agreed, you found yourself a good place for observation, and the household members have resumed their activities. Record the beginning time and observe the hand washing behaviour for all key exposures **during three full hours**. After three hours, record the end time and inform the household members that you have finished the observation. Find the household head and proceed with section "4. Household roster" of the household questionnaire.

3.6. Reactions to respondents

The table below summarises how you should respond to respondents in a few likely scenarios:

The respondent may:	**Your reaction should be:**
Want to talk to you	Kindly remind the respondent that you are only there to observe their normal every day activities. Tell the respondent that you will answer any questions **AFTER** the observation is finished.
Ask you for the purpose of the study or for details of what behaviour exactly you are interested in and how you evaluate it	You should never reveal the exact purpose of the study during the observation as this will influence the behaviour and introduce bias. Tell the respondent that you will answer any questions **AFTER** the observation is finished.
Want to see the answers	Do NOT show the answers to the respondent. Tell the respondent that he she can see the answers **AFTER** the observation **AND** the interview are finished. Only show answers if respondent insists at the end of the questionnaire.
Ask you to join household activities (e.g. food) or help with them with something (e.g. to lift or hold something)	You should not engage in household activities during the observation. This also includes eating with the household. Be kind when you turn down any offer, excuse yourself and remind the household that you are only there to observe the household activities during three hours. If the respondent insist, you can offer them to participate or help **AFTER** the observation time is over.

4. Haemoglobin Testing

4.1. Purpose

Haemoglobin is a red protein containing iron, responsible for transporting oxygen in the blood. Low levels of haemoglobin are a health hazard, especially in younger children. The survey will test haemoglobin levels in all children of 5 years old or younger. This is done through a non-invasive finger prick test.

The haemoglobin test will determine if the child is anaemic and if so, the person taking the test together with a Local Health Professional will advise the caregiver on the action to be taken.

Anaemia is defined as a decrease in number of **red blood cells** (RBCs) or less than the normal quantity of **haemoglobin** in the blood.

Classification of anaemia:

Normal HB/ No anaemia: A child's haemoglobin level is considered normal when it is above 9.4g/dl

Anaemic: A child is considered anaemic if his/her haemoglobin level is below 9.3g/dl

Severe Anaemia: A child with severe anaemia is one with a haemoglobin level of 4g/dl or below.

4.2. Recruiting a Local Health Professional

Prior to the fieldwork in any village the supervisor should report to the local dispensary. Here they will request a health professional to join the team for two out of the three days that they will be operating in the village. The health professional will provide a link between the child whose haemoglobin level is being tested and the health facility. This will ensure that any cases that need follow-up are referred through existing national system. The team will also have a set of iron supplements (in the form of tablets or syrup). No one from the survey team should, under any circumstances, dispense these supplements to anyone. It will be the task of the accompanying health professional to do on-the-spot dispensing of the supplements in line with national guideline. Finally, the health professional will also ensure that all medical waste from the tests is disposed off in a professional and safe manner.

In short the local health expert will assist in:

- Linking patients to facilities and the national health system if needed
- Dispensing drugs, if required (and qualified)
- Medical waste disposal

4.3. Disposal of equipment

All lancets and microcuvettes will be disposed of in a yellow container immediately after use.

Gloves, wipes and cotton swabs will be stored in autoclavable bag. At the end of the visit to each village, the local health professional will assist in disposing of the waste.

4.4. WHO DO WE TEST?

We only test children under five that are part of the study. We will not test other household members (that is, those over 5 years old) or non-household members, such as neighbours. You are accompanied by a local health professional, who can ensure that anyone requesting more information or wanting a test gets put through the appropriate channels.

4.5. CONDUCTING THE TEST

The haemoglobin test should only be conducted by the nurse on the team. It should not be conducted by anyone else, also not by the local health professional

4.6. MATERIALS REQUIRED:

- HemoCue Hb 201+ Machine
- Examination gloves
- HemoCue cuvettes
- Cuvette holder
- Blood lancets
- Bottle of 70% ethanol
- Swab
- Alcohol wipes
- Napkin or cotton
- Bleach
- Yellow container: This is the container that will be used to store all sharp objects such as blood lancets and hemoCue cuvettes.
- Autoclavable bag: Put all

4.7. STEP-BY-STEP GUIDE:

1. Make sure you are smartly dressed and are clean. It is important to make sure your language and entry to the household are done in a professional manner so that the mother or parent feels comfortable with you handling her child.

2. Start up the HemoCue Hb 201+ machine. After start up, the cuvette holder should be in its loading position. The display will show three flashing dashes and the haemocue symbol.
3. Put on the gloves
4. Make sure the study participant's hand is warm and relaxed (don't surprise your client). Use only the middle or ring finger for sampling. Avoid any finger with rings on.
5. Open an alcohol wipe and clean the finger.
6. Using your thumb, lightly press the finger from the top of the knuckle towards the tip. This stimulates the blood flow towards the sampling point.
7. For best blood flow and least pain, sample at the side of the finger tip, not in the center. This is because blood flows from bottom up and the central part of the finger is the most sensitive part.
8. Whilst lightly pressing towards the fingertip, prick the finger using sterile lancet.
9. Wipe away the first 2 to 3 drops of blood. This should be done in order to capture blood that is representative that is from circulation.
10. Re-apply light pressure towards the fingertip until another drop of blood appears.
11. When the blood drop is large enough, fill the microcuvette in one continuous process. Do not REFILL.

12. Wipe off excess blood on the outside of the microcuvette tip with the napkin. Make sure that no blood is drawn out of the microcuvette during this procedure.
13. Look for air bubbles in the filled microcuvette. If present, take a new sample. Small bubbles around the edge can be ignored.
14. Place the filled microcuvette in the cuvette holder. This should be performed within ten minutes after filling the microcuvette

15. Gently push the cuvette holder to its measuring position.
16. During the measurement a flashing dashes will be shown on the display
17. After 15-60 seconds the hemoglobin value of the sample is displayed. The result will remain on the display as long as the cuvette holder is in the measuring position. When operating on battery power the analyzer will automatically turn off after approximately 5 minutes.
18. Record result as appropriate and run another sample. Always handle blood specimens with care, as they might be infectious.
19. Dispose of cuvettes and lancets in the yellow container. Dispose of wipes, cotton swabs and gloves in the autoclavable bag.

Note: all results are stored in the analyzer and can be viewed in the display using the scroll functions or by using the PC programme. This function will be used by the supervisors and data processing persons for quality control purposes. You should always record the hemoglobin level immediately after it is displayed on the HemoCue machine. You should never measure the next child before entering the recordings of the previous child into the electronic questionnaire.

4.8. HemoCue Hb 201+ Cleaning and Maintenance

The HemoCue Hb 201+ analyzer is designed to measure hemoglobin from finger stick samples of whole blood. The instrument requires periodic maintenance to perform its function efficiently.

SAFETY NOTICE: The HemoCue Hb 201+ analyzer may be contaminated with blood or serum. Use gloves when cleaning the instrument.

Supplies:

- Cotton tipped applicators (swabs)
- Disinfectant: 70-95% ethyl alcohol (ethanol) or isopropyl alcohol (propanol)
- HemoCue cleaner (optional) (HemoCue, cat. # 139001)

Routine Function Checks:

- Check the function of the analyzer on a daily of use basis. Turn the analyzer on, pull the cuvette holder out to the loading position. Press and hold the left button until the display is activated (all symbols appear on the display). The display shows the version number of the program, after which it will show an hourglass symbol and “Hb”. During this time the analyzer will automatically verify the performance of the optronic unit by performing an automatic SELFTEST.
- After 10 seconds, the display will show three flashing dashes and the HemoCue symbol. This indicates that the HemoCue Hb 201+ has passed the SELFTEST and is ready for use. If the SELFTEST fails, an error code will be displayed
- If the SELFTEST passes, record the result as “Pass” on the daily Q.C. Log. Proceed with routine external cleaning.
- If the SELFTEST fails, an error code will be displayed. Refer to the Trouble Shooting Guide in the HemoCue Hb 201+ operating manual. Record out of range observations as “Fail” in the HemoCue Q.C. Log and document the appropriate corrective action to resolve the problem. Do not test client samples until after the problem is resolved and a successful self- test is completed.

External Cleaning (daily):

- Clean the HemoCue 201+ case each day of use with a clean cloth which has been dampened with alcohol (ethanol or isopropyl alcohol) or a mild soap solution. Allow the disinfectant 1-2 minutes contact time. Wipe off the disinfectant with a damp cloth. Use no abrasives at any time.
- The cuvette holder must be cleaned each day of use.
- Check that the analyzer is turned off. The display should be blank.
- Remove the cuvette holder from the instrument; pull straight out to its loading position. Carefully press the small catch positioned in the upper right corner of the cuvette holder.
- While pressing the catch, carefully rotate the cuvette holder towards the left as far as possible. Carefully pull the cuvette holder away from the analyzer.
- Clean the cuvette holder with alcohol or a mild soap solution. Wipe off the disinfectant with a damp cloth. Use no abrasives at any time.
- It is important that the cuvette holder is completely dry before being placed back into the analyzer.

4.9. GENERAL PRECAUTIONS:

a. Use routine general laboratory precautions**:** do not eat, drink or smoke in designated work areas, wear disposable examination gloves, and laboratory coats when handling specimens and kit supplies. Wash hands thoroughly after handling specimens and kit supplies.

b. Only personnel adequately trained in handling infectious materials should be permitted to perform this procedure.

c. Work surfaces, and other equipment must be regularly decontaminated with a 1:1 dilution of bleach (1 part bleach, 1 part water)

d. Take care to avoid cross-contamination during the specimen handling steps. Specimens can contain extremely high levels of organisms. Discard used materials without passing over open containers. If gloves come in contact with specimen, change gloves to avoid cross-contamination.

e. Do not use any equipment after its expiration date

f. Make sure you have an impeccable personal appearance. To this end EDI will provide laboratory coats which should be worn during the finger prick test, but not while travelling between households.

4.10. What if a Child is Anaemic?

It is very important that caregivers are made aware of the results of our tests, so that they can take action if they need to. The main purpose of having a local health professional is to ensure that the caregiver is immediately able to speak to a professional in their village who can assist them with both advice and medication as appropriate. They can also provide follow up support after we have left the village.

The local health professional accompanying you will decide how to handle cases of anaemia.

5. ANTHROPOMETRIC MEASUREMENTS

These are physical measurement of individual parameters which could be used to ascertain or infer the levels of nutrition of an individual(s) or a community. Most common anthropometric measurements relate to weight, height and length. Others includes mid-upper arm circumference, thickness of adipose tissue, head circumference, etc...

For the KHDS 2010, we are concerned with measurement of weight, height and length. You are required to measure **all the members of the household** as they are defined in the household questionnaire. In most cases a household will be composed of adults and children of all ages. Anthropometric measurements will in all cases be executed after the household questionnaire is completed by the interviewer. The interviewer should explain to the household that the team would return to conduct these measurements.

At the onset, approach the household as described in the interviewer's manual and remind them that you are part of the interviewer team but with the anthropometric measurement task. Politely ask for their consent and explain the procedures you are going to perform.

5.1. INSTRUMENT PROVIDED

Each Research Officer will be provided with the following equipment, which he/she will be responsible for the care and security:

a. Adult weighing scale
b. Adult height measurement board.
c. Children weighing scale
d. Kitchen scale

The purpose of any measurement is to get the true value of what is being measured, in other circumstances you are required to measure the true difference between two measurable quantities. There are several reasons for measurements being measured not being the true values or differences. These reasons could be attributed to:

a. Measurer
b. Measuring instruments
c. The measured

In order to maximize the possibility of getting nearer true values, we need to adopt standard methods of conducting the measurement. As earlier stated, we are involved in the measurement of heights, weights and lengths, here follows summary procedures for anthropometric measurement of either for an adult or child.

5.2. Reading Measurements

The reading areas of the tape on the measuring board are in centimetres which are numbered. Each centimetre is divided into ten gradations, i.e. small vertical lines, which at each centimetre, or millimetre. The line at five millimetres is slightly longer. Large numbers appear every ten centimetres.

Similarly, there are numbers on the hanging scale at each kilogram, small lines at each 0.1 kg and a slightly longer line at each 0.5 kg.

Be careful to read the scale on the measuring equipment properly. The tape on the measuring board should be read in an upward direction for height and left to right for length; and the hanging scale clockwise. Do not read the numbers in a backward direction.

Make sure to count the number of visible lines, i.e. millimeters, when you read the tape. The headpiece falls almost directly on the seventh line. Since it can be seen, it is counted towards the measurement.

If the dial of the hanging scale or the head piece fall directly on a line count that towards the measurements.

If the movable headpiece or footpiece or the dial of the scale fall between two lines, record the measurement of the LOWER number.

5.3. Equipment Standardization

Weighing and measuring equipment must be regularly checked during data collection, approximately twice a month, since weather changes, humidity and continued use may affect measurement reliability. Anthropometrist / interviewer should be able to check their own equipment while collecting data.

5.3.1. Measuring Board

a. For each measuring board, measure an object of known height such as a pole, twice for each board.
b. If the Board is in two sections, measure two different poles. The first pole should be less than the height of the lower section of the board. The second pole should be less than the total height of the board when both sections are together. Measure each pole twice for each board.
c. If there is 0.3 cm. or more difference between the known height of the pole and its height when measured on the board, then check the measuring tapes and the boards in question.
d. Check each board for the following:
    i. Loose screws
    ii. Broken or loose parts
    iii. Rough edges that may need sanding

iv. Sliding headpiece/footpiece: (1) Less than 0.2 cm. lateral wobble, i.e. that it is not too loose to fit when on the board.

5.3.2. *SCALE*

For each scale, weigh three objects of different known weights. Repeat this procedure a second time. A large plastic bottle with different marks on the outside of the bottle can be used for this purpose. Weight the bottle after filling it to each line with water and record the weights.

If there is a 0.1 kg or more difference between repeated weights on the same scale or between weights on different scales, check that the scale was zeroed, and reweigh each of the weights.

Always check:

- Scale 'zeros' properly.
- Stitching of weighing pants and infants slings to make sure they are not torn.
- Outside scale case for any breakage.
- Missing scale hooks.
- Dial of the scale is straight.

5.4. *GENERAL RULES*

Measurements must be carefully taken to ensure they are accurate, when taking measurements you should:

a. Never rush your work
b. Follow the procedures from your training, which are documented in the following sections
c. Make sure you are firm yet gentle with the child and give very clear instructions
d. Make sure the equipment is properly working and set up before you start:
    a. Make sure scales are set up properly and zeroed
    b. Make sure that measuring tapes are fixed properly and not twisted.
e. Make sure that the child is in the correct position before taking any measurements
f. Make sure you can clearly see the measurements, with nothing obstructing your view and adequate light.
g. With scales make sure the needle has stopped moving before reading the measurement
h. Carefully read the numbers to the nearest decimal place
i. Record the measurement in the correct box on the UMPC
j. Compare what you have entered with the measuring device before finishing.

5.5. *CHILD HEIGHT AND LENGTH MEASUREMENTS*

The following sections describe the acceptable ways for measuring the height of a child. When measuring height, you should always remember to:

a. Make sure that you first determine if the child was less than, equal to, or greater than two years of age (24 months)
    a. If less than two, measure length their length
    b. If two years of age or older, measure their height
b. Make sure that footwear and headgear are removed.
c. Interfering hair should be untied before the measurement.
d. If either b or c are not possible it was too cold or the child or mother were uncooperative, make sure you note this on questionnaire.
e. Make sure the child is in the correct position, as described in the procedures below.
f. Make sure the caregiver supports the child during the recording

5.5.1. Child Length Measurement Summary Procedure:

When measuring the height of a child under 24 months you will use a horizontal measuring board to measure the child’s length whilst they are laying flat on the ground:

Step 1: Place the measuring board on a hard flat surface, i.e. ground, floor or steady table.

Step 2: Advice the mother to kneel with both knees behind the base of the board, if it is on the ground or floor.

Step 3: Kneel on the right side of the child so that you can hold the footpiece with your right hand.

Step 4: With the mother's help, lay the child on the board by doing the following:

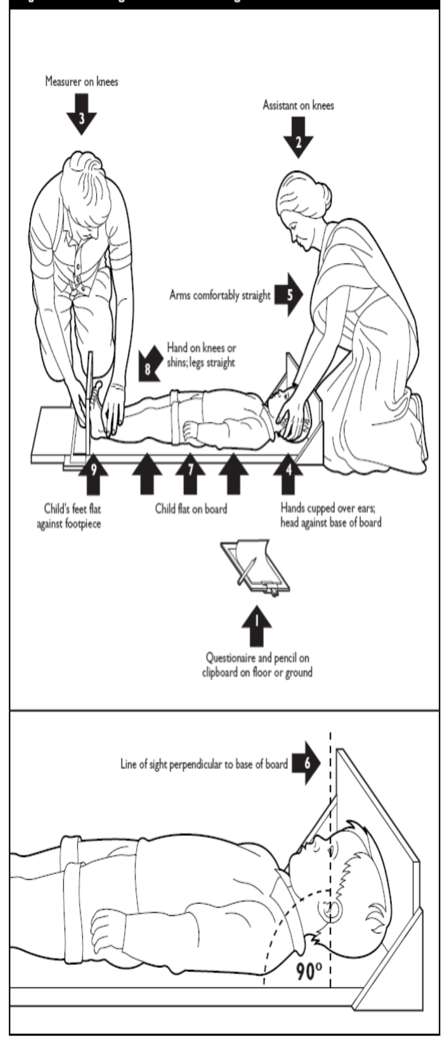
Mother: Support the back of the child's head with her hand and gradually lower the child onto the board.

You: Support the child at the trunk of the body.

Step 5: Ask the mother to kneel on the opposite side of the board facing the measurer to help keep the child calm.

Step 6: Cup your hands over the child's ears. With your arms comfortably straight, place the child's

Figure 5.2. Child length measurement - length for infants andchildren 0-23 months



Source: How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children, UN 1986.

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. Your head should be straight over the child's head. Look directly into the child's eyes.

Step 7: Make sure the child is lying flat and in the centre 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 footpiece firmly against the child's heels.

Step 8: Check the child's position.

Step 9: When the child's position is correct, read and record out the measurement to the nearest 0.1 cm. Remove the footpiece, release your left hand from the child's shins or knees and ask the mother to support the child during while you record the length on the questionnaire.

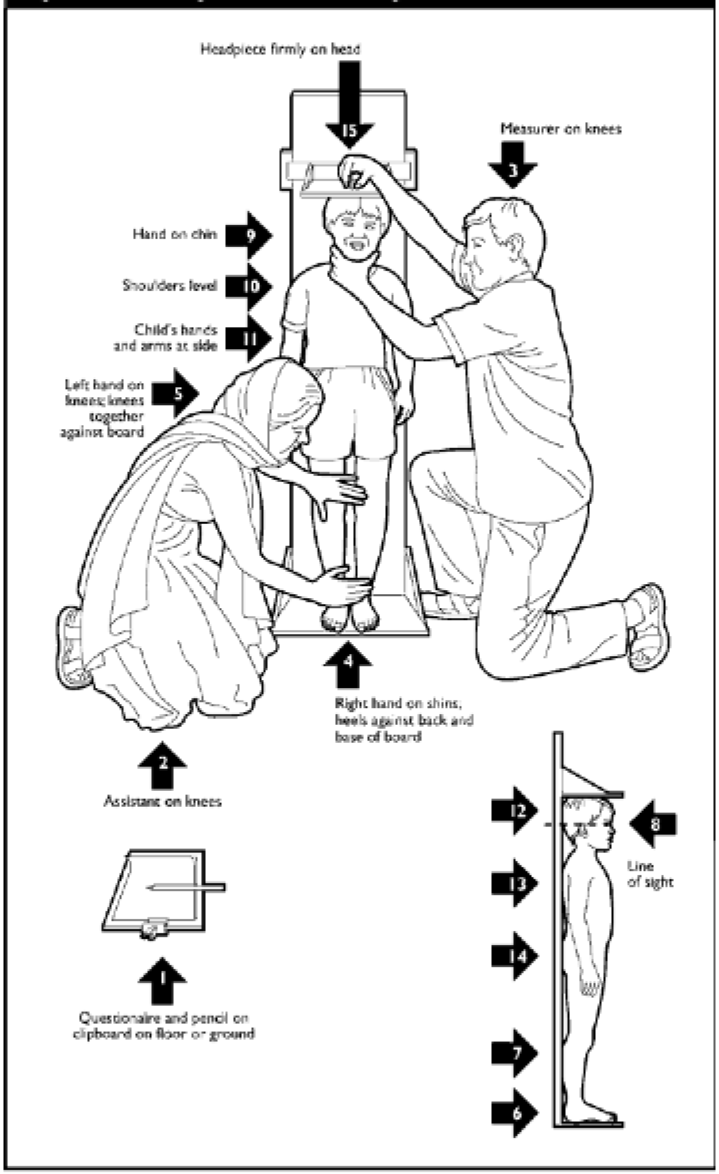
Step 10: Check the recorded measurement on the questionnaire for accuracy and legibility.

5.5.2. Child Standing Up Height Measurement

Step 1: Place the measuring board on a hard flat surface against a wall, table, tree, staircase, etc. Make sure the board is stable.

Step 2: Ask the mother to remove the child's shoes and unbraid any hair that would interfere with the height measurement. Ask

Figure 5.1. Child Height Measurement - Height for Children 24 Months and Older



Source: How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children, UN 1986.

her- to walk the child to the board and to kneel in front of the child. Request that the mother with both knees on the right side of the child .

Step 3: Kneel on your right knee only, for maximum mobility, on the child's left side.

Step 4: Place the child's feet flat and together in the centre of and against the back and base of the board. Place your right hand just above the child's ankles on the shins, your left hand on the child's knees and push against the board. Make sure the child's legs are straight and the heels and calves are against the board. Once the child is in position ask the mother to assist in making sure the child maintains the position.

Step 5: Tell the child to look straight ahead at the mother who should be in front of the child. Make sure the child's line of sight is level with the ground. Place your open left hand on the child's 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. With your right hand, lower the headpiece on top of the child's head. Make sure you push through the child's hair.

Step 6: Check the child's position. Repeat any steps as necessary.

Step 7: When the child's position is correct, read and record the measurement to the nearest 0.1 cm. Remove the headpiece from the child's head, your left hand from the child's chin, ask the mother to support the child during the recording.

Step 8: Check the measurement you recorded on the questionnaire for accuracy and legibility.

5.5.3. ADULT STANDING UP HEIGHT MEASUREMENT

For adults their height is measured whilst standing up:

Step 1: Place the height measuring on a hard flat surface against a wall table, tree, staircase, etc. Make sure that the board is stable.

Step 2: Ask the person to take off his/her shoes, and, if necessary, unbraid any hair that would interfere with the height measurement.

Step 3: Place the questionnaire and pencil on the **ground directly next** to you. Stand on the left side of the person. Make sure you are at eye-level with the reading area on the measuring board.

Step 4: Ask the person to place his/her knees and feet together so they are against the base and back of the measuring board. Make sure the feet are flat on the board and touching both the base and the back of the board at the same time. Make sure that the heels and calves are against the board.

Step 5: Tell the person to look straight ahead. Make sure that the person's line of sight is level with the ground. Place your open left hand on the person's chin. Gradually close your hand. Do not cover the person's mouth or ears. Make sure the shoulders are level, the hands are at the person's side, and the shoulder blades and buttocks are against the board. The head of an adult may not touch the back of the board.

Step 6: With your right hand, lower the sliding headpiece on top of the person's head. Make sure that you push through the person's hair.

Step 7: Check the person's position. Repeat any steps as necessary.

Step 8: When the person is in the correct position, read and call out the measurement twice to the nearest 0.1 cm. Remove the sliding headpiece from the person's head and your left hand from the person's chin.

Step 9: Immediately record the measurement on the questionnaire.

Step 10: Check that the measurement you recorded on the questionnaire is correct and readable. If you have made an error, erase it completely and record the correct measurement.

5.6. Child Weight Measurements

The following sections describe the three acceptable ways for measuring the weight of a child. When measuring weight, you should remember to:

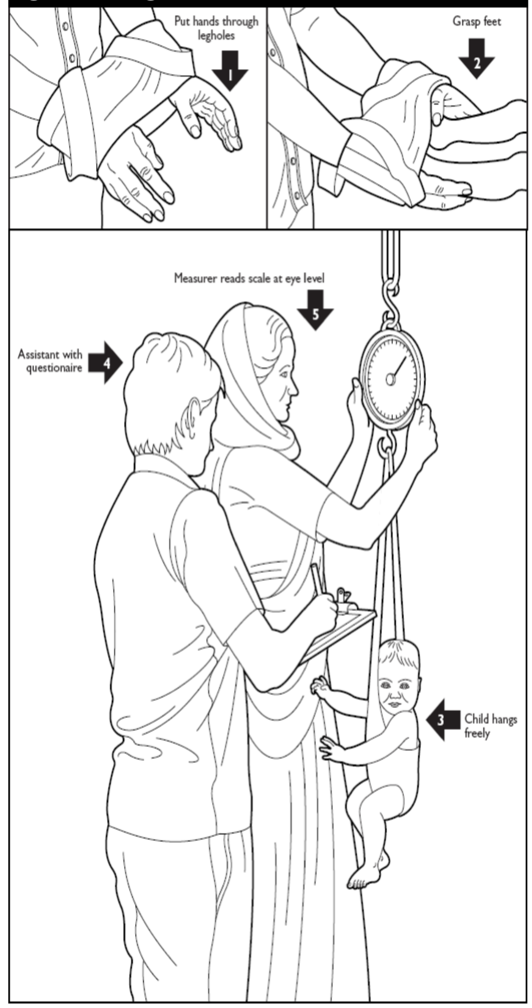
a. Always make sure that the scale is set up properly:
    a. Was the hanging scale should be hung a strong secure fixing, with the scale at eye level. The scale should be hung so that it hangs freely without touching anything.
    b. Standing scales should be set up on a flat stable surface.
b. The scale should always be zeroed before use:
    a. The hanging scales should be zeroed with empty measuring pants in place
c. Make sure that the child undressed and If not, you should record this as comment in the questionnaire, explaining why and what they were wearing
d. Always make sure that you wait for the needle to stop moving before taking a reading.
e. Enter all numbers carefully and accurately.

5.6.1. Hanging Scales

When weighing children in hanging scales you should carefully follow these steps:

Step 1: Hang the scale from a secure place such as a tree branch, ceiling beam or tripod with a piece of rope to hang the scale at eye level. Ask the mother to undress the child, as much as possible.

Figure 5.3. Child Weight



Source: How to Weigh and Measure Children: Assessing the Nutritional Status of Young Children, UN 1986.

Step 2: Attach a pair of the empty weighing pants, infant sling or basket to the hook of the scale and adjust the scale to zero, then remove from the scale.

Step 3: Have the mother hold the child. Put your arms through the leg holes of the pants. Grasp the child's feet and pull the legs through the leg holes. Make certain the strap of the pants is in front of the child.

Step 4: Attach the strap of the pants to the hook of the scale. DO NOT CARRY THE CHILD BY THE STRAP ONLY. Gently lower the child and allow the child to hang freely.

Step 5: Check the child's position. Make sure the child is hanging freely and not touching anything. Repeat any steps as necessary. This can be done either by you or by the mother.

Step 6: Hold the scale and read the weight to the nearest 0.1 kg. Read out the measurement when the child is still and the scale needle is stationary. Even children, who are very active, which causes the needle to wobble greatly, will become still long enough to take a reading. **Wait For The Needle To Stop Moving.**

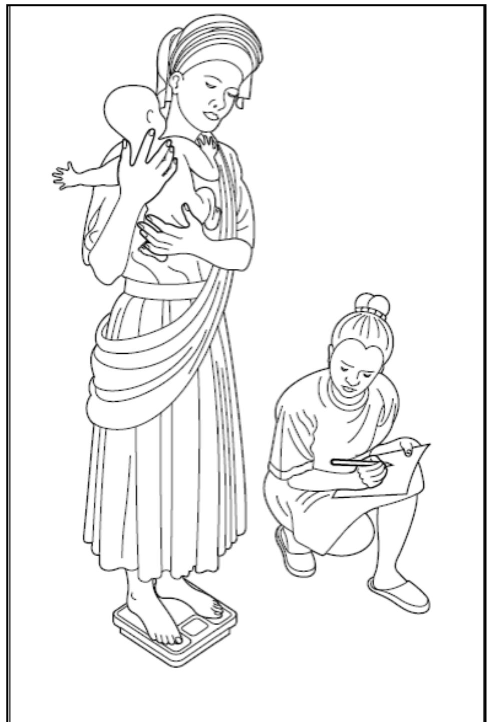
Step 7: Immediately record the measurement, then hold the child in one arm and gently lift the child by the body. **Do Not Lift The Child By The Strap Of The Weighing Pants.** Release the strap from the hook of the scale with your free hand.

Step 8: Check the recorded measurement on the questionnaire for accuracy and legibility.

The diagram below provides an illustration of the key steps in this procedure:

5.6.2. Child with Care Giver on Standing Scales

When weighing children under 24 months with the caregiver on a standing scale you should carefully follow these steps:


Source: "How to use the UNISCALE" UNICEF, 2000

Step 1: Ensure scale is not too hot and is on a flat, stable surface.

Step 2: Set scale to zero.

Step 3: Ask caregiver to remove excess clothing.

Step 4: Ensure caregiver stands with child in arms in centre of scale.

Step 5: Position yourself near dial to read weight.

Step 6: Wait for the needle to stabilize.

Step 7: Read the weight to be recorded to the nearest 0.1 kg (caregiver with child).

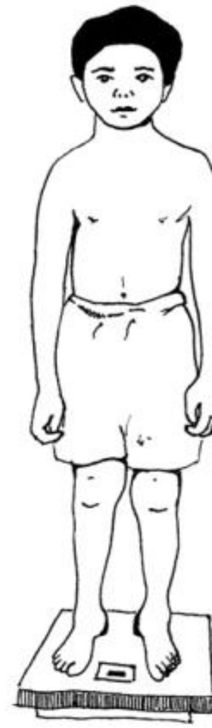
Step 8: Record the weight accurately.

Step 9: Ask the caregiver to hand child to assistant.

Step 10: Wait for needle to stabilize.

Step 11: Read out and record weight of caregiver alone be recorded to the nearest 0.1 kg.

5.6.3. CHILD WEIGHT MEASUREMENT PROCEDURE (STANDING SCALE, CHILD ALONE OVER 24 MONTHS)



Children of 24 months or older should be weighed on the standing scale ing this procedure:

Step 1 : Ensure that the scale is not too hot and is on flat, stable surface.

Step 2: Set the scale to zero.

Step 3: Ask caregiver to remove excess clothing from child.

Step 4: Ensures child stands straight in centre of scale.

Step 5: Position yourself near the dial to read weight.

Step 6: Wait for the needle to stabilize.

Step 7: Read and record the weight to be recorded to <u>the nearest 0.1 kg</u>.

5.6.4. ADULT WEIGHT MEASUREMENT SUMMARY PROCEDURE

Step 1: Place the scale on a hard, flat and level surface (you may have to use a plank of wood on which to place the scale). Adjust the scale to zero.

Step 2: Place the questionnaire and pencil on the floor or ground near the scale.

Step 3: Ask the person to take off his/her shoes and any heavy outer garments such as a coat, sweater, etc. Ask the person to stand on the scale. You may want to support him/her at the elbow as he/she steps on the scale. Make sure he/she is standing up straight and in the centre of the scale.

Step 4: Kneel on the floor or ground next to the scale. Make sure not to touch the person being weighed.

Step 5: Check the person's position. Repeat any steps as necessary.

Step 6: Read and call out loud the measurement <u>twice</u> to the nearest 0.1 kg.

Step 7: Immediately record the measurement on the questionnaire.

Step 8: Check that the measurement you recorded on the questionnaire is correct and readable. If you have made an error, erase completely and record the correct measurement.

5.7. Circumference Measurements

5.7.1. Head

To measure the Head circumference:

Step 1: Make sure your hands are clean and dry

Step 2: Tape measure is clean and dry and in good working order

Step 3: Asks caregiver to remove any head covering or hair accessories

Step 4: Extend the tape measure around the most prominent part of the back of the head and around the forehead, just above the eyebrows.

Step 5: Make sure you hold the child's head in a stable position

Step 6: Make sure that the tape measure is not twisted and then clip the end of the tape measure into the slot and press the central button to tighten the tape.

Step 7: Read and record the measurement over the forehead.

5.7.2. *ARM*

To measure the arm circumference:

Step 1: Make sure the tape measure is clean and dry

Step 2: Ask the mother to remove clothing that may cover the child's <u>left</u> arm.

Step 3: Calculate the midpoint of the child's left upper arm.

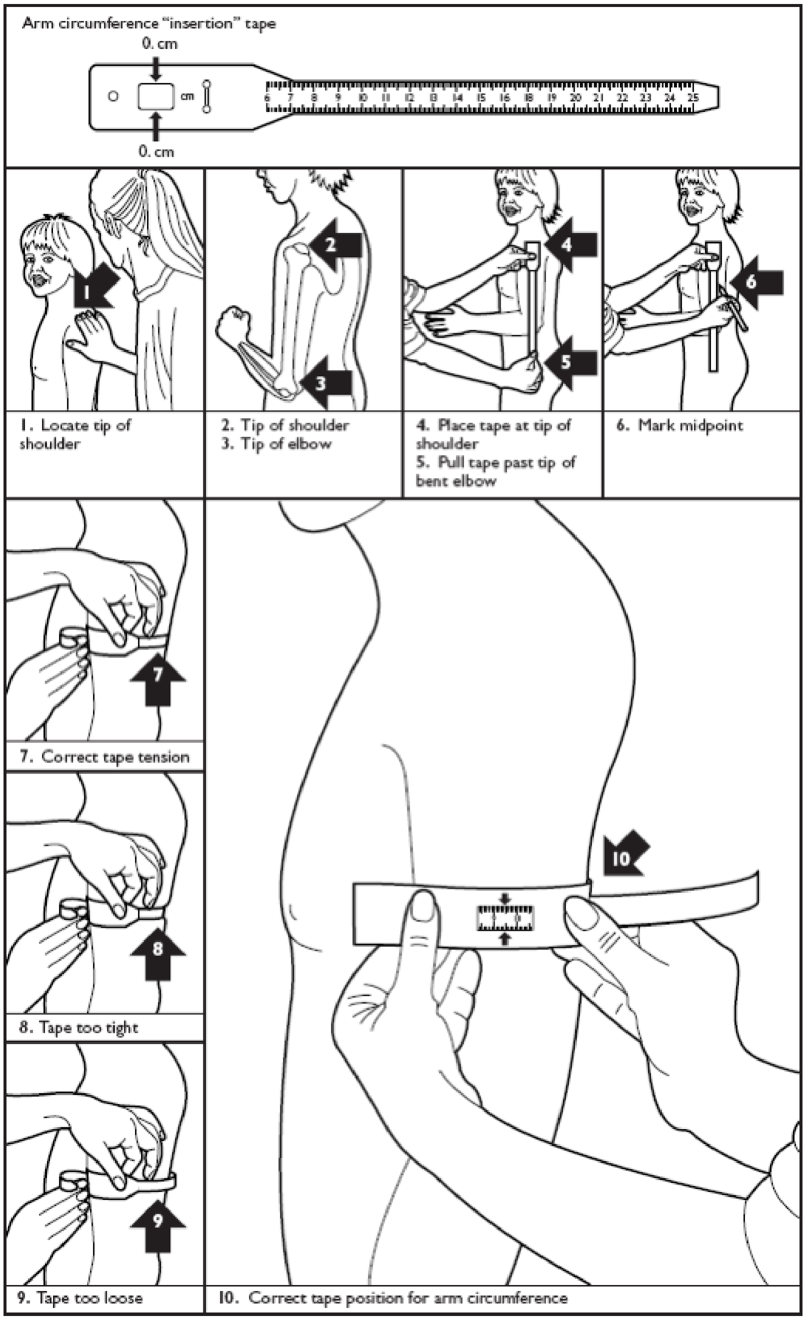
a. **Locate** the tip of the child's shoulder with finger tips and bend the child's elbow to make a right angle
b. **Place the** tape measure at the tip of the shoulder and pulls the tape straight down past the tip of the elbow
c. **Bend** the tape from the elbow up to the middle length to estimate the midpoint (**OR** divides the length of the upper arm by two)
d. **Marks** the midpoint with chalk **OR** the assistant holds the tape in place while the measurer gets another tape to measure around the midpoint

Step 4: Places (another) tape around the midpoint, making sure the numbers are right side up and the tape is flat around the skin.

Step 5: Inspect the tension of the tape on the child's arm, making sure the tape has the proper tension and is not too tight (squeezing the arm) or too loose (showing gaps).

Step 6: When the tape's position is correct, reads out the measurement <u>to the nearest 0.1cm</u>.

Step 7: Records arm measurement as soon as the tape is removed from the child's arm.



How to weigh and measure children: assessing the nutritional status of young children in UN (1986)

Section C. The Listing Questionnaire

1. Introduction to the Listing Questionnaire

The purpose of the listing exercise is to make a **full** list of all the households inside the EA. Every household must only be listed once. You will be accompanied by a village guide and you will need to make sure that you, as well as the guide, have a clear understanding of the EA boundaries that your supervisor will have established. If there are too many households for you to list, or if the households are too far apart for you to walk, inform your supervisor as soon as possible.

2. surveybe Set-up

The listing questionnaire is called **HW_Lisiting_xxxx** and can be found inside the Questionnaires folder. The questionnaire will be the same questionnaire for every EA, though there may be updated versions coming from the DP office. xxxx is the version number; ensure you always have the latest version of the listing questionnaire on your computer. The interview files from the listing questionnaire can be found inside the **surveybe\ HW_Listing** folder and are named something like this: **HW_Listing_12_45_234_23324_43.json**. The last number corresponds to your interviewer ID.

NB: NEVER CHANGE THE NAME OF AN INTERVIEW FILE! IF YOU HAVE SELECTED THE INCORRECT IDS THEN SPEAK TO YOUR SUPERVISOR, BUT DO NOT CHANGE THEM MANUALLY.

3. Important definitions/Concepts

*A **DWELLING*** is the house, houses or apartment in which the household members are presently living.

A ***HOUSEHOLD*** is one or more persons who usually sleep in the same dwelling and take their meals together.

*A **HOUSEHOLD MEMBER*** is a person who ate and slept in the household's dwelling for at least 6 months out of the past 12 months. If the household member is a new member i.e. has lived in the household less than six months then the individual will be a household member only if they are expected to still be in the household in the upcoming 6 months. Two exceptions to this rule are tenants or boarders and mkataba servants who may sleep or eat in the household's dwelling, but **SHOULD NOT** be classified as a household member. An additional exception are **CAREGIVERS** for children under 4 years who should always be listed as household members.

The **HOUSEHOLD HEAD** is the person identified by the household members themselves as the head. He/she is the person who is named in reply to the question: "Who is the head of this household?" Most often, but not always, it will be the person who is the main provider and who is familiar with all the activities and occupations of household members. The head of the household can be male or female.

When determining who is household head, pay attention to the customs and traditions of the area in which you are interviewing. Do not be prejudiced in thinking that only a man can be a household head.

In Ngara Kagera for example, if the male head dies, the first wife will often replace him as the head of the household.

There are many different types of HOUSEHOLDS, for example:

- a household with a head, his wives and children, his father, nephew, and other persons, whether blood relations or not, who have slept in the same dwelling and taken their meals together for three of the twelve months preceding the interview.
- a household with a single adult.
- a household with a married couple, with or without children.
- a child headed household (household headed by the oldest sibling/orphaned).

The household may include several persons who are blood relatives. However, it will only include the members of the extended family who live and take their meals together in the same dwelling for at least three of the last twelve months before the survey. Relatives who do not satisfy this criterion cannot be considered household members for the purpose of the survey. To avoid confusion for the respondents, the interviewer must be careful to explain the survey's household definition and use the term "kaya" for household, not "familia". If the term "kaya" is not understood, then you need to explain its meaning, and differentiate the term from "familia".

THE RESPONDENT is a well informed household member who will answer the questions you ask on behalf of him\herself and the other household members.

4. Getting Started

- Open the surveybe implementer and import the latest Listing questionnaire file
- Open the GPS applet and connect to the computer
- Ensure there are NO listing interview files from previous EAs i.e. there should be no .json files visible on the dashboard. If files are present, you must speak to your supervisor.
- Select the correct Region, District, Ward, Village, EA and your name, and then open the interview

5. Tab 1. Control

Answer the following questions on the Control Tab:

Q1 PLEASE CONFIRM THAT THE ABOVE IS CORRECT	On the Control screen, confirm that you have selected the correct Region, District, Ward, Village, EA and interviewer. -- > **If it is not correct**, go back to the dashboard, select the correct values, and open the new interview. Tell your supervisor about it when you are finished, so he/she can take the right measures.
Q2 START TIME	Record the Starting Time
Q3 COPY START LOCATION	Copy the Location from the GPS program. Note: this is the location where you start listing, not necessarily of the first household.

- Lock your screen and move to the first household inside the area assigned to you by your supervisor.

6. Listing procedure:

The procedure for listing is from the starting point assigned to you by your Supervisor:

- Go from dwelling to dwelling with your village guide, ensuring that the household has not been listed already.
- When you're done with a household put a sticker at their door, or any other easily visible place; this will help you to remember which households have been listed.
- Do not move outside the boundaries given to you by the supervisor
- Do not miss any household.
- Do not double record any household.

6.1. At Each Household

At each household you should:

- Explain the purpose of the study, what kind of information is being sought, and how it will be used;

- Stress the confidentiality of the interview; and
- Tell the respondent the approximate length of the interview, and the fact that the respondent will have the opportunity to ask questions.

6.2. LISTING TAB:

In the Listing tab record **one row for each household**. Note this is one row for each household, not one row for each dwelling or family. If there is more than one household in a dwelling you need to record one row for each household. If a household has more than one dwelling only one row is recorded. List only households that have at least a partial residence inside the EA, e.g. do not list a household that is visiting and has its residence outside the EA.

The following questions are for ALL households:

Q1 GPS COORDINATES

- Go to the GPS application and copy the GPS coordinates
- Click back to Surveybe
- Click on the answer field for Q1 and select 'Ctrl' + 'v' on your keyboard to paste in the GPS coordinates
- DO NOT EDIT the coordinates.
- Make sure you did not paste in the coordinates from the previous household.

Q2 NAME OF HH HEAD

Record at least **THREE** names for the household head. You need to be able to find the household again based on their name.

Q3 RESULT OF VISIT

Record the result of the visit:

- If you have been able to record all necessary information, select 'Household Listing Completed'.
- If you have been unable to record all necessary information, select the reason why
- If an adult household member was not found then you MUST try to arrange a revisit so that an eligible respondent can be questioned.
- If you plan to revisit the household for the above, or any other reason, then select 'Rescheduled'
- If a household could not be completed by the end of the day, or following the revisit, then change the result from 'Rescheduled' to the most applicable option.

Q4 No of Visits

Select the number of visits. For your first visit, the number of visit will always be one. When you revisit a household a second or third time select the respective number. If the household is not available at the third visit select the corresponding status. The household does not need to be followed up again.

Q5 TICK TO CONFIRM YOU

At the end of each household visit, click the Validate button at the

HAVE VALIDATED bottom of the Listing screen. This will check that you have not mistakenly copied the same GPS co-ordinates twice. Tick the box to confirm that you have no errors after validating.

6.3. T2A: Details

Q1 Try speaking to an adult household member if possible. This question identifies whether the person providing you with information about the household is a valid source – if not, you will have to do a revisit to obtain better information. The information is only valid if you speak to an adult household member, at least 18 years old. If no adult household member is available at the point of listing, answer with 'NO'. You will then need to try and arrange a revisit.

Q2 Ask if the household has lived in the community since February 2009. If the respondent has difficulties with the time reference, help by giving month and year. Note: community refers to the village, not the Kitongoji. If a household has moved within one village, e.g. between vitongoji, this counts as having stayed in the community.

Q3 This question records names of children below 5 years of age, i.e. the children of the household that have not reached their fifth birthday. E.g. a child that had their fifth birthday a couple of days ago would not count. Note that this question refers to resident children, i.e. the children need to be living in the household. Children of household members who live outside the household, e.g. in boarding or with another caregiver, do NOT count.

Q4 Record the age of the child. In case the child has not reached one year then record 0.

Q5 Record the month of birth of the child.

Q6 Record the year in which the child was born.

Q7 Record the number of months the child has lived in the household in the past 12 months. If the child travelled to another place for some time in the past 12 months that time should be deducted.

Q8 Ask whether the child is expected to be living in the household in the next 6 months i.e. we don't want to capture children who are living in the household temporarily.

Q9	Ask whether the child has had diarrhoea in the past two weeks. Keep in mind that a child with diarrhoea is one that has watery stool more than three times in 24 hours.
Q10	Count all the children who are between one and four years of age who live in the household i.e. children who have reached one year but have not celebrated their fourth birthday yet. Record the total number of children in this age category here.
Q11	Record the total number of household members who currently reside in the household including the children in question 10. Recall that household members are those who eat and sleep together. An exception to the rule is a child CAREGIVER who should always be listed even if she does not eat and sleep in the household.
Q12	Record the contact phone number if there is one.
Q13	Record if there are other households that reside in the same dwelling. An example is a building with different tenants who live independently from each other.
Q14	Record the time you finished administering the listing question.

A household is 'eligible' to be in the survey if the following three criteria are met:

1. The respondent for the listing questionnaire is a member of the household and is over 18 years of age (Details -> Q.1='Yes')
2. The household has lived in the community for the past three years (Details -> Q.2='Yes')
3. There is at least one child between the ages of 2 and 4 living in the household (Details -> Q.3>0)

If the above three criteria are met, the 'Eligible Households' sub-screen will become enabled and the following questions within should be asked:

6.4. Revisits Tab:

- This tab provides a summary of the households to be revisited and acts a reminder for you
- Each household which has a result of 'Rescheduled' will be listed in the table
- GPS co-ordinates and Household head name are displayed
- The tab will only be enabled when there are households which have a result of 'Rescheduled'
- Once a household has been revisited, make sure to update the status of the visit result question

- At the end of the listing exercise, there should be no households with an outstanding revisit i.e. this tab should be disabled at the end of the day

6.5. On Leaving each Household

Before Leaving each household:

- Make sure that all questions have been asked and recorded before leaving the page by using the validation key; and
- After the interview before opening the next window, review your questionnaire by clicking the validation key and make corrections if any.
- Thank the respondent for his/her time;
- Tell the respondent how important the information is that he/she has provided; and
- Ask the respondent if he/she has questions, and answer any questions or concerns the respondent may have about interview or the content of the study honestly.

6.6. End of Listing:

A final summary of the listing results is provided on the End tab. A complete list of all **eligible households** is displayed. The total number of households and total number of eligible households are also provided. Interviewers should make sure that the information displayed in the summary looks correct.

The following questions should be answered at the end of the listing exercise:

Q.1 INTERVIEWER COMMENTS	Any comments which the interviewer has should be noted down here. If no comments, write 'Ok'
Q.2 END TIME	Record the end time of the listing exercise. This should be recorded after all Revisits have been completed and all households have been recorded.
Q.3 COPY END LOCATION	Copy the Location from the GPS program. Note: this is the location where you end the listing exercise.
Q.4 SUPERVISOR	For supervisor when checking at the end of the day
Q.5 SUPERVISOR CHECK TIME	Record time of supervisor check

Once the listing exercise for the EA has been completed, return to dashboard and share the .json file with you supervisor.

Section D. **The Household Questionnaire**

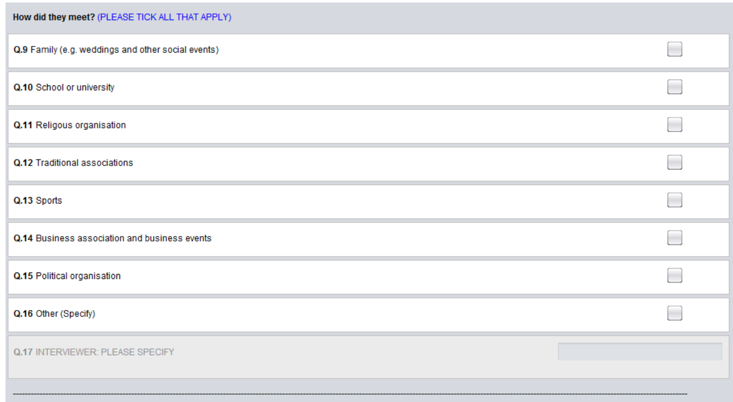
1. Introduction to the Household Questionnaire

The following sections describe the Household Questionnaire. The household questionnaire is composed of 10 sections, which are expected to be completed by the enumerator. The enumerator is required to complete the household questionnaire with the most accurate responses possible. Although section specific and sometimes question specific instructions on how to administer the section/question exist throughout the questionnaire, this question-by-question guide intends to give you a ***precise*** understanding of what each question ***means*** and the ***information*** is tries to capture. In addition, we want to make sure that there is a common understanding of the questions throughout the team. We would therefore encourage you to ***share*** any doubts or queries you have with your team throughout the survey. It's never too late.

1.1. General

1.1.1. Answering Convention

Use	**-98**	Does not apply
	-99	Don't Know
Don't Know	Try to find informed respondents for each section. Only use Don't Know if you cannot find anyone providing you with the information.	
Instructions	INTERVIEWER INSTRUCTIONS ARE WRITTEN IN CAPS AND BLUE. DO NOT READ OUT.	
Non-Prompt answers	ANSWER OPTIONS WRITTEN IN BLUE AND CAPS SHOULD NOT BE READ OUT. WAIT FOR RESPONSE FROM RESPONDENT AND SELECT THE ANSWER OPTION THAT BEST CORRESPONDS TO THE ANSWER GIVEN.	
Comment	If in doubt leave a comment! There no need to worry with language or spellings of the comments made. Kiswahili can be used as longer as the message is understood	
Multianswer	The survey contains a number of multianswer questions. Multianswer questions are marked by the question in a label, followed by all possible answers, each with a tick box. Below the last option a dash marks the end of the question. (PLEASE TICK ALL THAT APPLIES) indicates that more than one answer is possible. If the respondent gives an answer that is not part of the list, tick "Other (specify)" and specify the answer in the field below.	



How did they meet? (PLEASE TICK ALL THAT APPLY)

Q.9 Family (e.g. weddings and other social events)	☐
Q.10 School or university	☐
Q.11 Religous organisation	☐
Q.12 Traditional associations	☐
Q.13 Sports	☐
Q.14 Business association and business events	☐
Q.15 Political organisation	☐
Q.16 Other (Specify)	☐
Q.17 INTERVIEWER: PLEASE SPECIFY	

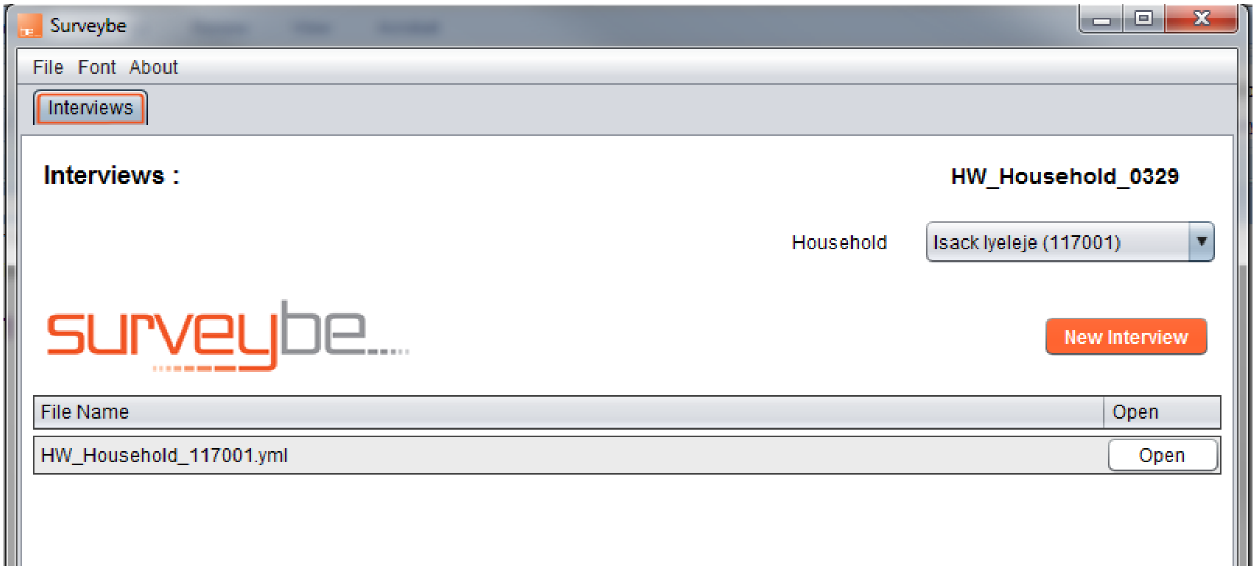
1.1.2. WHO INTERVIEWS

The interviews are conducted by an Enumerator (Interviewer).

1.1.3. WHO IS BEING INTERVIEWED

The respondent for the household questionnaire should be the most knowledgeable person in the household. In most households, it is usually the household head but there are some exceptions. It is important that you ask to interview the household member who is most knowledgeable about the household activities. Only in cases where it is ***impossible*** to interview the most knowledgeable person, can the main respondent be another well informed household member who will answer the questions you ask on behalf of him\herself and the other household members. If there are more than one household members while interviewing, record the main one.

2. THE DASHBOARD



Purpose

The dash board allows the interviewer to select the household key identifier for each questionnaire.

This identifier creates a unique file name for each household interview file, for example HW_household_117001.yml.

Remember never rename interview files as surveybe will no longer be able read them.

Key identifiers

For the household you conducting the interview in, select the name of the Household Head from the drop down box.

Then click on the New Interview button.

3. TAB 1. CONTROL.

Purpose

The purpose of this tab is to check that you are in the right Region, District, Ward, EA and household, as well as to identify the interviewer, time, and location.

Before starting the household interview, read the Names for Region, District, Ward and EA and confirm that the right EA has been selected. If this information is correct then proceed with the interview

If it is NOT, go back to the dashboard and open an interview for the correct household, conduct the questionnaire using the correct household, at the end of the day, ensure that the correct interview file is uploaded to dropbox. Archive both, the correct and the incorrect interview files, ***do not delete them!***

Q1 If this Household has been assigned to you by your supervisor as a replacement household, the you must identify from the dropdown menu, which household it is replacing.

Q2 Select your name from the drop down menu.

Q3-5 Select the time of the visit, if you have to return at a later time to conduct the interview because the required respondent is not there, the select the start time of each of your subsequent visits....

Q6-7 Record the GPS coordinates of the Household.

Do this a second time to confirm the coordinates are correct.

Q8 Confirm that the Household has lived in the village since for two years

Q9 Enter a contact telephone number or other contact for the HH

Q10 Read the Consent form with the respondent and ensure that they sign if the they agree to be interviewed.

If they refuse then please be polite, thank them for their time and end the interview.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 2

4. Tab 2. Household Members

Purpose The purpose of this tab is to make a complete list of all individuals who normally eat and sleep together in this household.

Q1 The interviewer should Click the "Get Time" button" to record the time when she/he starts listing household members.

Q2 *A **HOUSEHOLD MEMBER*** is a person who ate and slept in the household's dwelling for at least 6 months out of the past 12 months. If the household member is a new member i.e. has lived in the household less than six months then the individual will be a household member only if they are expected to still be in the household in the upcoming 6 months. Two exceptions to this rule are tenants or boarders and mkataba servants who may sleep or eat in the household's dwelling, but **SHOULD NOT** be classified as a household member. An additional exception is **CAREGIVERS** for children under 4 years, they should always be listed as household members.

List all household members starting with the head of the household. The household head should always be listed first even if the main respondent to the questionnaire is not the head of the household.

The household head is the person identified by the respondent as the household head. He is the person who is named in reply to the question "who is the head of this household". The process of listing household members should be done carefully to ensure that no one is missed.

Listing Household Members Procedure: Remember to list three names for each household member. If the member does not have three names but has a nickname then enter the person's nickname in the comment box.

- First, list the household head
- Second, list the spouse of the head. If the household head has more than one spouse then list the oldest spouse.
- Third, list the children of the eldest spouse
- Fourth, list the remaining spouses by age each followed by their children
- Fifth, List other children of the household head. Starting with the eldest child
- Sixth, list any other couples (by age) in the household followed by their children (by age)
- Finally, list all other household members according to their age i.e. staring with the oldest member to the youngest

To ensure complete coverage, the interviewer should explicitly ask about three types of persons which are commonly overlooked by survey respondents:
1) Persons who are temporarily absent; they should be included.
2) Servants makubaliano
3) Infants or small children who have not been listed, as very young children are often overlooked in accountings of household members.

Note:
Children who don't reside in the household (Example, living with relatives), should not be registered as household members even if their parents live in the respective household. Children at boarding school are also NOT included.

Q3 Ask the respondent the gender of each person listed in the household roster. The interviewer should not to assume the sex of the household member from the name.

Q4 The primary caregiver is usually the person the child spends most time with. In most cases, it is usually the mother. If the primary caregiver is not captured in the roster then add the caregiver to the roster and complete their detailed information.

Q5 If the main caregiver is less than 16 years of age then record the second main caregiver and interview that person. If the second main caregiver is not available for interview then ask the household head to respond to all questions related to the main caregiver.

Q6 Confirm that you have added all the household members to the roster by ticking the "YES" button. Refer to the instructions in Q2 of the household roster to make sure that no household member has been skipped.

Q7 Ask for the religion of the household head. If the head is a believer of any pentecostal church then you should categorise them under protestant.

Q8 Select from the drop-down menu, the youngest child between age 3 and 5. In cases where there are two children of the same age, select the child who was born later in the year of their respective year of birth. If the children are twins, then select the twin who was born last.

Q9 Confirm the caregiver of the child select in question 6. This should be the primary caregiver captured in question 4.

Q10 Here we want to capture the time, which the caregiver wakes up. This information will be useful if the household is selected for structured observations.

4.1. TAB 2A: MEMBER DETAILS

Q1 Age is among the most important pieces of information for this survey as many of the questions in each section depend on the age of the listed household member.

For each child aged 5 or below, you **MUST** record their date, month and year of birth.

For all children who are older than 5 but are 10 years or younger, you should at **LEAST** record their month and year of birth.

If the respondent does not know his/her age, you must make an estimate by reference to the events that have taken place in his life or that of the community (village, town, district, region) or the
world, such as the independence of Tanzania, a flood in the region, the war with Iddi Amin, or the World Wars. Intensive probing is required to obtain the complete date, month and year of birth. Often respondents will refer to events such as:

- Community events/weather conditions
- Religious occasions/holidays
- Public holidays e.g. Independence Day, Union Day, Idd-el-Fitr, Idd ul Hajj, Maulid Christmas, Easter, New Years
- Regional disasters
- Birth intervals

• World events e.g. World War I, II
• The famine that occurred in Tanzania after World War II, in 1946 and 1947.
• National independence in 1961.
• The birth of TANU.

The following additional questions could assist you in estimating the age of household members:
• Ask when the household member got married, and then add the age of the oldest child to the age of the parent when s/he was married. (However, if the oldest child was born several years before or after the marriage, this method can lead to large errors, so you should probe how long after marriage they got children)
• Compare the age of the household's child with that of a neighbour's child, an age-mate, or playmate.
• Establish the dates of specific events in a given location where the interview takes place and ask how old the member was when the events occurred.
Age must be recorded in full years which the household member has lived since his/her birth. For a child who has not completed 12 month (365 days) you record 0 year. If someone will be 25 years old in two weeks after the date of interview, the recorded age would be 24.

To check if you have recorded the age properly try to compare the age of the parent and that of the first child and see if make sense. Age will give you a lot of information which you will be using to prove the answers you're getting from the respondent.

Q2-Q4

In questions 2 to 4 you need to record the date, month and year when the household member was born. If the respondent cannot remember the member's date of birth, ask for their birth certificate, voter's card (kadi ya mpiga kura), driver's licence or any other document which may contain the member's date of birth. For children who are aged 5 or below, a clinic card may serve the purpose. The year of birth must be completed using 4 digits. For example 1964 and NOT 64

Q5

A household member is anyone who eats and sleeps in the household while a caregiver is a person who takes care of the child or children in the household. In many cases, the caregiver may not reside in the household hence the term "non-resident caregiver".

Q6

Record the number of months the household member has lived in the household out of the last 12 months. For example if the interview is conducted in the beginning of March 2012, then you should ask how many months from March 2011 to February 2012 has [NAME] lived in the

household. Do not confuse this with being away from the household, you should ask the number of months [NAME] was LIVING in the household. The time spent, does not need to be consecutive, it is CUMMULATIVE time that matters. You should add up all the months that [NAME] slept and ate in the dwelling. Continuing with the same example as above, imagine [NAME] moved into the household in beginning of May 2011 and then stayed till September 2011 (5 months). He then left the household in October 2011, but returned for the whole of January and February 2012. To summarise, [NAME] was:
- Absent from the household in March, April, October, November, December (5 months).
-Present in the household in May, June, July, August, September, January, February (7 months). Thus we would fill in 7 months.

Another example is someone who visits the household every weekend of the year. This means they are present for 2 out of every 7 days in the year, which adds up to about 3.5 months. Someone who visits 3 out of 7 days is present for 5.2 months i.e. ((3 days*52 weeks)/30 days).

Q7 Count six months from the date of interview. Following the example above, you would ask if they expect that NAME will be living in the household in September 2012.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 3

5. Tab 3. Structured Observation

The Structured Observations of Households involves conducting continuous direct structured observation of the target respondent's behavior by an observer. The observation is called continuous because you will be in place for several hours and observing the respondent's behavior throughout that time. It is direct because you will observe the respondent's actual behavior, as opposed to clues to that behavior. The observation is structured because you will be following a standardized format to observe and record the information. The information from this observation will complement the information that we will get by asking the respondent about her behavior or by looking for physical clues to her behavior. The Structured Observations data collection tool is described in detail below.

While conducting the direct observation, you are expected to be objective, which means that the information you record is free of your personal feelings, your opinions, and your interpretations. You are expected to only record what you see. You should make every effort to observe both the exposure events (ie. the activity that would, with "good" hygiene practices, require that a person wash their hands) and the behavior of interest. Your concentration and alertness must be at their peak throughout the 3 hour observation period so that you do not miss any of the exposure events to behavior of interest.

It is human nature to alter one's behavior in the presence of a new person. Therefore, your efforts to observe the behavior of interest should be balanced with minimizing the effects of your presence on the target respondent and the rest of the household as much as possible. One important aspect of minimizing the negative effects of your presence is setting and maintaining a positive tone to the structured observation experience for the respondent and other household members.

Once you introduce yourself and the purpose of your visit, and you are allowed access to the household, you should try to position yourself in the home or compound in a location that will allow you to observe the primary caregiver with little disruption to him/her or to yourself. You should not be in the way of the primary caregiver or other household members carrying out their daily activities. However, you should also be able to see the primary caregiver and observe his/her activities closely. His/her location may change during the course of your 3 hour observation. You may need to re-position yourself in order to continue observing him/her. As you move to reposition yourself, ensure that you are not hampering any household member's daily activities and that you are not drawing attention to yourself as you move about.

The respondent may feel that he/she should entertain you by chatting with you, and may offer you beverages or snacks through the course of the observation period. Try to encourage the respondent to go about her daily activities. Be brief but courteous in responding to her attempts to chat with you, reminding her that you do not wish to disturb her activities. Accept offers for beverages or snacks only as would be culturally appropriate to do. If it is considered very rude to refuse such offers, accept. However, if at all possible to decline without causing offence or much commotion, refuse such offers because preparing beverages or snacks for the observer is not a normal activity of the respondent.

An observer who is in the way of household members carrying out their daily activities, who is in frequent or extended conversation with the target respondent or with other household members, or who is obtrusive or loud, will likely influence the normal everyday behavior of the target respondent. Such an observer will constantly remind the respondents that a stranger, or outsider, is within the household. Moreover, such behavior by the observer might lead to negative feelings towards the entire study team.

The structured observation tab is only enabled for households that require the structured observation on top of the normal household questionnaire. The Household IDs of these households will ALWAYS end with a 1 or 2, e.g. 675001 or 223012. For all other households this tab is closed and can be ignored. If you ever see the tab enabled even though you were not asked by your supervisor to do the structured observation for this household speak to your supervisor.

Introduction for households that have been selected for Structured Observations:

We would like to visit your household tomorrow morning at 6am to see your household's daily activities and learn more about the types of things that households like yours do. This information will help to improve the survey that we are doing. Please do not make any special arrangements for us other than to ensure that [CAREGIVER] and [CHILD] are available in the morning. After some time observing your *household's activities we will ask you some questions. The entire activity will likely be completed before lunch. All information will be kept confidential. Will [CAREGIVER] and [CHILD] be available tomorrow morning?*

Purpose

The purpose of this tab is to record the hand washing behaviour for all key exposures of the CAREGIVER or the CHILD only. The behavior of interest for this structured observation is handwashing. We are interested in documenting the circumstances before, during, or after which a person might clean his or her hands. During these circumstances, you will watch closely to record the exposure event, you will observe closely whether hands are washed, whether any other activity occurred that may have contaminated the hands between washing and the exposure event, which material(s) are used for washing, whether both hands are washed or not, and how the hands are dried. It is important to record each opportunity for handwashing in order to provide a complete picture of the respondent's handwashing behaviors, and as applicable, each of the downstream questions regarding the specifics of the handwashing practices. Remember that we are looking for exposure events, not handwashing events. While it is easy to be prompted every time you see handwashing taking place, it is important to also keep track of activities that required handwashing, but where handwashing did not take place.

Make sure NEVER to ask the respondent for clarifications if a particular action/event was not clear. If it was not possible to observe the exposure event or determine the event without doubt then do not record an event. If the event was observed, but it was not clear if handwashing took place, then record the event but choose the "observation not possible" option for the rest of the questions. Do not ask the respondent for clarifications.

You will be doing person-based observation. The person, or respondent, of interest is the primary caregiver of the youngest child between 1 and 4 years old. Therefore, you should position yourself so that the primary caregiver of the youngest child between 1 and 4 years old is visible to you at all times. You should always keep your focus on the target primary caregiver of the youngest child between 1 and 4 years old. You will also have the opportunity to complete exposure events for the child and other household/non-household members, where their actions lead to direct exposure for the child.

The CAREGIVER and CHILD are displayed above the roster. If there are no names displayed, double check Q6 and Q7 on the tab "2. Household Members" have been recorded properly.

Q1 Make sure that the respondent has agreed to take part in the structured observation before you continue.

Q2 Record the starting time of the structured observation. Record the time **ONLY ONCE** you are ready to start the structured observation, i.e. once the household has agreed, once you found yourself a good place for observation, and the household members have resumed their activities.

For each occurrence of a key exposure, add one row and record the details.

Q3 Record if the key exposure was for the CHILD or the CAREGIVER. If both persons were exposed, e.g. both, CHILD and CAREGIVER started eating, add two rows and make a record for each person.

- *Caregiver leaves dwelling/compound vicinity:* Continue observations of the child, taking note also of other household activity leading to direct exposure to the child (handwashing before feeding child, before breastfeeding or post-toileting).
- *Child leaves dwelling/compound:* Continue observations of the caregiver.
- *Both child and caregiver leave compound:* End observation, providing comments to explain why the observation was cut short. Make sure that you re-schedule a visit if possible.

Q4 Record the nature of the exposure. Each exposure is explained in detail in the structured observation section above. Only record exposures on the list, don't record for any other exposures (there is NO Other (Specify)).

If handwashing takes place, but with no associated exposure event: Do not record anything. For example, if the caregiver dresses, washes her hands and then leaves the dwelling, there was no specific exposure event for which the handwashing was related to (before or after) and will thus not be recorded even though handwashing took place.

Take careful note on whether the exposure event defined in the list is *before* or *after* and activity. Be sure to double-check the code before writing it down.

- **Before** obtaining water from a wide-mouthed storage container: the respondent is dipping into or drawing water using a device such as a mug or long-handled ladle from a wide-mouthed water storage container. For the purposes of the structured observation, a wide-mouthed water storage container will be defined as one that requires dipping a hand, mug, or ladle to retrieve water, as opposed to a narrow-mouthed storage container, from which water can be poured or that has a tap. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she obtains water from a wide-mouthed storage container.

- **Before** cutting or preparing food: The respondent is cutting food, such as fruits or vegetables, seasoning, or cooking food. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she begins cutting or preparing food.

- **Before** serving food: The respondent is serving food to older children and adults, either with her hands or using utensils. This is distinct from 'Before feeding a child', which is described below. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she begins serving food.

- **Before** eating: The respondent is eating food herself. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she begins eating food. This may be a snack or a meal. For consistency, if a caregiver washes hands before serving food (c) and then eats the food (d), these will only be considered separate exposure events if an intermediate activity takes place that would potentially contaminate the caregiver's hands: (i) if caregiver does not wash hands before serving then both serving and eating will be two different exposure events, (ii) if caregiver washes hands before serving then immediately begins eating, then only the "serving food" exposure event should be recorded, (iii) if caregiver washes hands before serving food and then does another activity that could contaminate hands before eating, then "before eating" will be counted a separate exposure event.

- **After** eating: Here, we are trying to understand whether or not, and how, the respondent washes her hands after she finishes eating food. This may be a snack or a meal.

- **Before** feeding her child older than 1 but younger than 4 i.e. has not reached their fourth birthday: The respondent is feeding her young child by spoon or by hand. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she begins to feed her young child. The child, in this case, refers to the respondent's child < 5 years old. If the respondent is breastfeeding her child, the next option 'Before breastfeeding her child' should be selected.

- **Before** breastfeeding her child: The respondent is breastfeeding her child. Here, we are trying to understand whether or not, and how, the respondent washes her hands before she begins to breastfeed her child. The breastfeeding episode may be of any duration.

- **After** defecation: The respondent returns from defecation from the toilet or field. Here, we are trying to understand whether or not, and how, the respondent washes her hands after she finishes defecating. This code should be marked if it is clear that the respondent has defecated, based on locally appropriate clues such as use of a particular location, or other such clue.

- **After** toileting: The respondent returns from using the toilet, or from the field. Here, we are trying to understand whether or not, and how, the respondent washes her hands after she finishes toileting. This code should be marked if it is NOT clear whether the respondent has defecated but it is clear that the respondent has gone to the toilet or field.

- **After** cleaning child post-toileting: The respondent cleans a child who has urinated and/or defecated, either in a nappy, in a potty, or on the ground. Here, we are trying to understand whether or not, and how, the respondent washes her hands after she finishes cleaning a child who has urinated and/or defecated.

- **Bathing**: The respondent takes a bath, washing more than just his or her hands. While you will likely not observe the bathing directly, you may use locally appropriate physical clues to recognize bathing. These may include the respondent carrying a towel or a bucket and mug, or the respondent going into a structure designed specifically for bathing.

Q5 Record the time of the exposure. If *handwashing takes place before an exposure event, but an activity contaminating the hands occurs in between handwashing and the exposure event:* Record the exposure event but indicate on question 4 that contamination occurred. For example, if the caregiver washes her hands, picks up rubbish from the floor and then begins preparing food, the exposure event would be noted, indicating that handwashing took place, but also recording that other contamination occurred between handwashing and the exposure event. ***Note:*** This only applies to exposure events that require handwashing *before* the activity – eg. *before* preparing food or *before* breastfeeding the child.

Q6 If the exposure was for the CAREGIVER, record if he/she washed his/her hands. If the exposure was for the CHILD, record if CAREGIVER washed the hands of the CHILD.

If you know that an exposure occurred, record the exposure and select

OBSERVATION NOT POSSIBLE.

Exposure event occurred but is not observed: Only record the exposure event if there is no doubt what exposure event occurred based on visible signs– for instance going to the toilet or bathing. In the case of the person being observed going to the toilet, choose “after defecation” if it is clear that defecation took place, otherwise choose “after toileting”. You can think of your own clues as to how you would differentiate between the two!

If hands were washed, you need to provide details on the screen 3A. Details. The answer to this question should still be a YES even if ONLY one hand washed.

Q7 Record if any contamination occurred between when the respondent washed their hands and the current exposure event.

If exposure event occurred but handwashing not observable: Record the exposure event, but use option “not observable” for all questions relating to the handwashing.

Q8 If you have any comment for the exposure, you can record it here. The comment is optional, i.e. it does NOT have to be filled in and will NOT bring an error message during validation.

Q9 After observing CAREGIVER and CHILD for three full hours, record the end time of the structured observation.

5.1. T3A: Details

Q1 If hands were washed, specify if both hands were washed or only one. If you have not been able to observe, select OBSERVATION NOT POSSIBLE.

Q2 If hands were washed, record which type of soap was used to wash hands.

If only water was used, select “None, water only”, if any other non-listed soap type or cleaning liquid/powder/bar was used, select Other and specify. If more than one soap type was used, select the **MAIN** type.

Below is a lengthy description of the materials used to wash hands

- Beauty / toilet soap: This is a bar soap that is typically designed for face, hand, or body washing. Commonly recognized brands include Eva, Lux, Lifebuoy, and Safeguard.

- Other bar soap: In many places, multi-purpose bars of soap are used for laundry, dish washing, and handwashing. These are often coloured blue or green and are often used for washing hands as well. ‘Other bar soap’ should be marked if the individual is using a bar of soap that is clearly not a brand-name beauty soap.

- Laundry / powder soap: This is usually powder soap typically designed for washing clothes or cooking utensils and vessels. It is often used for washing hands as well.

- Liquid soap: In some places, liquid soap may be available. The soap is poured or pumped into the hand and mixed with water.

- None, only water: This should be indicated if water without any soap or other substance is used to wash hands. Hands may simply be rinsed or they may be rubbed together after water is poured over them. If you cannot tell whether water alone is used or whether another substance is used, you should circle -99 for DK, rather than 7 for Only water.

- Other: Indicate this if a material other than any kind of soap is used along with water to wash hands. Write down a detailed description of the material in the Comments.

- Could not observe: Indicate this if you cannot determine or could not observe what material, other than water, is used to wash hands.

Q3

If hands were washed, select the **MAIN** way the hands were dried. Select "Air dried" if no cloth was used to dry hands. If the respondent used a hand drying machine then record it under other (-96).

- Air dried: Indicate this if hands are shaken in the air to dry or if no specific action is taken to dry them.

- Clean towel: Indicate this if hands are wiped on a clean looking towel. The towel is a cloth other than that worn by the respondent.

- Dirty towel: Indicate this if hands are wiped on a dirty looking towel. The towel is a cloth other than that worn by the respondent.

- Clothing: Indicate this if hands are wiped on the respondent's own clothing.

- Other: Indicate this if you observe the respondent drying hands using another type of material or action. Write down a detailed description of the material or action used to dry the hands in the Comments.

- Could not observe: Indicate this if you cannot determine or could not observe how hands were dried.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 4

6. TAB 4. HOUSEHOLD ROSTER

Purpose This tab gives an overview of the household composition starting from the household head to all other household members. Details of each household member including the education will be captured here.

Q1 Select the "TIME BEGUN" button to capture the time you started administering the household roster questions.

Q2 This field requires you to select the respondent for the questionnaire. This is the most knowledgeable person in the household. In most cases, it is usually the household head. However, it is important not to assume who the main respondent may be. Let the household members identify this person themselves.

Q3 This question asks whether NAME can read and write in Latin characters i.e. they should be able to read text in newspapers or books in Swahili.

Any language including English, Kiswahili, or other local languages in which the individual can read and write the language should result in a "Yes" response. Otherwise, the answer should be "No". If a person can only read, but not write, then the response should be "No".

Q4 This question intends to capture whether NAME has ever attended school. Here we are referring to the formal education system. If the respondent attended Quranic school but not formal education then the answer should be "NO"

6.1. TAB 4A: DETAILS

Q1 This question solicits the social relationship that the person shares with the head of household. Indicate from the list the person's relationship to the head of household. The person listed in the first row in the roster should always be 'head', regardless of whether or not the head is present at the time of interview or is the most knowledgeable person in the household. Other members should be identified in the other categories listed.

The wife/husband is the married or unmarried partner of the head. Members of the household who are not related to the head will be coded "not related". Particular care must be taken in recording relationship information when the respondent is someone other than the head of the household; clarification must be made to the respondent that we are interested in the relationship of the person to the head of the household, not to the respondent.

Q2 PRESENT MARITAL STATUS is the marital status on the day of the interview. You must read each category to the respondent; otherwise he/she will reply, for example, that he is a bachelor instead of divorced or separated. MARRIED includes all types of marriage (for example, civil, traditional or common law).

•The category informal union will include all household members who live as husband and wife but they are not legally recognized as husband and wife.

•The category Divorced will include all household members who have signed the legal divorce paper and they do not live together anymore.

•The category separated will include all household members who have been living together as husband and wife, but they do not live together anymore due to some misunderstanding, but they have not signed the divorce papers.

Q3 Select from the drop down menu the name of NAME's spouse

Q4 Select from the drop-down menu the name of NAME's biological father. The person selected has to be the biological father of the child. If the biological father is not in the household, then select "not in household".

Q5 Select from the drop-down menu the name of NAME's biological mother. The person selected has to be the biological mother of the child. If the biological mother is not in the household, then select "not in household".

Q6 Record whether NAME is at home during the interview. This implies that the person is/was physically present any time since you started the interview.

Q7-Q8 Record the number of years that NAME has been living in the village. This period should include anytime which the person was living in a separate household but in the same village. If NAME has lived in the village for less than 2 years then record years and months.

Q9 The aim of this question is to capture whether there have been any deaths of children under the age of 5 in the household. Keep in mind that we ONLY want to account for children who were born alive and died thereafter. For example, if child was born alive and died after a few minutes of hours then the answer to this question would be "YES".

6.2. UNDER 5 MORTALITY

Add a row for each under 5 death that occurred in the household and complete questions 1-6 for each death.

Q1	Fill in the year in which the child died. The year value should be a complete 4 digit value.
Q2	Select from the drop-down menu the month in which the child died.
Q3	Fill in the sex of the child. Be mindful not to assume the sex of the child from the name even when you think it is obvious; confirm then sex of the child with the respondent.
Q4-Q5	Fill in the age of the child at the time of death. These should be the complete years of the child at the time of death hence it becomes very important to have accurate information of the child's month and date of birth. For example, a child A born on the 12th, December 2010 and died in 16th, March 2012 would be one year and three months at the time of death. However, child B born on January 12th 2010 would have been two years and two months at the time of death. Although both child A and B were born in the same year, they were a lot different with respect to age.
Q6	Select from the drop-down menu the cause of the child's death.

6.3. TAB4B: EDUCATION

Q1	Record NAME's completed years when he or she started school.
Q2	Record only completed level and not the level a person is currently in or reached. For example, if NAME reached standard 7 but did not take the final exam then the answer to this question will be standard 6.
Q3	Record if name is currently in school. This question tries to capture whether the person is currently enrolled in school. Therefore, if the person's school is closed i.e he/she is on holiday then the answer to this question will still be YES.
Q4	Record whether NAME was enrolled in school in the past 12 months. This means that you should refer to the twelve months prior to your visit to the household.
Q5	Record NAME's grade in 2012.
Q6	Record NAME's grade in 2011.
Q7	Record whether NAME sat for the annual exam with respect to the grade they were in in 2011.
Q8	Record NAME's grade in 2010.
Q9	Record whether NAME sat for the annual exam with respect to the grade they were in in 2010.
Q10	Record NAME's grade in 2009
Q11	Record whether NAME sat for the annual exam with respect to the grade they were in in 2009.

Q12 This question wants to capture whether name has ever repeated a grade independent of the reasons behind the repetition. It is very important to pay attention to details when recording education information. People often forget about grade repetition. It is therefore important to try and use the information already give to satisfy your curiosity. For example, repetition is usually common in primary school. You could use information on the age at which NAME started school and compare it to NAME's current age and grade to determine whether NAME repeated a grade.

Q13 Record the number of times NAME had to repeat a class. If NAME repeated grade 4 twice and grade 7 once then NAME would have repeated a grade 3 times.

Q14 Record whether NAME has done any national examination where the results have been announced. Usually, there are 5 national examinations in the Tanzanian education system i.e. grade 4, grade 7, form 2, form 4 and form 6. If the results for the national exam NAME has done are not out then DO NOT record this exam.

Q15 Record the level corresponding to the latest national exam NAME took. Note that this question only asks about the LAST examination the person took. Make sure the respondent considers the last one, and not a previous one (even if he/she obtained a higher score on the previous one).

Teachers grade 'A' certificate is NOT a national examination.

If the respondent took the Standard VIII examination long time ago, you should select 'standard VII', since this is the current equivalent to the former Standard VIII degree (does no longer exist now).

Q16 This question wants to capture whether NAME passed the national exam. For those that have completed grade 7 it is quite clear whether the person has passed or failed. For those in secondary school, we define a pass as Division 1, Division 2 or Division 3. Anything beyond that is a FAIL.

Q17 Record the pass mark NAME got in the national examination. This question will only be asked for those who have reached secondary school

Q18 Record whether name missed/skipped classes in the past week. If NAME did not attend school for at least one day in the past week then the answer to this question should be YES.

Q19 Record the reason behind NAME's absence from school.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 5

TAB 5. INCOME/ASSETS

Purpose The purpose of this tab is to capture information on labour, income, assets, social capital in the village and the household's participation in community related activities.

6.4. TAB 5A: LABOUR MODULE

Q1 Click the "TIME BEGUN" button to record the time in which you started administering the labour module.

Q2 Select from the drop-down menu the name of the most knowledgeable person who will be able to give you information on the activities of the main income earner in the household.

Q3 Select from the drop-down menu the name of the main income earner of the household. We define the "*main income earner"* of the household as the main provider of household members and household needs. This person may not necessarily be the household head. For example, the household head is living together with his daughter who provides for most of the day-to-day household needs. In this case, you will record the daughter as the main income earner rather than the household head.

You should also note that "main income earner" should not imply the person who gives the most cash contribution in the household. It should imply the person who ***provides most*** for the household needs whether in cash or in kind.

Q4 This question aims at capturing the income generating activities that the main income earner of the household was engaged in in the past week. Last week implies 7 days prior to the day of interview. For example, if you are conducting the interview on Thursday 12^{th} then the past 7 days would be (counting backwards) Wednesday(11^{th}), Tuesday (10^{th}), Monday (9^{th}), Sunday (8^{th}), Saturday (7^{th}), Friday (6^{th}), Thursday (5^{th}). You should reach response until the first answer is given

Definition of a production activity: A production activity is any activity that involves transforming a certain material to another product. A **product** used for production DOES NOT necessarily have to be raw.

Q5 This question tries to understand why NAME did not actively look for work in the past week. Select from the drop-down menu the reason.

Q6 This question wants to capture the income generating activities that name was involved in in the past 12 month. Note that this question considers ACTIVITIES, not only occupation. Leave the respondent to decide on which activity is considered main for a member.

Q7 This question aims at understanding whether NAME contributed is labour in household specific income generating activities such as a family business or a family farm whether or he/she was paid.

Q8 Here we want to capture the sector from which name gets most of his income.

Mining and Exploration: This refers to any activity directly associated with extracting resources from the earth (either off-shore or on-shore). People who are hired as in-house staff in mining companies such as guards, cleaners or administrative staff should also be included in this category.

Q9-Q19 This question aims to capture detailed information of those engaged in farming and livestock keeping. The key issue here is to understand how to classify crops and livestock and be able to fit them in the categories provided.

Q20 Here we want to know NAME's status of employment. Pay special attention to "Employer or a boss of a business". The questionnaire intends to capture people who own businesses but have also employed others. For example, we are interviewing person X who manages a business and its employees but does not own the business. This person will be categorised under "employed or working for someone else" and NOT "Employer or boss of a business".

Q21 Here we want to know how frequent NAME is paid in his/her job. Select the appropriate response from the drop-down menu.

Q22 Record the amount that name is paid every time he/she gets paid as indicated in question 20.

Q23-Q28 These questions try to capture the types of compensation NAME gets from his/her job.

Compensation can be defined as any other service that is provided by the employer to the employee in addition to the employee's salary or wage. The compensation can be in terms of a full subsidy or partial subsidy and can be received as a special package in cash or in-kind. For example, we would tick the lodging box for a teacher who lives in housing provided by the school, government or community.

Q29 Record the number of hours NAME works per week in this particular job. DO NOT account for hours NAME worked in other jobs if he/she is working multiple jobs. If the respondent gives you the number of hours worked per day then multiply those hours to the number of days he/she works in a week.

Q30 Record the number of months NAME worked to earn income for the household/family. Account for the 12 months prior to your visit to the household. Include the leave months if the person is officially hired and took a paid leave.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB A

6.5. Tab 5B. Income

Purpose	The purpose of this tab is to capture the household's main sources of income.
Q1	Click the "Get time" button to register the time that you started administering the labour module
Q2	Select the most knowledgeable person in the household to answer questions on income. Note that this person may be different from the person who was the main respondent in previous sections
Q3	Here we want to find the monetary value of all the goods produced by the household and consumed within the household. Here we do NOT want to include goods that were bought. We ONLY want goods that produced AND consumed within the household. The recall period is for the past 12 months. Recalling consumption data may be quite difficult therefore, you would play a big role in assisting the respondent recall proper information. A good way to assist would be to ask the respondent to approximate how much of each good the household produced in the past 12 months, approximate the amount of goods that were sold and given as presents to others. The remainder would be the goods consumed inside the household. Ask the respondent to approximate the value of these goods at the current market price. If the household produces more than one good, then ask for the monetary value of each good, add their values and specify the period in the next section.
Q4	This question requires you to record the period corresponding to the amount reported in question 3.
Q5	This question tries to capture the sources of income of the household. Ask this question for all sources of income before you move on to the details section. YES IN CASH: This implies that the household received income in terms of cash. For example, they sold bags of maize then you would record the income they got from the sale of maize. YES IN KIND: Here we are looking for the income that was made in non-monetary terms. For example, if the household receives goods in the form of maize or sugar then you would select IN KIND.

6.6. T5B1: Details

Q1	Record the revenue the household normally receives from the SALE of agricultural products in the past 12 months. If the respondent finds it difficult to approximate revenue then it is best to encourage him/her to start approximating for a short time period such as monthly or even weekly if necessary. Try to find a recall period that is most comfortable for him/her and then use that as a base to recall revenue for the remaining

months.

Q2 Record the recall period for the amount reported in question 1.

Q3 Record the monetary value of all in-kind transfers that the household has received in the past 12 months.

Q4 Record the recall period for the amount reported in question 3.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 5B

6.7. TAB 5C. HOUSEHOLD DURABLE GOODS

Purpose The purpose of this tab is to capture the household's assets.

Q1 Press the "get time" button to record the time when you start administering the household durable goods section

Q2 Select the most knowledgeable person in the household who would be able to answer questions of the assets owned by the household

Q3-Q25 Select the durable good/asset, which the household currently owns. It is important to probe if you think it is unlikely that the household owns such a good. For example, if the respondent mentions that the household owns an electrical iron while it does not have electricity services. However, be careful to ask politely so that the respondent isn't offended.

For each item listed, indicate whether someone in the household owns one of the listed items ('yes' or 'no'). Make sure to ask EACH individual item. Don't ask let the respondent to mention the assets he/she thinks they have. Also, you should ask about the more luxury items, such as cars, even if you think they do not own it. You can always tell the respondent that you are asking those questions to everybody in the village, and that it is your job to do so in order to be consistent for each household.

Make sure you ask whether or not the respondent or anyone in the household owns the item. This is important as it is easy to slip into the habit of asking 'you' rather than 'you or anyone else in the household' (as it conforms more closely to natural conversational phrasing). Stick to the formulation 'you or anyone else in the household' to avoid confusion.

Asking 'you' may be interpreted by the respondent as meaning 'his/her self' not the household. People who belong to several households (e.g. a polygamist head of household with another wife and household somewhere else) will own assets that do not belong to the household you are interviewing. E.g. do not count this person's furniture in the other household as belonging to the household you are interviewing, but DO count a mobile phone that he carries with him or a motorbike that he uses to visit both households.

The rule should be that anything that remains in the other household is not eligible for inclusion in the asset section of the questionnaire, but anything that clearly transfers between households can be included. Note that a 'functioning' need to be 'functioning' in order to be considered as owned asset. For instance, do not consider a car that has been standing still in the garage for several years because it does not function anymore. However, in case an asset is temporarily not functioning (for instance a cell-phone that is at the fundi at the moment),
you should consider it.

Specific asset instructions:

• Radio: Emphasize that also small radios are considered. However, you should exclude radios from cell phones
• Clock: Emphasize that also watches are considered
• Television: it is having the UNIT itself that is meant here, NOT whether this unit has SIGNAL or not.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 5D

6.8. Tab 5D. Animals

Purpose	The purpose of this tab record all the animals owned by the household. It is important to keep in mind that you should only record animals that are OWNED by the household i.e. the household could sell them or get rid of them anytime. You should NOT record animals which the household keeps for other people or have been borrowed.
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	This question tries to capture whether the household keep birds or small animals that are not for trade purposes/ business. These birds are only for home consumption.
Q3	Ask this question before going to question 4. Ask whether the household owns any of the animals listed in the questionnaire.
Q4	For each animal, which the household owns, ask for the total number owned. Here you should also take into account babies or new-born animals. This question is only about OWNERSHIP. That is, we do not mean POSSESSION. The difference between ownership and possession is that one can be in the possession of a livestock while he/she does NOT own it, hence the livestock should NOT be considered in this question.
Q5	Specify other animals that are owned by the household.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 5D

6.9. Tab 5E. Social Capital and Community Participation

Purpose	This section tries to capture the extra curricula activities/ community activities and efforts available in the village and whether household members are actively involved in these activities
Q1	Record the time you begin administering this section by pressing the "get time" button
Q2	This question contains a list of community activities, which exist in the village. Read out all the activities to the respondent and ask whether they

	exist in the household. Make sure you read out all the activities before asking for household participation.
Q3	Ask whether there is ANYONE in the household who is actively involved in any of the existing community activities.
Q4	Here, we want to know if there is anyone in the household who is a leader in any of the active community activities.
Q5	Specify other activities which exist but have not been listed in question 2
Q6-Q11	There are YES/No questions which aim at understanding the household's networks and how active the household members are in advocating for social improvements
Q12	This question aims at understanding how much cohesion there is between a household and its neighbours. How much does the household depend on its neighbours in acquiring different services.
Q13	Here we want to capture how often the household has helped its neighbours to acquire the listed services
Q15	Do the household members attend any community meetings? These meetings can range from be religious, women's groups or environmental groups. These are just a few examples. There are many kinds of groups however, if you are in doubt please do not hesitate to consult.
Q16	This question wants to capture any kind of maintenance that the household did on its own property or business stand. This could be painting or rebuilding
Q17	This question wants to capture any kind of maintenance that household members have done on public property that that they have done WITHOUT being paid. This is work done on a voluntary basis
Q18-Q20	In this question, we want to see how willing the household's neighbours are in assisting the household when they are in need whether in monetary or non-monetary terms

6.10. T5F1: Ownership of Goods

Q2-Q24	These questions aim at knowing whether the household owned all the assets it currently owns in the past three years.

6.11. T5F2: Ownership of Animals

Q2	For all the animals the household currently owns, record the number of animals they used to own three years ago.

7. TAB 6. DWELLING/FACILITIES

7.1. TAB 6A.DWELLING CHARACTERISTICS

Purpose	This section intends to assess the dwelling facilities of the household. The dwelling demographics, how animals are accommodated in the household, the types of energy used for lighting and cooking, water sources and sanitation in general.
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	Select the most knowledgeable person to respond to question on dwelling characteristics.
Q3	Record the number of rooms the household has excluding the bathroom, toilet, kitchen and store, the question gathers information about the number of rooms in the house that the household can occupy. However, if the HH only has one room in which they do everything (cooking, sleeping, etc.), enter '1'. Do NOT enter 0 because of excluding bathroom/kitchen etc. in this case. Only in the very rare case of the HH being nomads and not having a house at all, enter '0', though a comment MUST be made in this case.
Q4 – Q5	Record the number of years the household has resided inside their current dwelling. If less than two years then record zero and the number of months.
Q6-Q15	Here you are required to ask the respondent whether animals are allowed inside the house. Even if the animals have a particular place they sleep but can freely come into the house then the answer to this question should be a YES.
Q16	If more than one source of lighting is used, take the most frequently used. If they say that they are using a lamp, you need to ask them which energy source they are using in order to lit the lamp. Always choose the highest value option in the list that applies. For instance, if the household uses a generator, you should select generator as the response, even if the generator charges a battery first.
Q17	If more than one source of cooking fuel is used, take the most frequently used.
Q18	Read all responses here. Also, in case the household owns the dwelling, but not the area, the question should still be 'yes', since we are interested in the tenure status of the residence. We are NOT interested in who exactly owns the place if this is not the household members themselves. In case the household lives for free in the household owned by another relative that does not live in the household, you should select SPECIFY OTHER.
Q19	We want to capture the cost of building or buying the house. In many cases, people build their own houses. You should make sure that the

respondent captures the cost of material and labour. Even if household members used their own labour to build the premises, you should make sure that the cost of material is captured.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 6B

7.2. Tab 6B. Water Sources

Purpose This section intends to capture information about sources of DRINKING water for the household.

Q1 Record the time you begin administering this section by pressing the "get time" button.

Q2 Select the most knowledgeable person in the household who is most able to answer questions of water sources.

Q3 Here we want to know whether the household has a constant water supply throughout the year or whether they have to find a water source depending on the season.

Q4 If more than one source of drinking water is used, only the main one will be recorded. If the household uses a different drinking source in different seasons, then use that source that they use the most days in a year. Note that a spring (chemichemi) is water that naturally springs from the ground, while a well (kisima) is dug to reach the ground water table level. A chemichemi can be dug a little to improve water collection, but that does not make it a kisima. In case the response is 'tinga tinga', the response option [12] should be selected.

Q5 Record the number of months in each year in which the household gets it main drinking water from the source mentioned in question 5.

Q6 If the water source is inside the dwelling i.e. a water pipe and tap are inside the house then select option 1. If it is anywhere within the household premises even if it is a communal water source then select option 2. For all other locations select option 3

Q7 Ask if the main water source for the household is covered. If the source is a tap then you should take this to be a covered source. We want to see if the water can easily be adulterated. For example, can animals step into the water? Can people urinate or defecate in the water? If the water is partially covered then select option 3.

Q8 Record the time which it takes to go to the water source, collect water and return. If there is more than one person collecting water for the household, ask for the time it takes the household member who frequently goes to collect water.

Q9-Q10 Record the number of return trips that household members make to the water source. For example, if person A goes to the well and returns, this is

	counted as one trip, if he goes again and returns then this will be the second trip. You should count the number of trips for everyone in the household who went to fetch water that day.
Q11-Q12	This question asks for the main person who usually goes to fetch water for the household. If it is more than one person then ask the respondent to mention the person who most often goes to fetch water
Q13	Record the amount of water fetched on each trip to the water source. If more than one person fetch water for the household then record the amount of water fetched by the person who usually fetches water. Some households use donkeys and carts to fetch water. If this is the case, then record the amount of water fetched by using the cart or water.
Q14	The question asks whether water was available at the source in the last 10 visits. If there is more than one person in the household fetching water then refer to the person who frequently fetches water for the household. Count the number of tips made by person A and only A to the water source prior to your visit to the household. For example, person A went to fetch water 3 times on Monday, 4 times on Sunday, 2 times on Saturday and once on Friday then these will be the ten times you will refer to. Out of these 10 times ask how many times person A didn't find water at the source.
Q15	The cost required here cover connection and construction including labour charges. If the household built the water source using their own labour then capture the connection and material costs here. If the source is a public water source then ask if the household was required to contribute toward its construction and how much they contributed.
Q16	If they paid or made any in-kind contributions then ask the respondent to give you a monetary estimate of their in-kind contribution.
Q17	For own labour used or volunteered, ask the respondent to give you an estimate of the number of labour hours spent. If they contributed labour towards a public water source then as the respondent to estimate the number of hours they volunteered.
Q16	Ask the respondent whether they pay any fees to access water from the water source. This includes any in-kind payments made towards the service.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 6

7.3. *TAB 6C. DRINKING WATER*

Purpose	The purpose of this tab is to collect information on availability of drinking water throughout the year.
Q1	Record the time you begin administering this section by pressing the “get time” button.
Q2	Select the most knowledgeable person in the household who is most able to answer questions of water sources
Q3	Specify to the respondent that you are ONLY asking about drinking water. If they store drinking water in the same container as water used for other purposes then the answer to this question should be yes. Even if they don’t have a specific container to store drinking water but the respondent says that they use the available water for drinking then select yes.
Q4	Cleaning the water does not specifically mean boiling it. Let the respondent say what they understand by cleaning water.
Q5-Q13	These are a few ways in which a household could clean water. The list provided in the questionnaire is not exclusive. Record any other water treatment methods mentioned in the other specify category. Although IODINE can be found in many items, here it is referred as an agent to clean and purify water. For example, if water is stained with soil i.e. red in colour. Once you add IODINE and wait for three minutes or so then it will be clear. If the respondent mentions any other method that is not listed the record it under SPECIFY OTHER.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 6C

7.4. Tab 6D. Sanitation Facilities

Purpose The purpose of this tab is to capture information on the type and condition of the household's sanitation facitlities.

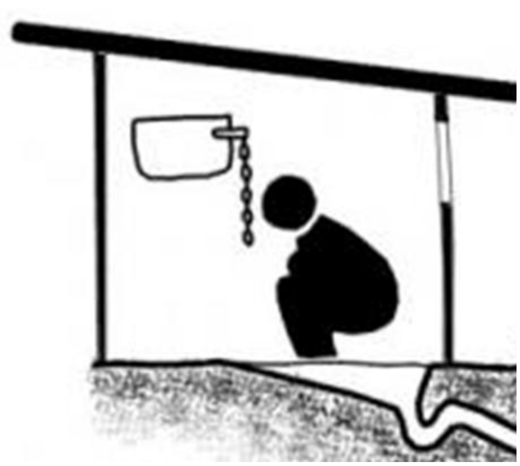
Q1 Record the time you begin administering this section by pressing the "get time" button.

Q2 Select the most knowledgeable person in the household who is most able to answer questions on sanitation facilities.

Q3 This question tries to understand where the household members usually go to defecate. If there is more than one place then ask the respondent to tell you the place where they most frequently defecate. If it is in a toilet, then ask the respondent to tell you the type of toilet is. Then use the picture guide you have been given to confirm with the respondent the type of toilet. Look at the definitions below for each type of facility to make sure that you understand the differences between them.

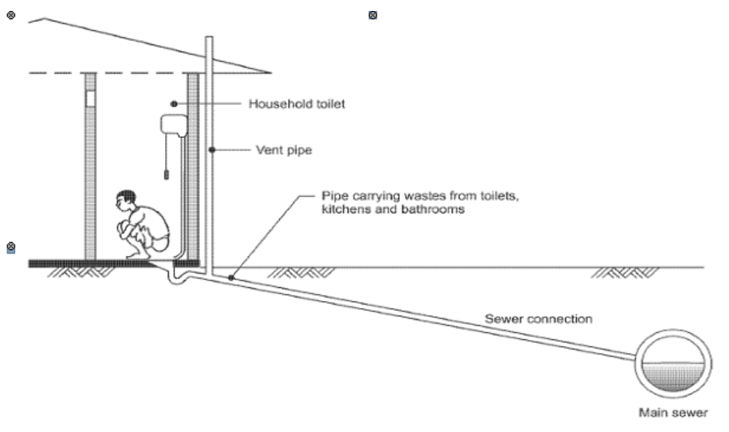
Important Definitions on Sanitation

- **Slab:** A slab is defined as the area covering the toilet facility.
- **Flush toilet** uses a cistern or holding tank for flushing water, and a water seal (which is a U-shaped pipe below the seat or squatting pan) that prevents the passage of flies and odours.



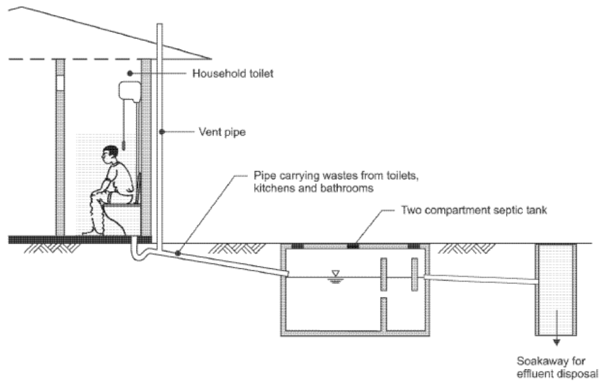
- **A pour flush toilet** uses a water seal, but unlike a flush toilet, a pour flush toilet uses water poured by hand for flushing (no cistern is used).

- **Piped sewer system** is a system of sewer pipes, also called sewerage, that is designed to collect human excreta (faeces and urine) and wastewater and remove them from the household environment. Sewerage systems consist of facilities for collection, pumping, treating and disposing of human excreta and wastewater.



(1) Flush/ pour flush to a piped sewer

- **Septic tank** is an excreta collection device consisting of a water-tight settling tank, which is normally located underground, away from the house or toilet. The treated effluent of a septic tank usually seeps into the ground through a leaching pit. It can also be discharged into a sewerage system.

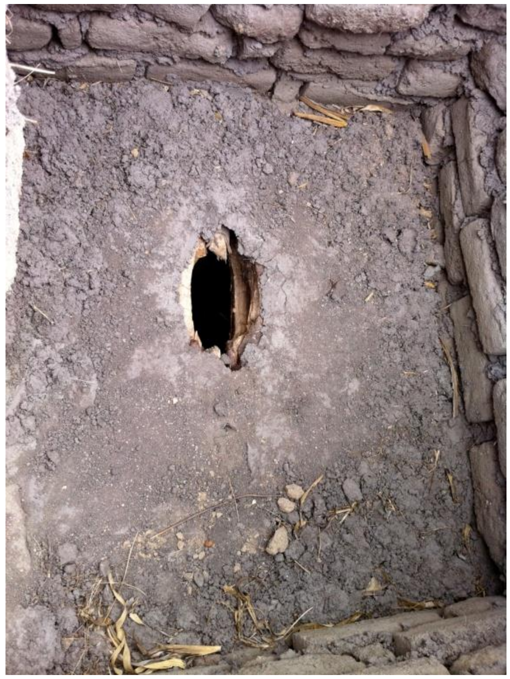


Pour-flush to a septic tank (b)

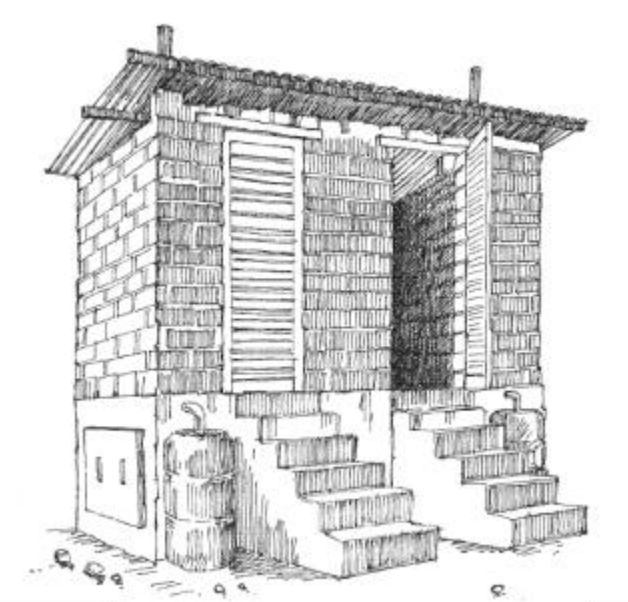
- **Flush/pour flush to pit latrine** refers to a system that flushes excreta to a hole in the ground or leaching pit (protected, covered).

- **Ventilated improved pit latrine (VIP)** is a dry pit latrine ventilated by a pipe that extends above the latrine roof. The open end of the vent pipe is covered with gauze mesh or fly-proof netting and the inside of the superstructure is kept dark.

- **Pit latrine with slab** is a dry pit latrine that uses a hole in the ground to collect the excreta and a squatting slab or platform that is firmly supported on all sides, easy to clean and raised above the surrounding ground level to prevent surface water from entering the pit. The platform has a squatting hole, or is fitted with a seat. Below is an example of a pit latrine with an earth slab.



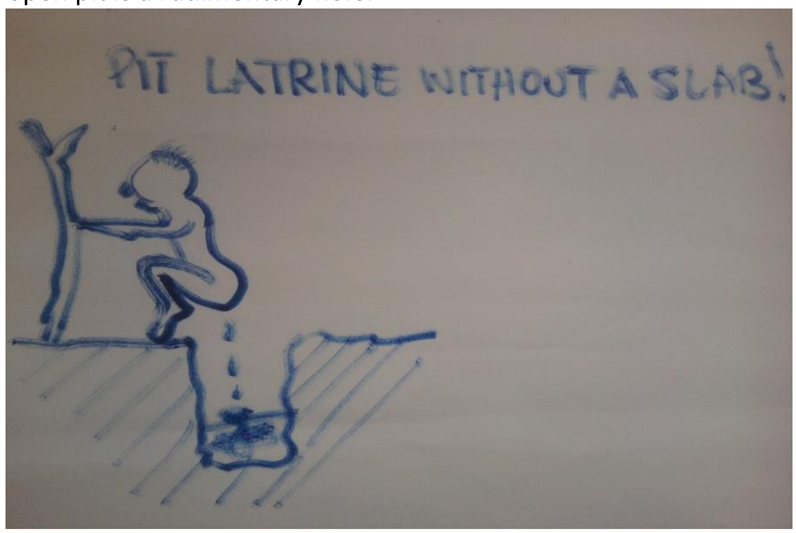
- **Composting toilet** is a dry toilet into which carbon-rich material (vegetable wastes, straw, grass, sawdust, ash) are added to the excreta and special conditions maintained to produce inoffensive compost. A composting latrine may or may not have a urine separation device.



(8) Composting Toilet

- **A response of "flush/pour flush to unknown place/not sure/DK** where" is taken to indicate that the household sanitation facility is improved, as respondents might not know if their toilet is connected to a sewer or septic tank.

- **Flush/pour flush to elsewhere** refers to excreta being deposited in or nearby the household environment (not into a pit, septic tank, or sewer). Excreta may be flushed to the street, yard/plot, open sewer, a ditch, a drainage way or other location.
- **Pit latrine without slab** uses a hole in the ground for excreta collection and does not have a squatting slab, platform or seat. An open pit is a rudimentary hole.



- **Bucket** refers to the use of a bucket or other container for the retention of faeces (and sometimes urine and anal cleaning material), which are periodically removed for treatment, disposal, or use as fertilizer.
- **No facilities or bush or field** includes defecation in the bush or field or ditch; excreta deposited on the ground and covered with a layer of earth (cat method); excreta wrapped and thrown into garbage; and defecation into surface water (drainage channel, beach, river, stream or sea).

(12) No Facilities / Bush or

- **Hanging toilet or hanging latrine** is a toilet built over the sea, a river, or other body of water, into which excreta drops directly.

7.5. TAB 6D1. LATRINE

Q1	For the type of latrine reported, ask the respondent whether anyone has ever emptied it.
Q2	If there is more than one person who usually empties the latrine then ask for the main person i.e. the person who empties it often. If there is no one who frequently empties the latrine then select option 1
Q3	If there is a specific person who empties the latrine and he/she is a household member then specify their name here.
Q4	Here we want to know if the pit latrine has ever been cleaned before i.e. since the toilet has been built.
Q5	If there is more than one person who usually cleans the latrine then ask for the main person i.e. the person who cleans it often. If there is no one who frequently cleans the latrine then select option 1.
Q6	If there is a specific person who cleans the latrine and he/she is a household member then specify their name here.
Q7-Q8	Record the year and month when the latrine was constructed. If the construction started in one year and ended in a different year then record the year when the latrine was completed. For example, if the household started constructing the latrine in December 2007 and finished in February 2008 then record 2008 in the year category and February in the month category.
Q9	Here we want to capture the amount the household spent in building the latrine. If the materials were donated or given for free then fill in 0. If some materials were donated and others bought then we want to know the cost of the materials that were bought ONLY. In case the materials were given in exchange for an in-kind item then ask the respondent to

estimate the value of the in-kind.

Q10 Ask how much was spent in paying someone for building the latrine. If the latrine was built by the household then fill in 0. If the person was given an in-kind payment rather than a cash payment the ask the respondent to estimate the amount if the in-kind given

Q11-Q15 Here we want to determine here the household hired labour to build the latrine.

In or Outside the village: If the builder originally comes from the village but does not reside in the village then the answer should be "builder from outside the village". For example, if you are interviewing in Marangu-Moshi and the builder used to build the toilet is a chagga but resides in Aris-Moshi then you would select that the person comes from outside the village even if his family originally comes from Marangu.

Community labour: Community labour is labour put together through community initiatives to build latrines for people in the village. For example, a community sanitation committee can decide to put together a group of builders to build latrines for old people

Q16-Q24 Here we want to know sources of information on types of facilities, supplies and costs, which people in the village have access to. Read each option and select each one that the household used this source when building their latrine.

Q25-Q34 This is an open-ended question aims at understanding why the household decided to build a latrine. Let the respondent freely give reasons and record the first three that he/she mentions

Q35 Through this question, we want to get an idea of how satisfied the respondent is with the household's sanitation facilities. You should read all responses and let the respondent select the most appropriate one. Even if the toilet is in a condition you think is not satisfactory, you should fill in the respondent's response as it is as we are ONLY interested in the respondent's responses not yours.

Q36-Q44 These questions are on possible improvements the household could make to their current latrine. Read out all options and tick all responses that apply

Q45-Q51 First, read out all the possible constraints to improving latrines listed here and ask the respondent to select the top three constraints he/she is facing

Q52 Ask this question for all latrine expenses before proceeding to the next question

Q53 For all latrine expenses that the household incurred in the past 12 months, ask the respondent to estimate the cost associated with the improvement made. These costs should include costs of material and labour. However, if they used their own labour then ONLY include the cost of material.

Q54 Record any other expenses the household had pay in relation to their main latrine.

7.6. TAB 6D2. GENERAL

Q1 Sharing means that another household uses the household's latrine on a daily basis. If there is more than one latrine used by the household then ask about the main toilet used by the household

Q2 Record the number of households that use the toilet. Remember, we want a household count not a count of individuals. A household is defined as people who eat and sleep together. So make sure you use this definition as a guide when counting the number of households sharing a toilet. The number recorded here should include the household you are interviewing. If the answer in question one is yes then you should NOT have a 1 in this question.

Q3 Select who owns the toilet from the options given.

Ownership: Is meant to describe the person who has exclusive rights to using the facility. For example, if a landlord is living in the same household as his tenants then you would select COMPOUND. In addition, in many cases, ownership comes with the responsibility of cleaning. An exception may be public toilet.

Compound: Here we define a compound as a group of houses sharing common ground and facilities such as a back yard, gate etc. For example, In urban areas it is not uncommon to find several households living in one dwelling. These households usually share a toilet, which belongs to the compound, which is meant to be shared amongst all tenants of the dwelling.

Neighbour: This means that it is your neighbour who owns the toilet and has the exclusive right to using it. The household will be using the toilet as a favour from the owner.

Q4 Record the average time it takes household members to get to the toilet (one way) from the household. If the dwelling is shared by many households then record the time it takes from the household's main door to the toilet. If less than one minute then record 0.

Q5 Record the distance from the household to the toilet (one way). If the dwelling is shared by many households then record the distance from the household's main door to the toilet.

Q6 Read out the responses to the respondent and select the response that applies.

Q7 The female respondent required here should be a household member. If there is no female household member then use the current respondent.

Q8 This question tries to capture how safe female respondents feel when they go to the toilet. Do they feel scared that something might happen even if it has not happened yet? It is preferred that this question be asked to a female household member. You should ask the current male respondent only if there is no female household member available.

Q9 This question tries to capture the sense of privacy female household members have during defecating. Do they feel watched or exposed to people outside when defecating?

Q10-Q11 Read these two statements to the respondent and ask them if they agree or disagree with each of them. If the respondent does not know what a sungura slab is (we don't expect this) then show then the picture of a sungura slab from your toilet photo library.

Q12-Q21 These are options for where the youngest child's waste is disposed after defecating. If there are two children of the same age or twins then refer to the child that was born last.

Q22-Q31 These questions try to understand how people in the community deal with children faeces. Ask the respondent to tell you how people in the community handle children's faeces.

Q32 Here we want to capture if adults in the community have a habit of defecating in areas other than latrines. Even if faeces are collected in plastic bags but disposed in the open, we still consider this open defecation.

Q33 Here we want to capture if household members defecate in areas other than the household's latrine. Even if faeces are collected in plastic bags but disposed in the open, we still consider this open defecation.

Q34-Q41 These are response options that explain why household members defecate in the open. Read out all responses to the respondent and select all answers that apply

7.7. TAB 6D3. NO LATRINE/FACILITY

Q1 Record the time it takes to get to the area of defecation (one way) from the household. If there is more than one place where the household defecates then ask the respondent to refer to the area they frequently go. If household members go to different locations then ask for the area most household members go. In case members are equally split in terms of where they defecate then ask the respondent to refer to the place he/she usually goes.

Q2 Record the distance from the household to the area of defecation (one way). If there is more than one place where the household defecates then ask the respondent to refer to the area they frequently go. If household members go to different locations then ask for the area most household members go. In case members are equally split in terms of where they defecate then ask the respondent to refer to the place he/she usually goes.

Q3	Read out the responses to the respondent and select the response that applies.
Q4	The female respondent required here should be a household member. If there is no female household member then use the current respondent.
Q5	This question tries to capture how safe female respondents feel when they go to the toilet. Do they feel scared that something might happen even if it has not happened yet? It is preferred that this question be asked to a female household member. You should ask the current male respondent only if there is no female household member available.
Q6	This question tries to capture the sense of privacy female household members have during defecating. Do they feel watched or exposed to people outside when defecating?
Q7	Through this question, we want to get an idea of how satisfied the respondent is with the household's sanitation facilities. You should read all responses and let the respondent select the most appropriate one. Even if the toilet is in a condition you think is not satisfactory, you should fill in the respondent's response as it is as we are ONLY interested in the respondent's responses not yours.
Q8-Q13	These questions are on possible initiatives the household could take to their sanitation conditions. Read out all options and tick all responses that apply.
Q14	We are not asking the respondent to give us the actual cost but we are asking him/her to tell what he thinks is the minimum cost of building or buying a latrine. Please do insist that these costs should reflect the cheapest latrine that could be purchased.
Q15	We want to see if the respondent would be willing to pay the minimum cost he mentioned if he/she had the money. We are NOT asking if the respondent currently has the money to finance building such a latrine.
Q16	Here, we want to see if the minimum price of building a latrine has changed compared to the same time two years ago.
Q17-Q18	Read these two statements to the respondent and ask them if they agree or disagree with each of them. If the respondent does not know what a sungura slab is (we don't expect this) then show then the picture of a sungura slab from your toilet photo library.
Q19-Q28	These are options for where the youngest child's waste is disposed after defecating. If there are two children of the same age or twins then refer to the child that was born last.
Q29-Q31	These questions try to understand if there is open defecation in the community i.e. defecating in areas other than latrines. Even if faeces are collected in plastic bags but disposed in the open, we still consider this

open defecation.

Q32-Q40 These are response options that explain why household members defecate in the open. Read out all responses to the respondent and select all answers that apply.

7.8. TAB 6E. RETROSPECTIVE QUESTIONS

Purpose The purpose of this tab is to capture changes in the household composition, access to basic services and types of latrines as compared to three years ago.

Q2 Count the number of children born in the past three years. If you are interviewing in May 2012, it means that you will refer to the period between April 2009 and May 2012. Count all children born even if they were born still.

Q3 Count the number of household members that have joined the household in the past three years for other reasons than birth.

Q4 Probe the respondent for the number of people who died within the past three years. Double check that these deaths occurred within the past three years by recalling the time period referred to in this question.

Q5 Note down the number of people who left the household in the past three years for other reasons than death. For example, they got married, moved elsewhere for a job, went to school etc.

Q6 This question refers to the type of sanitation facility. If the household used the same type but improved it then the answer to this question should be yes. For example, it they used a pit latrine with an earth slab and they now use a pit latrine with a concrete slab then the answer should yes.

Q7 If the household has a different type of sanitation facility compared to three years ago, then record the type of facility they used to use then.

Q8 Record whether the source of drinking water has changed compared to three years ago. For example, if you're interviewing in May 2012 then we would ask about the source of drinking water in April 2011. If there was more than one source of drinking water, ask the respondent to refer to the main source they used then.

Q9 If the main source of drinking water changed compared to three years ago, record the source of drinking water they used then.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 7

8. Tab 7 Household Hygiene

8.1. Tab 7a. Programme Exposure

Purpose	The purpose of this tab is to examine whether people heard about the hand washing program, where they heard it from and what they know about the program. This section should be directed to both the main caregiver and the most knowledgeable person in the household. Make sure that the child's caregiver is present. All handwashing questions should be directed to the child's main caregiver while the sanitation questions should be directed to the other respondent. Try to engage the caregiver as much as possible.
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	Select the respondent for this section. This should either be the household head or the main respondent for the household.
Q3	Select the name of the caregiver from the drop-down menu. This is usually the mother however, if it is not the mother then ask to speak to the primary caregiver. Recall that the primary caregiver is the person who spends most time with the child.
Q4	Record the number of years the household respondent has been living in the village.
Q5	Record the number of years the main caregiver has lived in the village.
Q6	Record the number of years the child has lived in the village.
Q7	Record the age of the main caregiver when he/she started caring for the child.
Q8-Q9	Here we want to know if the main caregiver has heard or read about hand washing with soap. It is important to understand that we are not asking people if they are aware about this specific hand washing and sanitation program, we just want to know if people know or have heard about the importance of washing hands even if it was from a neighbour or another program.
Q10-Q11	Here we want to know if the main respondent has ever heard or read about using latrines for defecation. It is important to understand that we are not asking people if they are aware about this specific hand washing and sanitation program, we just want to know if people know or have heard about the importance using latrines even if it was from a neighbour or another program.
Q12-Q13	These questions intend to examine if the WSP sensitisation material on using and improving latrines and washing hands with soap reached the respondent. The respondent has to recall whether they saw this material. If they heard about the posters but never saw them then the answer to

this question would be no.

Q14-Q16	These question aim checking whether the respondents have ever heard about hand washing and sanitation through radio. Either through advertisements or radio plays. These radio programs could be part of another project. It is not necessary that the advertisement be directly linked to WSP.
Q17	The aim here is to know whether the respondent has heard or watched plays which talk about hand washing and sanitation and when. It is not necessary that the plays be part of the WSP sensitisation. They can be part of another program. We are trying to see if the respondent is aware of wand washing and sanitation practices.
Q18	Record whether the respondent has ever attended a meeting where the a Community Lead Total Sanitation committee was formed. This can either be in their own sub-village or another sub-village.
Q19	Record the period when this meeting was held.
Q20-Q21	Record whether the respondent has ever attended an event including singers, dancing and plays on handwashing with soap and using sanitation facilities for defecation in the past three years.
Q22	Record the period when the event was held within the village.
Q23	MSABUNISHAJI is a WSP sensitisation person who visits communities and sensitises people on hand washing and sanitisation practices.
Q24	This question wants to capture whether the respondent knows the importance of washing their hands before brushing their teeth and whether anyone has talked to her/him on this topic.
Q25-Q26	These questions ask whether there is a mason who resides in the community. The mason does not have to professionally trained. The aim is to know whether the household can acquire masonry services within the village.
Q27-Q28	Here, we want to know if the community has a sanitation committee and whether the household knows anyone who is a member of the committee. Although you may come across households that mention the existence of a sanitation committee, you should still record the answer of the respondent as it is even if it is no. We want to whether the household is aware that such a committee exists.
Q29	Record who of the two was most active in responding to the questions in this section. If both respondents were equally responsive then record both.

8.2. *TAB 7A1. POSTER, WALL DRAWING, CALENDAR*

Q1-Q2	These questions want to capture whether the household received specific WSP material on building tipy taps (vibuyu chirizi) and announcing the

existence of a soap opera on radio on washing hands with soap.

Q3-Q10 These are slogans that have been used in the WSP sensitisation. We want to know whether the respondent could recall any of these slogans. DO NOT read these to the respondent. If the respondent give a response that is not on the list, record that response under the "other specify" category.

Q11 Read the options and responses aloud and tick the appropriate answer

Q12-Q13 These questions try to see if the respondent has the WSP sensitisation material at hand. Therefore, insist on seeing the material if available.

8.3. TAB 7A2. RADIO ADVERTISEMENT

Purpose The purpose of this tab is to check what the respondent remembers from the WSP radio programs

Q1-Q6 These are slogans and characters from the WSP radio advertisements and plays. DO NOT read them to the respondent. Just ask and select the responses that apply. If the response does not fit the options given then record it in the other specify category.

Q7 Read the question and the list of responses aloud and tick the appropriate response

Q8 If more than one radio station is mentioned, record the first response that the respondent gives.

8.4. TAB 7A3. SOAP OPERA

Purpose The purpose of this tab is to check what the respondent remembers from the WSP soap opera.

Q1-Q6 These are slogans and characters from the WSP radio soap opera(play). DO NOT read them to the respondent. Just ask and select the responses that apply. If the response does not fit the options given then record it in the other specify category.

Q7 Read the question and the list of responses aloud and tick the appropriate response.

Q8 If more than one radio station is mentioned, record the first response that the respondent gives.

8.5. TAB 7A4. MSABUNISHAJI

Purpose The purpose of this tab is to check what the respondent remembers from his/her communication with MSABUNISHAJI.

Q1-Q10 These are slogans and topics the WSP MSABUNISHAJI would have talked bout. DO NOT read them to the respondent. Just ask and select the responses that apply. If the response does not fit the options given then record it in the other specify category.

Q11-Q20 These are possible locations that the respondent might have met the MSABUNISHAJI. Tick all responses that apply.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 7B

8.6. Tab 7B. Child Health Calendar

8.7. Tab 7B1. Health Details

Purpose The purpose of this tab is to capture children's health details.

Q1-Q4 These questions what to capture whether the child had a fever in the past seven days and the status of his/her fever on the day of your visit and the past two days.

Fever implies an increase in the child's temperature from his/her normal temperature.

Q5-Q8 These questions what to capture whether the child had a constant cough in the past seven days and the status of his/her cough on the day of your visit and the past two days.

Q9-12 These questions what to capture whether the child had a runny/stuffy nose in the past seven days and the status of his/her congestion on the day of your visit and the past two days.

Q13-Q16 These questions what to capture whether the child had difficulties breathing in the past seven days and the status of his/her breathing condition on the day of your visit and the past two days.

Q17-Q20 These questions what to capture whether the child had stomach pains or cramps in the past seven days and the status of his/her stomach condition on the day of your visit and the past two days.

Q21-Q24 These questions what to capture whether the child had nausea in the past seven days and the status of his/her nausea on the day of your visit and the past two days.

Q25-Q28 These questions what to capture whether the child vomited in the past seven days and whether he/she was still vomiting on the day of your visit and the past two days.

Q29-Q32 These questions what to capture whether the child had diarrhoea in the past seven days and the status of his/her diarrhoea on the day of your visit and the past two days.

Diarrhoea is defined as having three or more loose or liquid bowel movements per day.

Q33-Q36 These questions what to capture whether the child three or more bowel movements in 24 hours in the past seven days and the status of his/her bowel movement on the day of your visit and the past two days.

Q37-Q40 These questions what to capture whether the child had loose or watery stool in the past seven days and the status of his/her stool on the day of your visit and the past two days.

Q41-Q44 These questions what to capture whether the child had mucus in his/her stool in the past seven days and the status of his/her stool on the day of your visit and the past two days.

Q45-Q48 These questions what to capture whether the child had blood in his/her stool in the past seven days and the status of his/her stool on the day of your visit and the past two days.

Q49-Q52 These questions what to capture whether the refused to each in the past seven days and the status of his/her feeding on the day of your visit and the past two days.

Q53-Q56 These questions what to capture whether the child had abrasion, scrapes or bruising in the past seven days and when the child got these bruises.

Q57-Q5 These questions what to capture whether the child had skin itching on the body or scalp in the past seven days and the status of his/her itching condition on the day of your visit and the past two days.

8.8. TAB 7B2. GENERAL

Purpose The purpose of this tab is to get information on medical assistance sought as a result of the child's condition.

Q1-Q9 These are a list of possible medical assistance that could have been sought for the child's condition. Do not read the responses to the respondent. Tick all the responses that he or he gives.

Day visit to the doctor: Here we imply a visit where the sick child is taken for consultation but returns home on the same day.

Overnight stay at the hospital or clinic: You should select this option if the child was admitted and spent at least one night at the hospital. If the child was admitted only for a few hours then you should record it as a day visit.

Pharmacy (self-diagnosis): This is when the patient feels sick and decides to go to the pharmacy to buy medication without consulting a doctor or any health specialist. This option should also be selected if the patient or household got medical advice from a neighbour or friend.

Pharmacy (Pharmacist diagnosis): This occurs when the household gets consultation from a pharmacist rather than a doctor. For example, a child got sick and they decided to go buy medication at a pharmacy. The pharmacist then gives advice on what medication to take.

Traditional healer/witch doctor: These are the kind of healers who use a combination of magic and local herbs for healing.

Herbalist: We define this healer as one who uses local herbs ONLY for healing. There is no aspect of faith in the treatment.

Q10 If the caregiver or household member visited the health facility twice in one day then we would count these as two visits not one. Ask for the total number of visits to the medical facility in the past seven days. If more than one medical facility was visited the record the total number of visits made to all facilities. You should use the facilities mentioned by the respondent in questions 1-9.

Q11-Q12 Record the total time spent at the medical facility as a result of the child's illness/condition. This should be the total time spent at medical facilities in the past 7 days. If time spent at the facility was less than one hour then record 0 for hours and fill in the minutes spent. If the person visited more than one facility then find the total time spent in all facilities.

In case the child was admitted for a few days then record the days and hours spent at the hospital or medical facility.

Q13-Q18 Select the means of transport used to reach the medical facility or the place where medical advice was sought. Select all means of transport reported. For example, if they first walked on foot and then took a bus, you would select on foot and bus.

Please note that we are not looking for the item that was used to carry the patient. We want to record the mode of transport. For example, if the child was carried on a stretch and taken to the hospital on foot then the mode of transport would be ON FOOT.

Q19-Q20 Record the total time used to get to the medical facility or area of consultation using the reported mode/modes of transportation. If more than one mode was used record the total time used travelling for all trips made.

Q20-Q21 Record the total number of persons who accompanied the child to the medical facility if the child was accompanied. If the number of persons differed across visits then add up all the people that accompanied the child for all trips. DO NOT include the child when counting.

Q22 Record the total amount of money used on transportation to go and return from the medical facility in the past 7 days. Remember to account for the fare used on those who accompanied the child. Do not assume that the fair to the facility and from the facility are the same. Confirm the costs with the respondent.

8.9. TAB 7B3. COUGH AND RUNNY NOSE

Q1-Q9 These questions seek to know the interventions and the cost of the interventions related to the child's respiratory problems. The costs should not include doctor consultation fees.

TAB 7B4. STOMACH AND DIARRHOEA SYMPTOMS

Q1-Q9 These questions seek to know the interventions and the cost of the interventions related to the child's stomach and diarrhoea symptoms. The costs should not include doctor consultation fees.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 7C

8.10. Tab 7C. Caregiver Time Use

Purpose	The purpose of this tab is to record the time the caregiver spends caring for the child.
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	Select the respondent for this section. It should preferably be the primary caregiver of the child. This is usually the mother however, if it is not the mother then ask to speak to the primary caregiver. Recall that the primary caregiver is the person who spends most time with the child.
Q3	Record whether the caregiver took the child for defecation yesterday. If the child is too young to defecate in a toilet or outside i.e. defecates in the nappy then record no.

8.11. Tab 7c1. Details

Q1	Record the number of times the caregiver took the child to defecate. If the child went to defecate three times on the same day then you would record 3 trips and not one.
Q2-Q3	Record the average time it takes per trip when the caregiver escorts the child for defecation (going to defecation area/toilet and returning).
Q4-Q5	Record the number of days and hours the caregiver could not perform their normal duties because of caring for the child. If his/her duty is only to take care of the child then probe if he/she had to spend some of his/her free time to care for the child instead of resting or doing his/her extra curricula activities.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 7D

8.12. TAB 7D. SELF-REPORTED HANDWASHING BEHAVIOUR

Purpose	The purpose of this tab is to
Q1	Record the time you begin administering this section by pressing the “get time” button.
Q2-Q3	Select the respondent for this section. It should preferably be the primary caregiver of the child. This is usually the mother however, if it is not the mother then ask to speak to the primary caregiver. Recall that the primary caregiver is the person who spends most time with the child. Also record if the respondent is alone with you during this session.
Q4-Q5	Here, we want to know if the caregiver washed his/her hands with soap at least once in the past twenty four hours and the circumstances that led to washing hands. If the respondent washed his/her hands more than once in the past 24 hours then refer to the last hand washing session. Ask for a specific reason if the response is “for washing my hands” or “for washing the children’s hands”.
Q6-Q20	These are other possible circumstances under which a person may wash their hands. Select all the appropriate responses. Do not read the responses to the respondent.
Q21-Q29	Tick all the reasons given by the respondent on why it is important to wash hands. Do not read out the responses.
Q30-Q33	Ask to see the respondent’s hands and observe the cleanliness condition of his/her nails, finger pads and palms then record your observations.
Q34	This is an open question. Do not read the responses. Select the response that coincides with the respondent’s answer.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 7E

8.13. TAB 7E. HYGEINE COSTS

Purpose The purpose of this tab is to

Q1 Record the time you begin administering this section by pressing the "get time" button.

Q2-Q3 Record the total amount spent to buy soap for the household's use and how frequently the household bought soap. Do not account for soap that was given as a present.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 8

9. TAB 8. OBSERVATIONS

9.1. TAB 8A. OBSERVATIONS OF DWELLING CHARACTERISTICS AND FOOD STORAGE

Purpose The purpose of this tab is to evaluate the condition of the household's facilities and surroundings. This section will cover household dwelling materials, food storage, animals and faeces, hand washing facilities, latrine facilities and children. You do not need to ask these questions if it is obvious by looking around.

Q1 Record the time you begin administering this section by pressing the "get time" button.

Q2 Record the type of dwelling the household occupies.

How to identify the number of rooms: We count the number of rooms the household has excluding the bathroom, toilet, kitchen and store. The question gathers information about the number of rooms in the house that the household can occupy. However, if the HH only has one room in which they do everything (cooking, sleeping, etc.), enter '1'. Do NOT enter 0 because of excluding bathroom/kitchen etc. in this case. Only in the very rare case of the HH being nomads and not having a house at all, enter '0', though a comment MUST be made in this case.

Single room house: This is a single household dwelling that has one room has excluding the bathroom, toilet, kitchen and store. However, if the HH only has one room in which they do everything (cooking, sleeping, etc.), enter '1'. Do NOT enter 0 because of excluding bathroom/kitchen etc. in this case.

Detached house with multiple rooms/huts: This is a single household dwelling with multiple roofs. For example, there may be a separate building which is used as a living room and a separate building used for sleeping.

Multiple household dwelling: This is a multiple household dwelling. For example, one dwelling can have six tenants. Each tenant is considered a separate household but they all live under one roof.

Improvised housing: This question tries to capture whether the dwelling is permanent or not. Note that we are NOT looking for households built using abnormal material BUT dwellings that have a high chance of not being there on your next visit.

Record the number of rooms the household has excluding the bathroom, toilet, kitchen and store, the question gathers information about the number of rooms in the house that the household can occupy. However, if the HH only has one room in which they do everything (cooking, sleeping, etc.), enter '1'. Do NOT enter 0 because of excluding bathroom/kitchen etc. in this case. Only in the very rare case of the HH being nomads and not having a house at all, enter '0', though a comment MUST be made in this case.

Q3 This question wants to capture the material used to build the walls of the main living area. The main living area in most cases is the building that has the living room or where guests are welcomed. You can also ask the respondent to point out the main living area for you. You do not need to ask this question if it is obvious by looking around.

If the walls of the main living area are constructed using more than one material then record the material which is used to construct a larger proportion of the walls. If there is not a significant main one, the interviewer will record the one of highest value. But if, for example, the walls are plastered you need to ask what material is behind the plaster.

In case the walls of the dwelling seem to be build out of grass, you should figure out which material supports the grass and select that material in the list. It cannot be that grass stands on its own, so the response cannot be 'grass'. You will notice that in Moshi there is a unique type of building walls materials. There is a kind of bricks that look strong but not baked. They are sliced out of naturally compacted gravel.

Q4 This question wants to capture the material used to construct the roof of the main living area. If the roof is constructed using more than one material then record the material that is used to construct a larger proportion of the roof.

Q5 This question wants to capture the material used to construct the floor of the main living area. You do not need to ask this question if it is obvious by looking around. If there is more than one type of floor material, the interviewer will record the main one.

If there is not a significant main one, the interviewer will record the one of highest value. But if, for example, the floor is covered with grass or carpet, you should ask what material is below the grass.

Q6	This can be organic garbage such as pieces of orange, banana peels or even tomato peels. It can also be inorganic material such as paper, plastic bags etc.
Q7	Here you should check if the food is fully covered, partially covered or not covered. **Fully covered** implies that the food is not visible and dust or insects such as flies cannot reach it **Partially covered** refers to food that is covered in some places and not in others. Flies and other insects can land on the food **Not covered refers** to food that is left open. It may be in a container but insects and flies have full access to it

9.2. T8B. Observations of Animals and Faeces

Purpose	The purpose of this section is to observe whether there are animals and animal faeces in the household and areas surrounding the living room. This section requires you to observe ONLY. You should not ask the respondent.
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2-Q8	This section wants to capture if there are animals in the house or in the living are surrounding the house. This is independent of whether the animal is small or big. What we want to capture is the possibility of having animal faeces in the house or the area surrounding the living room. For these questions, record the number of animals of each type in the field given. If the animal is not included in the list then record it in the SPECIFY OTHER field.
Q9	Count the number of animal faeces that are visible to you and record them using the appropriate response.
Q10	Record a yes if you can smell human or animal faeces while in the house or near the house.

9.3. T8C. Observation of Hand washing facilities

Purpose	
Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	Ask the respondent to show you the place whether they usually wash their hands. If there is more than one place then ask the respondent to show you all the three most popular areas for washing hands ordered by the most frequently used area.

9.4. T8C1: Details

Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2-Q11	Record all the material that is within three meters from the hand washing place
Q12-Q19	Here we want to record the use of each soap found at the hand washing place. If more than one soap is observed then ask the respondent the use of each bar of soap.
Q20	Record the location of the handwashing place with regards to the main entrance of the dwelling. If the dwelling has more than one entrance then ask the respondent for the main entrance which is used most frequently for entry and exit.
Q21	Record the location of the handwashing place with regards to the cooking area. If there is more than one cooking area then ask the respondent to show you the main cooking area.
Q22	Record the location of the handwashing place with regards to the area for defecation.
Q23	Ask for another place where the household members usually wash their hands besides the place that you have recorded. If there is more than one other place then ask for the most common place.

9.5. T8D. Observation of latrine facilities

Q1	Record the time you begin administering this section by pressing the "get time" button.
Q2	Ask the respondent to show you the place whether they usually go for defecation. If there is more than one place then ask the respondent to show you the main place they usually go for defecation.
Q3	Record the location of the latrine. Inside the household: This implies that the latrine is inside the main building. In household compound: Is defined as the area around the household's dwelling that is the household's responsibility to clean and keep up. Less than minute walk from the house: If the latrine is 5 minutes' walk away but is still within the household compound then your response would be 2. If it is outside the household's compound
Q4	Record the type of latrine
Q5	Record whether the latrine has a slab
Q6-Q14	This question wants to capture anal cleansing material that is present in

the latrine facility.

Q15 Record the distance to the nearest handwashing facility. If there is more than one then record the distance to the closest place. If case they are equidistant then record the distance the handwashing facility that is used most frequently.

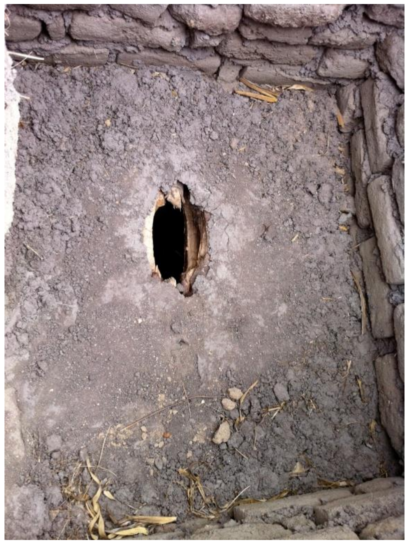
Q16 Record if there is a visible path to the latrine facility. If the path to the latrine is paved, then it is visible. In case the latrine is outside the household and the latrine is surrounded by grass without a clear path that is used then the answer to this would be NO

9.6. T8D1: Pit latrine with slab

Q1-Q8 Record the material around 1 foot radius of the drop hole.

Concrete:

Earth:



Wood:

Q9	Record if the area around 1 foot radius of the drop hole can be swept without ruining the material.
Q10	Record if the area around 1 foot radius of the drop hole can be washed without ruining the material.
Q11	Record if the remaining floor material i.e outside the 1 foot radius is different from that used within the 1 foot radius.
Q12-Q19	Select from the options, the material used to construct the remainder of the flooring material .
Q20	Record if the remaining floor be swept without ruining the floor.
Q21	Record if the remaining floor can be washed without ruining the floor.
Q22	Record a YES if there are more holes than the drop hole.

Q23	This question wants you to record the status of the latrine's platform.
Q24	We define a smooth surface as a surface that does not have any bumps.
Q25	Record if the latrine is a sungura type of latrine.
Q26	This question asks whether the latrine have a wet surface. Here we are trying to see if there is dirty stagnating water in the toilet.
Q27-Q39	Look at the features outlined in questions 27-39 and record if those features are present in the household's latrine.
Q40	Record whether the squat hole is covered. Below are examples of latrines who's squat holes are covered.

Q41	Record the strength of the odour in the latrine facility.
Q42	Record if you observe faeces outside the pit or on the latrine facility.
Q43	Shine a light into the pit to see the fullness of the pit.

9.7. T8E1. Details

Q1 Record if the child is relatively clean and has no offensive odour. You need to make sure that you smell an offensive odour from the child

Q2 Check the child's hands and record if they are dirty. If the child's hands were washed just before you started observing then you would record that they are clean.

Q3 Check if the child's fingernails have soil.

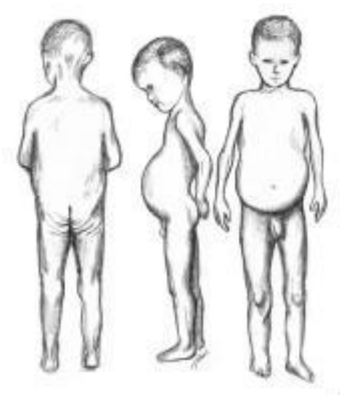
Q4 Record if the child's face is dirty

Q5 Record if the child is wearing an underwear or shorts

Q6 Record if the child is wearing an upper garment. For example, a dress or a shirt.

Q7 Record if the child's clothes are dirty.

Q8 We define a potbelly as a protruding belly, which is not proportional to the child's body.



Q9 Record if the child is wearing shoes. Here we also include flip-flops/ndala independent of their condition.

10. Tab9: Anthropometry

Q1 Record the time you begin this section

Q2 Record the altitude from the GPS device

Q3 Record whether the child is available for measurment

10.1. T9A: Birth Weight

Q2 Record the child's weight at birth. If possible, ask the mother to provide you with the clinic card. If the child was born at home and was taken to a health centre within 24 hours then you can use the recorded birth weight. If the child was only taken to the health centre after a few days or weeks then record -99 (DK).

Q3	Record if the child was unusually small at birth i.e if the child's birth weight was below 2.5 kilograms.
Q4	Record if you saw the child's clinic card or if the birth weight was recalled from memory

10.2. T9B: Anthropometry

Q2	Confirm that the household agreed that anthropometric information be taken. Do not continue with measurements before you fill in this section.
Q3-Q4	Take two measurements for weight. Record the first measurement in question 2 and the second measurement in question 3.
Q5	Record whether the child's weight was taken in the mother's arms or alone.
Q6-Q7	If the weight was taken in the mother's arms then take two weight recordings of the mother.
Q8-Q9	Take two height measurements for the child. Record the first measurement in question 5 and the second reading in question 6
Q10	Record whether the child's weight was taken lying down or standing up.
Q11-Q12	Take two measurements of the child's head circumference.

10.3. Tab9C: Anaemia

Consent statement	
Q2	The consent statement must be read. Confirm that the statement has been read before continuing with this section.
Q3	Record the haemoglobin level to the nearest 0.1
Q4	If the child has anaemia, inform the mother and confirm that you have linked them to the health professional.

Section E. The Community Questionnaire

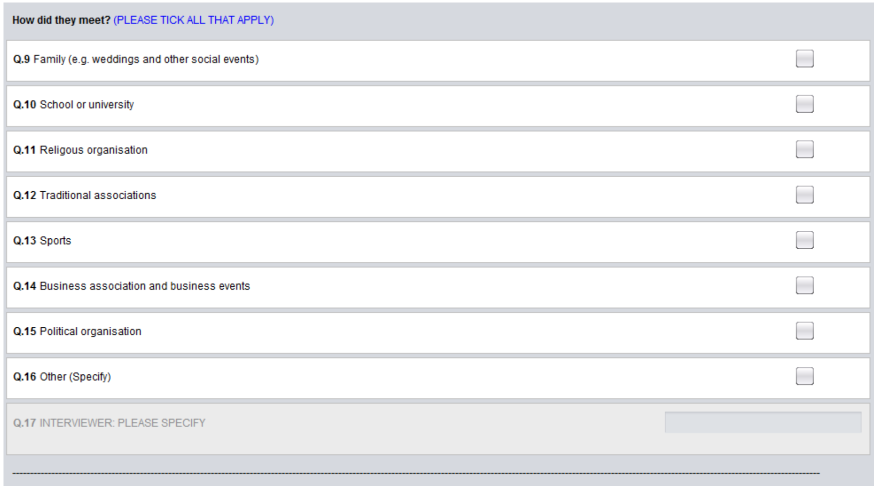
1. Introduction To The Community Questionnaire

The following sections describe the Community Questionnaire, which captures information from Community Leaders on the communities in which the Household Surveys are being conducted.

1.1. General

1.1.1. Answering Convention

Use	**-98**	Does not apply
	-99	Don't Know
Don't Know	Try to find informed respondents for each section. Only use Don't Know if you cannot find anyone providing you with the information.	
Instructions	INTERVIEWER INSTRUCTIONS ARE WRITTEN IN CAPS AND BLUE. DO NOT READ OUT.	
Non-Prompt answers	ANSWER OPTIONS WRITTEN IN BLUE AND CAPS SHOULD NOT BE READ OUT. WAIT FOR RESPONSE FROM RESPONDENT AND SELECT THE ANSWER OPTION THAT BEST CORRESPONDS TO THE ANSWER GIVEN.	
Comment	If in doubt leave a comment! There no need to worry with language or spellings of the comments made. Kiswahili can be used as longer as the message is understood	
Multianswer	The survey contains a number of multianswer questions. Multianswer questions are marked by the question in a label, followed by all possible answers, each with a tick box. Below the last option a dash marks the end of the question. (PLEASE TICK ALL THAT APPLIES) indicates that more than one answer is possible. If the respondent gives an answer that is not part of the list, tick "Other (specify)" and specify the answer in the field below.	



How did they meet? (PLEASE TICK ALL THAT APPLY)

Q.9 Family (e.g. weddings and other social events)	☐
Q.10 School or university	☐
Q.11 Religous organisation	☐
Q.12 Traditional associations	☐
Q.13 Sports	☐
Q.14 Business association and business events	☐
Q.15 Political organisation	☐
Q.16 Other (Specify)	☐
Q.17 INTERVIEWER: PLEASE SPECIFY	

1.1.2. Who interviews

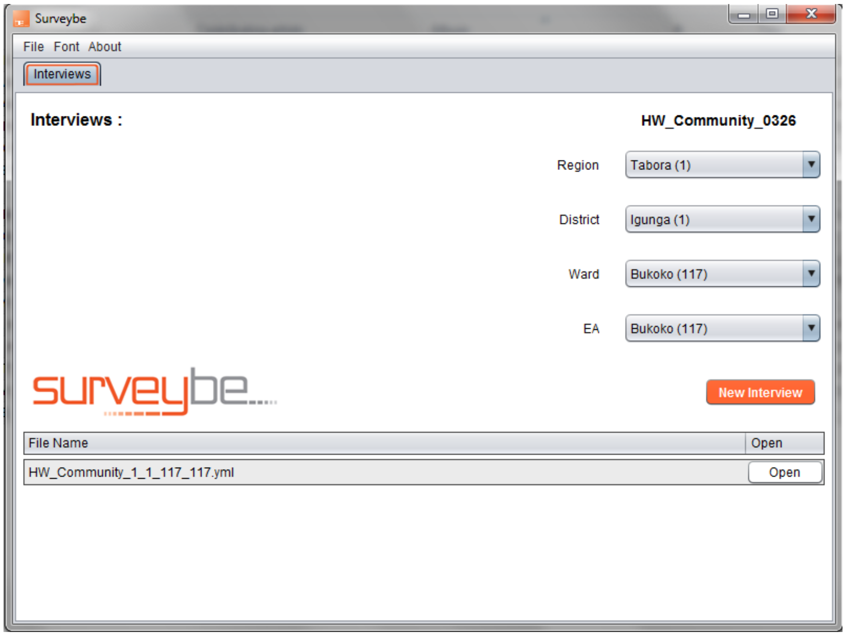
The interviews are normally conducted by the team supervisor. Where this is not possible it should be conducted by an experienced interviewer.

1.1.3. Who is Being Interviewed

The respondent for the village questionnaire should be the village secretary. If the village secretary is not available, another community leader can be interviewed. The respondent must be someone who is aware of and properly informed about government or other ongoing programs in the community. Replacement respondents for the village secretary could include a local government representative or a knowledgeable leader such as school directors/teachers, health professionals, religious leaders, youth representatives, or local business people.

More than one respondent can be selected for the interview

2. The Dashboard



Purpose

The dash board allows the interviewer to select the four key identifiers for each community questionnaire. These four identifiers create a unique file name for each community interview file, for example HW_Community_1_1_117_117.yml.

Remember never rename interview files as surveybe will no longer be able read them.

Key identifiers

For the community you conducting the interview, select the Region, District, Ward and EA from the drop down.

Then click on the New Interview button.

3. Start Screen

Purpose

The purpose of this tab is to check that the right Region, District, Ward, Village and EA have been selected, as well as to identify the interviewer, time, location and respondents.

Q1

Read the Names for Region, District, Ward and Village and the EA ID and confirm that the right EA has been selected.

- ➔ **Click YES** and proceed with the interview
- ➔ **If NO**, go back to the dashboard and open an interview the correct EA, conduct the questionnaire using the correct EA, at the end of the day, ensure that the correct interview file is uploaded to

dropbox. Achive both, the correct and the incorrect interview files, do not delete them!

Q2 Select your name from the drop down

Q3 Click on the GET TIME button to set the start time of the interview

Q4 Copy the GPS coordinates from the GPS program. Record the GPS coordinates of the location where you conduct the interview.

Q5/Q6 The respondent for the village questionnaire should be VEO/MEO (Village Executive Officer/ Mtaa Executive Officer. If the VEO/MEO is not available, another community leader can be interviewed. The respondent must be someone who is aware of and properly informed about government or other ongoing programs in the community. Replacement respondents for the village secretary could include a local government representative or a knowledgeable leader such as school directors/teachers, health professionals, religious leaders, youth representatives, or local business people.

Add one row for each respondent:

Q5 Enter the respondent's full name

Q6 For each respondent select the position:

501 **VEO/MEO or other local authority / official elected / appointed by the Government**

502 **Village/Mtaa chairman or other local authority / official elected / appointed by the community**

503 **Former authority / official (elected / appointed by Government or the community)**
This includes retired 501 and 502

505 **Influential citizen (for historic, economic, or other reasons)**
This is for persons that do not fall on above but are invited for specific reasons based on the known knowledge

506 **Medical doctor / head of medical facility / community health worker**

507 **Social Worker or Similar**

508 **Head of police or military authority**
Security/Defense recognized worker

509 **School director / teacher**
Education related recognized worker

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 1

4. TAB 1. VILLAGE REMOTENESS AND ACCESSIBILITY

Purpose This tab explores the remoteness and accessibility of the Village in terms of:

- Distance, road type and transport to nearest larger village/town/city;
- The size of the village in households and residents;
- Access, type and management of the water supply;
- Access to electricity;
- Access to media – TV, Press and Radio

Q1	Observe if the dwellings in the village are rather crowed or dispersed. Select the more appropriate answer if only some dwellings are crowded. Use your observations from the listing exercise. If in doubt, ask the respondent(s).
Q2	Record the name of the closest larger village/town/city which this village depends on for services or goods unavailable in the village itself. If the village is itself a business center for other villages in this area, ask for the next larger village/town/city.
Q3	Question the respondents on the type of road between the village and the nearest larger village/town/city identified in Q2. You should also be able to observe this from your visit.
Q4	Ask respondents how far away the village/town/city identified in Q2 is in Km.
Q5	From the drop down select the mode of transport that villagers most often use to travel to the village/town/city identified in Q2.
Q6	Record the respondents estimate of how many buses/minibuses stop in the village on typical week.
Q7	This question asks for the total number of households in the village.
Q8	This question asks for the number of **permanent residents**, i.e. the number of persons in this village that spend at least 6 month/per year living in the village.
Q9	Identify whether the village has official boundaries
Q10 -14	Discuss the main water source in the village
Q15 - 18	Discuss whether or not the village has access to an electricity supply and if so, what is the source(s) of the electricity
Q19	Access to a phone includes cell phone and landline. For a village to have access to the cell phone network, at least one network needs to be available inside the village, (not more than a 5 minutes walk from the village).
Q20	Enter how many households have access to a phone out of the total number of households.

Q21	A village has access to television if a television signal can be received inside the village. Note, this does not ask if households own a television. E.g. if a bar or hoteli in the village has a television with signal, the answer to this question is yes.
Q22	Enter how many households have access to television out of the total number of households.
Q23	Record whether the village receives daily or weekly newspapers or magazines.
Q24	Record whether the village receives any radio stations allowing villagers to listen to one or more radio stations. Note, this does not ask if households own a radio. E.g. if a bar or hoteli in the village has a radio with signal, the answer to this question is yes.
Q25-Q29	Select the most popular radio stations, starting from the most popular on the top (Q25), working your way down to Q29. Prompt the respondent(s) with "Which other station". If the respondent(s) don't know any other station, select "Does not apply (-98)" from the DDM. Do not select the same station twice.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 2

5. TAB 2. VILLAGE SERVICES

Purpose	This tab explores the villages access to the basic services of education (primary and secondary), market, health (Doctors/heath centre and Hospital) and Transportation. The level of access to each basic service is explored in terms of physical distance, method of transport to access the service and time taken to reach the service are recorded.
Q1	Record the distance (in kilometres) between the place of the interview and the closest locality that has this service TYPE '0' IF THE SERVICE IS LOCATED WITHIN THE VILLAGE OR WITHIN ONE KILOMETER OF THE VILLAGE.
Q2	Select from the drop down the type of transportation the majority of residents of the village use to travel to the closest service
Q3/Q4	This question asks for the **AVERAGE** of how long it takes to get to this service by the type of transport mentioned in Q2. Record time in hours OR minutes. If the answer is over 90 minutes (1.5 hrs), answer in full hours. If 90 minutes or less, answer in minutes. IF MORE THAN 90 MINUTES, ANSWER IN HOURS INPUT '24' FOR 24 HOURS OR MORE.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

GO TO TAB 3

6. TAB 3. SANITATION, COMMUNITY ACTION, BORROWING & HEALTH

Purpose	This section investigates the most commonly used toilet facilities in the village, the types of community action undertaken in the village, sources of borrowing and the three most common health problems.
Q1	Select the main sanitation (toilet) facility used by most households in this village from the drop down. Refer to notes at the start of this manual describing each type of toilet.
Q2	This question asks about any visits by or discussion with agents or workers from a government or non-governmental institution about water, sanitation or hygiene?
Q3-10	Asks about any collective action activities in the village in the past 12 months and records the types of activities performed.
Q11-19	Asks about who community members borrow money from.
Q20-Q22	Record the three most important health problem of this community, starting from the most important one at Q20, the second most important one at Q21 and the third most important one at Q22. Do not record any health problem twice.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 4

7. TAB 4. EVENTS & NATURAL DISASTERS

Purpose	This tab explores any negative events and natural disasters that have affected households in the village in the past 2 years.
Q1	For each type of event identify whether this event has affected any household in the village in the past 2 years.
Q2-4	Tick Q2-4 identifying in which year the event has affected a household in the village.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 5

8. TAB 5. ASSISTANCE/PROGRAMMES

Purpose	This tab explores which assistance/programmes the community has received in the past two years.
Q1	For each programme identify whether the village has received any assistance for the majority of households over the past 2 years.

Q2	Identify which year the programme started in the village, if the programme has been implemented in rounds, identify the year that the most recent round started.
Q3	Identify which year the programme ended in the village: **If the programme is continuing enter 98** **If the respondent does not know enter 99**
Q4	Enter the frequency of the programme's visits to the village
Q5	This question refers to the households that have **DIRECTLY** benefited from the assistance/program . E.g. for 1. Vaccination campaign, the question asks in how many households persons have been vaccinated.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO TAB 6

9. TAB 6. COMMUNITY EXPOSURE

Purpose	This tab investigates handwashing and sanitation in the village.
Q1-3	Record whether respondents remember having ever heard, seen or read anything about handwashing with soap. And if so when was the last time they heard, saw or read about handwashing with soap.
Q4-6	Record whether respondents remember having ever heard, seen or read anything about sanitation / improving latrines for defecation. And if so when was the last time they heard, saw or read about sanitation / improving latrines for defecation.
Q7-8	Asks about whether over the last 2-3 years, people in this village watched an event that included singers, dancing and plays about Q7 - Handwashing with soap Q8 - Sanitation / improving latrines for defecation.
Q9-14	Explore whether the village has had any event that discussed feces in the community, improving latrines and health. The follow up question explore when this event took place and what follow up activities occurred after the event.
Q15-18	Ask about any other events that sparked improvements in sanitation in the village.
Q19-20	Asks whether the village has a register to track improvements in sanitation. If such a register does exist the interviewer should request to see it and select YES only if you see it.
Q21-24	Ask who in the village are used to build new latrines or improve existing

	latrines
Q25-32	Ask how people get information about options available for types of latrines, supplies and costs YOU SHOULD READ ALL OPTIONS AND TICK ALL THAT APPLY
Q33	Ask about any MSABUNISHAJI in this village. If there are any you should ask the respondent HOW MANY? AND RECORD THE NUMBER IF NO, PUT '0' IF DON'T KNOW, PUT '-99'
Q34	If the answer to Q33 was yes, you should ask how often the MSABUNISHAJI talk to people in the village.
Q35-41	Asks about the help given to households to install slabs, improve the floor or superstructure of latrines YOU SHOULD READ ALL OPTIONS AND TICK ALL THAT APPLY
Q42	Asks whether the village has been declared free of open defecation.
Q43	Asks respondents to compare the general sanitation situation now compare to before interest in sanitation and hygiene was raised
Q44-47	Asks about any households in the community that still defecate in the places other than toilets
Q48-52	Identify whether some people in the community share a latrine with neighbours/other households and the access to public toilets.

VALIDATE THE SCREEN AND MAKE CORRECTIONS IF NEEDED

MOVE TO THE END TAB

10.THE END TAB

Purpose	The End tab is for finalising the interview including recording the end time, validation and recording any additional comments
Q1	Click on the Get Time button to record the end time of the interview.
Q2	On the file menu click on the validate entire interview option and take action to correct any errors or warnings
Q3	Select the status of the interview
Q4	If there were any problems with conducting the interview, please explain them here. If No problems enter “OK”
Q5-8	Are then completed by the Supervisor and Data Processing Department confirming that they have checked the interview.

APPENDIX A. TRAINING TIME TABLE

The following provides an overview of the Interviewer Training Schedule for this project. The Timetable is indicative only and a more detailed training timetable will be issued at intervals during the training.

Day	Dates	Session Length	Time	Session Title	Facilitated by
1	11th Apr 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		15 mins	09:00 am - 09:15 am	Welcome: Introduction to EDI	Leonard Kyaruzi
		45 mins	09:15 am - 10:00 am	Welcome: Introduction project set-up	Joachim De Weerdt
		30 mins	10:00 am - 10:30 am	Becoming an EDI Employee – Contract	Benjamin Kamukulu
		30 mins	10:30 am - 11:00 am	Tea Break	Aris Mgohamwende
		180 mins	11:00 am - 02:00 pm	Becoming an EDI NSSF, SHIB	Benjamin Kamukulu
		60 mins	02:00 pm - 03:00 pm	Lunch Break	All
		30 mins	03:00 pm - 03:30 pm	Becoming an EDI Employee – Finance	Aris Mgohamwende
		60 mins	03:30 pm - 04:00 pm	General overview	Mitti/Mujo
2	12th Apr 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Interviewing skills	Thaddaeus Rweyemamu
		30 mins	10:00 am - 10:30 am	Tea Break	All
		60 mins	10:30 am - 11:30 am	Interviewing skills	Thaddaeus Rweyemamu
		90 mins	11:30 am - 01:00 am	Interviewing skills	Thaddaeus Rweyemamu
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 am - 03:00 pm	Working with UMPC/Del Inspiron 1090	Robert Kamugisha
		60 mins	03:00 pm - 04:00 pm	Surveybe Technology (Using HH Survey)	Respichius Mitti
3	13th Apr 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Map reading, interpretation and use	Sylvia Meku

		30 mins	10:00 am - 10:30 am	Tea Break	All
		240 min	10:30 am - 03:30 pm	Supervisors: Field practice with Maps	Sylvia Meku
		90 mins	10:30 am - 01:00 pm	Interviewers: Surveybe Technology (Using HH Survey)	Respichius Mitti
		60 mins	01:00 am - 02:00 pm	Interviewer: Lunch Break	All
		30 mins	03:30 am - 10:00 pm	Supervisor: Lunch Break	All
		60 mins	02:00 am - 04:00 pm	Interviewers: Surveybe Technology (Using HH Survey)	Respichius Mitti
		30 mins	04:00 pm - 04:30 pm	General Overview	Leonard Kyaruzi
		30 mins	04:30 pm - 05:00 pm	Supervisors' Meeting	Allan Katemana
4	14th Apr 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		90 mins	09:00 am - 10:30 am	Listing Qx Concept and practice	Leonard Kyaruzi
		30 mins	10:30 am - 11:00 am	Tea Break	All
		30 mins	11:00 am - 11:30 am	HH Questionnaire Overview	Respichius Mitti
		90 mins	11:30 am - 01:00 pm	Household Members (HHQ, T1&T2)	Timothy/ Leonard Kyaruzi
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		120 mins	02:00 pm - 04:00 pm	Household Roster (T4)	Thaddeus Rweyemamu
		30 mins	04:00 pm - 04:30 pm	General Overview	Robert Kamugisha
		30 mins	04:30 pm - 05:00 pm	Supervisors' Meeting	Leonard Kyaruzi
	15th April 2012				
5	16th April 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Household Roster (T4)	Thaddeus Rweyemamu
		30 mins	10:00 am - 10:30 am	Tea Break	All
		150 mins	10:30 am - 01:00 pm	GPS capturing	Misinde
		60 mins	01:00 pm -	Lunch Break	All

7			02:00 pm		
		60 mins	02:00 pm - 03:00 pm	HH T1, T2, T4: Mock interviews	David Rutha
		60 mins	03:00 pm - 04:00 pm	General Overview	Matsawil
		30 mins	04:30 pm - 05:00 pm	Supervisors' Meeting	Leonard Kyaruzi
6	17th April 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Introduction to WSP	WB Person
		30 mins	10:00 am - 10:30 am	Tea Break	All
		150 mins	10:30 am - 01:00 pm	Definitions to complex WSP related term	TG / WSP Program persons
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 pm - 03:00 pm	Exposure + Child Health Calendar (T7)	Respichius Mitti
		60 mins	03:00 pm - 04:00 pm	General Overview	*David Rutha*
		30 mins	04:30 pm - 05:00 pm	Supervisors' Meeting	Leonard Kyaruzi
7	18th April 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Durable Goods, Animals & Social Cap (T5 Cont.)	Leonard Kyaruzi
		30 mins	10:00 am - 10:30 am	Tea Break	All
		150 mins	10:30 am - 01:00 pm	Labour and Income (T5)	Leonard Kyaruzi
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 pm - 03:00 pm	Dwelling, Water and Drinking Water (T6)	Allan Katemana
		60 mins	03:00 pm - 04:00 pm	*General overview and Facilitator of the day*	*Amwesiga Bandio*
		60 mins	04:00 pm - 05:00 pm	Supervisors' Meeting	Leonard Kyaruzi
8	19th April 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Sanitation & Retrospective Questions (T6)	Timothy
		30 mins	10:00 am - 10:30 am	Tea Break	All

		150 mins	10:30 am - 01:00 pm	Structured Observations (T3)	Respichius Mitti
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 pm - 03:00 pm	C/Time use, HW/Behaviour & H/Cost (T7 Cont)	Thaddaeus Rweyemamu
		60 mins	04:00 pm - 05:00 pm	*General overview and Facilitator of the day*	*Kayusi Chami*
9	20th April 2012	30 mins	08:30 am - 09:00 am	Arrival & Registration	All
		60 mins	09:00 am - 10:00 am	Observations: Dwelling, F/Storage, Animal and Feces (T8A&B)	
		30 mins	10:00 am - 10:30 am	Tea Break	All
		150 mins	10:30 am - 01:00 pm	Observations: HW, Latrine facilities and Children (T8)	Respichius Mitti
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 pm - 03:00 pm	Questions and answers for T3-T8	All
		60 mins	04:00 pm - 05:00 pm	Supervisors' Meeting	Leonard Kyaruzi
10	21st April 2012	30 mins	08:00 am - 08:30 am	Arrival & Registration	Robert Kamugisha
		120 mins	08:30 am - 10:30 am	Mock Interviews (T1-T8)	All
		30 mins	10:00 am - 10:30 am	Tea Break	All
		90 mins	11:30 am - 01:00 pm	Mock Interviews (T1-T8 cont)	All
		60 mins	01:00 pm - 02:00 pm	Lunch Break	All
		60 mins	02:00 pm - 03:00 pm	Feedback from Mock interviews	Robert Kamugisha
		1 hour		*General overview and Facilitator of the day*	*Leonard Kyaruzi*
	22nd April 2012			**Selection of 35 candidates to go for field practice**	**Administration team**
12	23rd April 2012	3 hours		Haemoglobin test training to Supervisors and Medical trainees	Dr. Jullu
		5 hours		Anthropometry Supervisors and Medical trainees	Tricia
		Whole Day		Travel to the field	Timothy and Diego

13	24th April 2012	2 hours		Listing	All
		3 hours		1 household interview per group. Groups of three enumerators formed	All
15	25th April 2012	6 hours		2 household interview per group. Groups of three enumerators formed	All
14	26th April 2012	Whole day		Review	Amwesiga Bandio
16	27th April 2012	6 hours		Field interviews: Two interviews per enumerator (70 households)	All
17	28th April 2012	Whole day		Review: Feedback from the field, updating instruments	Kayusi Chami
18	29th April 2012	Whole day		Travel to teams individual clusters for rehearsal	Each team
		Whole day		Travel back home	Dropped trainees
19	30th April 2012	Whole day		Listing and sampling	All
20	1st May 2012	Whole day		Household interviews	All
21	2nd May 2012	Whole day		Household interviews	All
22	3rd May 2012	Whole day		Wrap up and travel Back to Bukoba	All

APPENDIX B. SURVEY REGIONS, DISTRICTS AND WARDS

The table below documents the wards, districts and regions to be visited during the survey:

Intervention and Control Wards					
Region	**District**	**Group 1**	**Group 2**	**Group 3**	**Group 4**
Tabora	**Igunga**	Bukoko	Mbutu	Igunga	Igoweko
		Mwashiku	Ziba	Naga	Itumba
		Mwamashimba	Simbo	Ndembezi	Sungwizi
		Nguvumoja	Igurubi	Itunduru	Kinungu
		Kining'inila	Mwisi	Nyandekwa	Mwamashiga
		Ngulu	Isakamaliwa	Chabutwa	Ntobo
Iringa	**Iringa Rural**	Nzihi	Ifunda	Mseke	Izazi
		Nduli	Maboga	Kiwere	Wasa
		Ulanda	Kalenga	Mlowa	Lumuli
Kagera	**Karagwe**	Kamuli	Kiruruma	Nkwenda	Mabira
		Kimuli	Nyakakika	Kituntu	Bugomora
		Kyerwa	Kaisho	Rwabwere	Igurwa
		Nyakahanga	Isingiro	Kibingo	Ihanda
		Kayanga	Bweranyange	Kihanga	Ndama
		Kibondo	Bugene	Nyaishozi	Murongo
Manyara	**Kiteto**	Dongo	Olboloti	Partimbo	Matui
		Kijungu	Dosidosi	Bwagamoyo	Makame
Dodoma	**Kondoa**	Kondoa Mjini	Goima	Chandama	Jangalo
		Busi	Changaa	Bereko	Pahi
		Haubi	Mrijo	Dalai	Makorongo
		Kikore	Mnenia	Paranga	Kalamba
		Ovada	Kisese	Suruke	Kingale
		Farkwa	Kikilo	Thawi	Mondo
		Kolo	Lalta	Kwadelo	Sanzawa
		-	-	Soera	Kwamtoro
	Mpwapwa	Mpwapwa Mjini	Rudi	Chunyu	Kibakwe
		Mazae	Matomondo	Kimagai	Ipera
		Massa	Mbuga	Lumuma	Ving'hawe
Mtwara	**Masasi**	Mwena	Lukuledi		Lisekese
		Chigugu	Nanganga		Namajani
				Chiungutwa	Mnavira
		Marika		Mpindimbi	
				Mkululu	Lipumburu
		Mkundi	Sindano	Chiwata	
Mara	**Musoma Rural**	Nyankanga	Buhemba	Kukirango	Etaro
		Kiriba	Butiama	Bwasi	Nyakatende
		Bukima	Nyambono	Buruma	Murangi
		Nyamimange	Kyanyari	Tegeruka	Butuguri
		Suguti	Bukumi	Mugango	Masaba
		Muriaza	Bukabwa	Buswahili	Bwiregi
Pwani	**Rufiji**	Ngorongo	Kibiti	Bungu	Chumbi

Intervention and Control Wards					
Region	**District**	**Group 1**	**Group 2**	**Group 3**	**Group 4**
		Mchukwi	Ruaruke	Mahege	Ikwiriri
		Maparoni	Mbwara	Mtunda	Salale
		Mgomba	Mwaseni	Mbuchi	Kiongoroni
Rukwa	**Sumbawanga Rural**	Milepa	Kaengesa	Muze	Kasanga
		Matai	Sandulula	Sopa	Mwimbi
		Kalambazite	Mtowisa	Kaoze	Laela
		Mpui	Lusaka	Mambwekenya	Miangalua
	Total Wards currently	**45**	**44**	**46**	**46**
Replacement Wards					
Region	**District**	**Handwashing**	**Sanitation**	**Sanitation and HW**	**Control**
Iringa	Iringa Rural	Magulilwa	Mgama	Kihorogota	Itunundu
Kagera	Karagwe	Ihembe	Nyabiyonza	Nyakasimbi	Rugu
Mtwara	Masasi		Mchauru	Namatutwe	
		Nanjota	Lulindi	Mbuyuni	
Dodoma	Mpwapwa	Mima	Mlunduzi	Berege	Luhundwa
	Kondoa	Chemba	Masange		
		Ovada			
Manyara	Kiteto	Songambele	Engusero	Njoro	Lengatei
Rukwa	Sumbawanga Rural	Katazi	Mwazye	Kipeta	Msanzi

APPENDIX C. WORKING WITH THE DELL INSPIRON 1090

1. USING YOUR NETBOOK

Your Duo PC is a netbook that functions in a very similar way to a normal computer. The main difference is that the Dell Inspiron Duo is designed to be used in two different modes, first as a normal **netbook as** you know it, and second as **a tablet PC**. In both, the netbook and tablet PC mode, the Dell Inspiron Duo is equipped with a **multi touch display** that allows you to operate it with your **fingers**, making it a very useful PC for conducting surveys in the field.

Note: the following screenshots relate to a particular model, the Dell Inspiron Duo 1090. Your model may differ, but this guide can serve as a general reference for what care, usage and safety guidelines interviewers need to be aware of before fieldwork begins.

2. GETTING STARTED

This section will teach you all the basic things you need to know in order to be able to use your Dell Inspiron Duo in the field for surveying purposes.

2.1. *TURNING THE PC ON AND OFF*

1. **Turning the Computer On**

Make sure that you press the Power switch shown above to turn on the computer.

2. **Turning the your computer off**

To turn off your computer using the Start menu, click the **Start** button , and then, in the lower-right corner of the Start menu, click **Shut down**.

When you click **Shut down**, your computer closes all open programs, along with Windows itself, and then completely turns off your computer and display. Shutting down doesn't save your work, so you must save your files first.

3. **Using Sleep**

If you will not be using the computer for a very short while, you may not want to shut down the computer. Putting your computer into **Sleep** mode is an easy way to save battery life during short breaks in use. To put your compueter into **Sleep** mode:

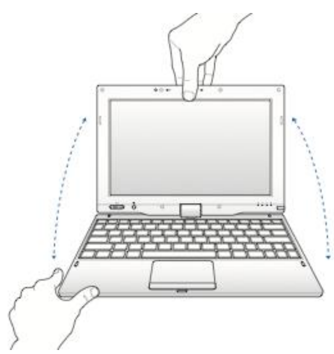
1. Click the **Start** button on the taskbar.
2. Click **Sleep**

2.2. USING THE DEL DUO IN TABLET PC MODE

A special feature of this computer is the Tablet PC mode, in which built-in keyboard and track pad are hidden, and in which you operate your it using the touch screen with your **fingers**. **DO NOT use any other object apart from your finger**, as they may scratch or damage the surface of the LCD Screen and screen sensitivity may be reduced.

To use your Duo Dell in the Table PC mode:

1. Firmly hold the edge of your computer, and then open the display panel to a 90° angle, as shown in the picture



2. With both of your hands, firmly hold the two edge of your computer, and then using your thumb push the LCD outwards.

Assis the LCD to spine halizontally through 180° untill it is flat with its holding frme.

3. Close down the display panel.

2.3. Screen Touch Functions

Mouse	Stylus Pen	Function
Single-click	Single-tap	Single-tap with the pen to select an item.
Double-click	Double-tap	Double-tap with the pen to run an item.
Right-click	Press and Hold	Press and hold for more than 3 seconds with the pen to display the Pop-up menu.
Drag	Drag	Press an item and drag it with the pen to move the item.

Mouse	Finger touch	Function
Single-click	Singel tap	Selecting item
Double-click	Double-tap	Runing/upening an item
Right-click	Press and hold	Touching and pressing for about 3 seconds display the pop-up menu
Drag	Drag	Touching and dragging an item moves it

2.4. Volume and Screen Brightness control

Two functions particularily important for the purpose of conducting interviews are controlling the volume and the screen brightness of your computer.

In most cases, before beginning an interview you want to ensure **that the sound is switched off on your computer**, because the sound may bother respondents.

	Key combinations
• To turn the sound of on your computer/mute the speakers, press **Fn** and **F10**	**Fn** and **F10**
• To decrease speaker volume, press **Fn** and **F11**	**Fn** and **F11**

- To increase speaker volume, press **Fn** and **F12** **Fn** and **F12**

Another important function is controlling the screen brightness. Since some interviews (specifically listing) are conducted outside in **daylight**, you want to adjust the screen brightness accordingly. Generally, you will notice that you will not be able to see the screen when you switch on the computer in natural daylight until you have moved into a shade/ darker location. However, once inside in a house, you should decrease the screen brightness in order to extend battery life.

Key combinations

- To decrease screen brightness, press **Fn** and **F5** **Fn** and **F5**
- To increase speaker volume, press, press **Fn** and **F6** **Fn** and **F6**

When using your computer with a **high screen brightness** outside in **daylight**, make sure that you **frequently check the remaining battery charge**, particularly **before** a new interview begins. High screen brightness decreases battery faster. Try to avoid changing the battery during an interview.

2.5. Locking Screen

When conducting interviews, there may be only few minutes before subsequent interview. This is where it becomes less worth to put your machine on sleep or even shut down. At the same time you may not want to exit from your questionnaire (especially listing). Leaving a questionnaire open and the screen active may intertain unintended entries. Putting your computer into **Screen lock** mode is an easy way to prevent unintended entries during short breaks.

1. Click the **Start** button on the taskbar.
2. Click **Lock**

To activate the screen, slightly press on switch.

2.6. Windows Journal

While interviewing, you may want to write down some comments to your supervisor in order not to forget them. **Windows Journal** is an electronic sheet on which you can write anything you want using your finger. The advantage is that you can use your fingure in the same way as you would use a standard pen. Your computer will be installed with a quick launcher in such a way that one button launches the Windows Journal.

It can be helpful to keep Windows Journal open (though minimized) throughout the interview, so that you can immediately write down anything unusual you encounter.

2.7. Using the Battery

The batteries of your computer last long enough to conduct even very long interviews, but only if they have been **properly and fully charged**. Once in the field, electricity may often be unavailable, so in order to avoid running out of power, it is best practice to:

1. Always charge the batteries of your computer before and after conducting interviews.

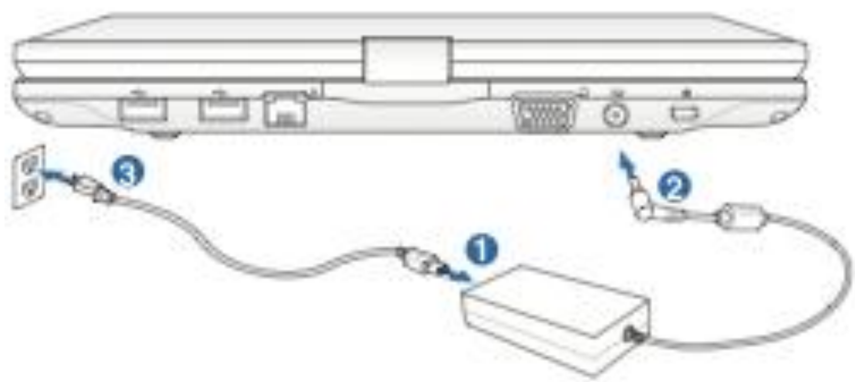
2. Always carry your exyernal battery/power pack.

3. Frequently monitor the Battery Charge to ensure no interview data is lost due to low power.

4. Never allow a computer to hibanate itself with applications (surveybe, GPS capture, etc) running.

2.8. Charging the Battery using standard electricity

To charge the batteries of your Dell Duo connect it to the power socket as indicated in the picture below.



Charge your Computer until the battery charge indicator on the side of the power switch goes off. If the indicator is still on, the batteries are not fully charged yet, if the indicator LED is **orange** then batteries status is very low. See more details below:

Battery Charge Indicator

The battery charge indicator (LED) shows the battery charging status as follows:

Powered ON / Standby mode

	With Adapter	Without Adapter
High battery power (95%–100%)	Green ON	Off
Medium battery power (10%–94%)	Orange ON	Off
Low battery power (0%–10%)	Orange Blinking	Orange Blinking

Powered OFF

	With Adapter	Without Adapter
High battery power (95%–100%)	Green ON	Off
Medium battery power (11%–94%)	Orange ON	Off
Low battery power (0%–10%)	Orange Blinking	Off

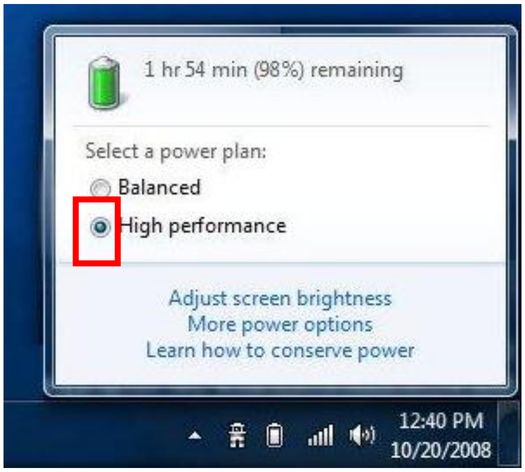
2.9. Removing and Attaching a Battery

Dell inpiron Duo have intergrated battery. Users have no provision of replacing batteries. A lid like of a battery in other computers is provided but not for the purpose.

2.10. Monitoring the Battery Charge

It is important that you frequently monitor the Battery Charge, **BEFORE** the interview takes place, and **DURING** the interview, to make sure that you do not run out of battery while interviewing a household.

On the bottom right of the Windows task bar, you find the battery status icon. (red frame). Clicking on it will display the remaining battery life in hours and minutes, as well as percentage of the fully charge battery.



You should connect your computer with an external battery/power pack whenever the indicator shows 15%. Externaal battery/power pack charges your in-built battery. Charging with power pack goes very fast thus you should monitor when the indicator displays 100% you should get it disconnected. Provided power packs can charge your computer in full 2 times at minimum depending on the program being run.

3. Use and Safety Precautions

3.1. Use related

- Operate the touch screen LCD following the instructions below, i.e. **ONLY** by use your **fingers**. Dell Duo respond better to heat dispased from your body at a point contact. Use of stylus pens may still work but not as efficient as using your clean finger. **NEVER** use any sharp object, as the LCD will never respond to them at the same time resulting into scratches or damage the LCD surface.
- Use the computer with special care. Avoid dropping the computer or any of its parts and do not put heavy objects on top of it. Take particular care not to drop the product when using the computer on the stand.
- Keep the computer and all its attributes out of reach of children
- Do not place a candle, lighted cigar, etc. over the product.
- In case of bad weather/ lightning, immediately turn the system off and disconnect the power cord from the wall outlet.
- Do not connect any devices to the connectors or ports of the computer, unless you have been permitted to do so by your supervisor.
- When the computer is used for a long time, an 'odd' smell may arise from overheating. Ventilate the room frequently and ensure the computer has room for ventilation around it.

- Only use computer parts (e.g. power pack) given to you by your supervisor.
- When moving the product, turn the power off and separate all connected cables first. Failing to do so may damage the product or cause users to trip over the cables.
- For cleaning the computer screen, only use the cloth provided to you by your supervisor. Using a cleansing solution or chemical not explicitly developed for computer use may damage the product.
- A hard disk is extremely sensitive to external impact and may cause data loss on the surface of the disk. To avoid damaging the hard drive, avoid:
    - External impacts to the disk while assembling or disassembling the computer.
    - Turning the computer off or reset by a power failure while the hard disk drive is in operation.
    - Moving the computer or causing any impact caused to it while the hard disk drive is in operation.

3.2. POWER RELATED

- Do not touch the power cord with wet hands, as there is a danger of electric shock.
- If the power cord or power outlet makes a noise, disconnect the power cord from the wall outlet and contact the supervisor, as there is danger of electric shock or fire.
- Do not use a damaged or loose power cord or power outlet.
- Plug the power cord into the power outlet firmly. Failing to do so may cause fire.
- Do not unplug the power cord by pulling only the cable. If the cord is damaged, this may cause electric shock.
- Do not bend the power cord excessively or place heavy objects on it.
- Keep the power cord out of the reach of infants and pets.
- If water or another substance comes into contact with the power input jack or into the computer, disconnect the power cord and contact your supervisor.
- Keep the power cord and power outlet clean.
- Never disassemble parts (e.g. the power supply or AC adapter). There is a danger of electric shock. If the computer does not work properly, the interviewer needs to contact the supervisor.

- Do not block the ports (hole), vents, etc. of the product and take care not to insert any alien substances into the product.
- Do not touch the antenna and power outlet, as there is a danger of electric shock.

3.3. Battery Related

- Do not dispose of non-functioning external batteries or power pack. Carry them with you and take them back to the headquarter office, as improperly disposed batteries may cause fire or an explosion.
- Do not throw or disassemble the battery, as this may cause injury, fire or an explosion.
- Avoid contact with metal objects such as car keys or clips when storing or carrying a battery. Contact with metal may cause excessive current and high temperature, which may damage the battery or cause a fire.
- Do not place the battery into a fire or heat it, as there is a danger of fire or explosion.