Global Water Insecurity Study Field Manual



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This is your manual and your everyday guide to all the different tasks that you will be expected to do in the Global Water Insecurity Study. You will work through this manual during your fieldworker training, and you will get to know and understand everything that is in it. Thereafter, you can carry it with you in the field so that you can refer to it when you need to check on anything about your job.

When you read through this introduction, you will have a broad overview of:

- What water security is
- What the Global Water Insecurity Study is about
- You should also have a good understanding of your role is in the project.

1. What is water security and why study it?

Water security is the ability to reliably access water in sufficient quantity and quality for all household members to support an active and healthy life. Access to safe and sufficient quantities of water is critical for optimal agricultural productivity, nutrition and health. However, water for a healthy life is unreliable, inadequate, undrinkable, or unaffordable for millions of people around the world.

A number of attempts have been made by researchers from different parts of the world to develop alternative ways of measuring water insecurity at the household level in both low and middle income countries as well as low income settings in the United States. A review of the studies has shown that none of the studies used crossculturally equivalent methods for measuring household water insecurity.

It is hoped our study and on-going studies elsewhere will

- find out new facts about ways of measuring water insecurity across various cultural settings
- help to understand which questions in the survey were well understood by research study participants

2. What is Global water Insecurity study?

This is a research study of different factors affecting have how water is acquired and used in households.

The main purpose of the study is to collect and store information to:

- Learn about the various ways people acquire and use water
- Any consequences that arise from household water insecurity
- Develop a standard measure for assessing how people acquire and use water

3. Study Area

The global water insecurity study is being conducted in 14 countries including Mexico, Guatemala, Peru, Brazil, Nigeria, Ghana, Ethiopia, Uganda, DRC, Tanzania, Tajikistan, Nepal, Bangladesh and Malawi.

In Uganda the study is planned to be conducted in 5 rural villages in Arua district. In each village, 50 households have been selected randomly from which one person per household who is most knowledgeable about water is acquired and used in the household will be interviewed. See below the 5 villages selected by county, sub-county, and parish

	1	2	3	4	5
DISTRICT	ARUA	ARUA	ARUA	ARUA	ARUA
COUNTY	AYIVU	AYIVU	MADI OKOLLO	TEREGO	VURRA
SUBCOUNTY	PAJULU	AROI	OFFAKA	OMUGO	ERUBA
PARISH	POKEA	ALIBA	ELIBU	DUKU	VURRA
VILLAGE	KASUA	YIBA	ALIBU NYANYABU	AMBAKUA	AMBALA
Enumeration Area	KASUA 'B'	YIBA	ALIBU NYANYABU	AMBAKUA 'A'	AMBALA 'B'

4. What are we trying to achieve in this project?

The project has been set up to provide us with detailed information on how people acquire and use water using questions that have been used in other places. We do not have information as to whether the questions asked on water use can be understood well by participants in our setting.

The information we have from other sources is insufficient and a lot has changed since it was collected. As a fieldworker, you will be helping us to collect very much more detailed and reliable information.

5. Who will participate in this study?

In this project we are interested in three important subjects. We refer to these as our "main subjects". These subjects are

Villages – referring to government administrative units or groups of buildings that we come across in the study area that are part of a bigger village. It includes huts and houses where people live (*homesteads*). They usually have a leader.

Households – this refers to the social groups to which people belong and consists, in most cases, of the family group and any other people who live closely with the family. They usually eat together. A household may be spread across several buildings or several households may share a building.

Individuals – this refers to the individual members of the household. These people are the subject of greatest interest and together they make up the population that will be studied. In this study the individuals who will be interviewed are adults (i.e. individuals ≥ 18 years) or 'emancipated minors' who are able to consent.

The survey coordinator and field operations manager will also debrief all the survey interviewers in order to understand which questions in the survey were well understood by research study participants

6. Who is in the field team?

This project has research staff members from many different educational backgrounds and with quite different training and experience including; Field operations Manager, Study Coordinator, Team leader, Study clerk and interviewers.

Fieldwork team

The main task of the fieldwork team is data collection at both household and individual level. The roles and responsibility of each team member are outlined in the Roles and responsibilities log. Please carefully check your roles.

The team will be headed by a Field Team Leader who reports to the Study coordinator. The field operations manager will be responsible for coordinating human, financial and logistical operations including making contact with local leaders.

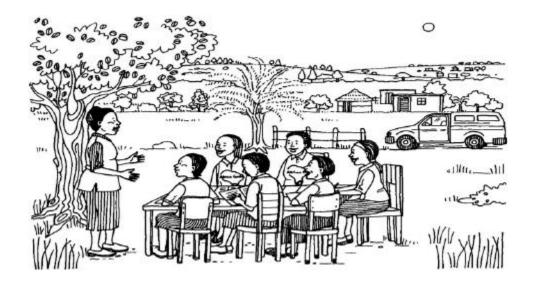
For the purposes of efficiency of fieldwork, the study team will use one car and will work together in each village for a maximum of 2 days per village.

The 50 households in a village will be divided among the 5 interviewers that will be under a designated Village health worker (VHW) or Local council (LC) member whose role is to notify individuals in their area about the schedule of activities and encourage them to participate.

Team Leader

The team leader is responsible for all fieldwork and all the information that is collected by the fieldworkers. The team leader will handle all logistics on behalf of their fieldworkers. This includes ensuring that the fieldworkers have all required transport, stationery and data forms, planning on how the fieldworkers handle their work, provide training and closely monitor

everything that the fieldworkers do in the field. The team leader ensures that at the end of each working day, all completed work from the fieldworkers is submitted to study coordinator for checking. The team leader ialso moves ahead of the team to identify households selected and assigns to the interviewers.



Study coordinator

The study coordinator is responsible for ensuring completeness and accuracy of data collected from the field; ensure that fieldwork and data processing teams comply with set processes and standard operating procedures; diagnosing and reporting on levels, patterns and trends of data errors (both during collection and processing); coordinate the production and distribution of a centralized progress tracking report (Unified Report) so that data collection and data processing progress is properly accounted for and round roll-over activities are able to be done timely; and coordinating quality improvement inputs, processes and outputs of both fieldwork and data processing units.

The study clerk

The study clerk under the supervision of the field operations manager will conduct;

- a) **Document Production** which is largely in-house printing of data forms; they will control which forms to use.
- b) **Document Control** which is the process of accounting for all data forms and is done through a system of scanning a document's version every time a data form exchanges hands. This system of document checking is the basis on which a document *chain of custody* is maintained. In addition the document scanning system is the foundation on which the concept of a Unified Report is based on.
- c) **Scanning of forms**; will scan all consent forms and questionnaires. The consent form and questionnaire for each participant must be stored as one unit and saved with participant IDNO as the name of the file.
- d) **Document Archiving** is the filing of all the data forms for the purpose of long term safekeeping.

The field operations manager

The field operations manager will conduct the recruitment of staff, plan workshops, and manage both the human resources and finances for the study. In addition the operations manager will introduce the study to the sub-county authorities and handle any communication challenges

between field teams and the community. She will also work closely with the team leader to ensure that community entry meetings are conducted 1-2 days before teams enter the EA.

The scientific team

Many of the *scientists* (also called *principal investigators*) will spend time preparing training materials and will also visit you in the field, but they are mainly based in the central office.



The first main job of the scientists is to design and develop the study and to make sure that it is fully operational. Once this has been done their next main task is to analyse the information and to write detailed reports and articles about this information. This will assist planners and service providers to understand this information and to use it for policy making and to develop health and population programmes. The products of research are these scientific reports and articles which are also used as the measure of research production. So you now see that everyone employed is important in contributing to the final product; i.e. the scientific report. The study clerk prints and controls the forms. The fieldwork team collects the information. The quality control section ensures that the information is accurate and complete. Finally scientists write up the scientific reports. This also teaches you that in research every role or job is dependent on the other. We therefore are all a team that has to work together for the same objective.

The management team

The project has *Principal Investigators* (*PIs*) who are the scientists ultimately responsible for the project and provide overall scientific leadership of the project.

The PI, co-investigators and the field operations manager/study coordinator/team leader come together to form a *Study Coordinating Committee (SCC)*. The SCC is responsible for ensuring that a study is implemented in accordance with its approved protocol; provide ongoing review of progress and general conduct of the study; make decisions about measures to improve or facilitate protocol implementation or adherence.

Work of the managers

The management team is responsible for making sure that the project runs smoothly, effectively and efficiently at all times. This involves making sure that the many staff members are keeping up with their tasks. It requires careful attention to:

- each staff member and his or her performance
- checking all work routines
- managing equipment and transport
- co-ordinating the team



When you have worked through this section, you will have an overview of the steps that you need to go through when you make first visits to households for data collection. In particular, you will know how to:

Enter households

- Introduce yourself as an interviewer /team leader
 - Explain the goals and objectives of the BIS project
 - Conduct interviews with different household members
 - Obtain formal consent from household members to participate
 - Identify the informants and consent them for interview
- Conduct the interview

1. General introduction

Most likely you will be visiting the households for the first time during after your training. As an interviewer you visit households and ask people to provide us with information about the intimate details of their lives. It is important for us to offer them clear and understandable information about the project and to obtain their free and voluntary consent to participate in this research project.

For some of you this will be the first time that you interview members of the community and collect information in this way. It is important that you should know how to conduct yourself during these interviews.

You must make sure that you

respect the rights of the people you interview obtain accurate and reliable information maintain good and open relationships with household members over a long period of time.

In this section of the manual we will run through the various steps that you need to go through in order to gain proper entry to the structure and to prepare the ground for the collection of information from the people living there.

2. Entering the structure

When you arrive at the household, you should ask for the owner of the homestead. If these people are not available, senior household members equally suitable. You will need to explain that you are an interviewer for the Global Water Insecurity Study and ask for permission to meet with and interview one member of the household who is most knowledgeable about water situation in the household.

3.Approach to informed consent

(a) Informed consent

Before any information can be collected from people in this community we need to be sure that they understand everything about our research project, and the type of information we will be collecting from them. Once we are sure that they are well informed and understand the project,

they will be asked to participate in the research project. This process of informing people and obtaining their permission to participate is called "informed consent". We take this very seriously because people in this community have rights and they do not have to take part in any study if they do not want to do so. It is our responsibility to inform them by explaining honestly and in simple language about the following:

The purpose of the study

The type of information that will be collected

The methods we will use to collect this information

The ways in which this information will be used

The likely benefits and possible disadvantages, if there are any, which this will have for them individually and as a community.

(b) Confidentiality

One of the promises that researchers make to the people who provide them with information is that they will not allow anyone outside the research team to know who they are, or to look at the information that they have collected unless they are given special permission to do so. When we say something is "confidential" we mean that we will not tell it to anyone else, except people who are involved in research like the scientists. This is one of the most important rules in any research project and it is a serious offence to break this promise.

(c) Community consultation

Leaders in the community must be consulted before any research project is started in a community, but this is not the same thing as getting informed consent. These leaders are very important people and we need to make sure that they understand the research project and the information it will be collecting. Once they understand and support the project they will give us permission to come into the community, to visit the homesteads and to meet with the household members – we call this "community entry". But they cannot give us permission to collect information from the people who live in the community – only the people themselves can do that.

(d) Different levels of information and consent

Information may need to be provided at the level of:

the village head (LC chairman) and the LC1 executive committee the household (to the household head) the individual.

(F) VERBAL CONSENT

Verbal consent applies when we ask very general demographic questions and do not carry out any invasive procedures. In this study verbal consent will be given. The participant will receive a copy of the consent form signed by the interviewer but not the participant. The participant will only attest to the acceptance of the survey by a verbal response.

NB: Read through the consent form to familiarise yourself with the content.

4. Guidelines for conduct and practice

Many scientists in Uganda, in the rest of sub-Saharan Africa, and in many other countries in the world will be following our progress, and will have a great interest in the results of our research. It is essential that we have some regulations to guide the way we conduct ourselves and apply ourselves to our daily tasks. The following regulations are intended to assist us in reaching these high standards of practice:

(a) General conduct

- Your conduct must be professional and your behaviour must be congenial in dealing with the public at all times.
- Household members must be shown the greatest respect and you should avoid getting
 Into disagreements or conflict with anyone in the community.

The co-operation and good will of people in this community are critical for the success and sustainability of our work. Please help us to build a close relationship with the people in this area.

(c) Dress and identification

The way we present ourselves to household members during our daily work in the community is a measure of our respect for them. It is therefore very important that we are well turned out and neatly dressed at all times. All other items of clothing remain the responsibility of the fieldworker but it is important to have descent dressing acceptable by the community.

(d) Incentives and rewards

It is not acceptable to offer informants or other household members special rewards for participating in this research project. Their participation should be based on their understanding of the project and should be free and voluntary. The offer of rewards or incentives unfairly influences them and creates expectations that will cause problems for all other researchers in the district.

(e) Working hours

Field based employees, like Fieldworkers, have a ten consecutive day (10) work Working hours are variable depending on operational requirements but employees must work for at least 8 hours in each day.

(f) Time keeping

In any scientific research project it is very important that the information we collect is as reliable and as exact as possible. It is also important for our work to be completed on time. You will therefore be assessed on your ability to do your work accurately and on time. You will be expected to be at work on time, to attend all meetings called by your supervisors, to complete the work that is set for each day, each week and for each round. You will be monitored very closely and carefully to ensure that you are meeting these requirements.

(g) Co-operation and teamwork

We are in a position to learn from each other and to support each other.

From time to time it may be necessary for us to move you around and help each other. We must

all strive to be good and co-operative members of this team to assist each other and to do our best to get the job done.

h) Attendance at meetings

Regular and punctual attendance at all supervision and training meetings is expected of all Fieldworkers. You will also be expected to attend a monthly meetings or any other meeting you might be asked to attend.

(i) Collecting data and managing forms

Our main goal in this project is to collect information. We therefore expect you to collect information with the greatest of care and to carefully organise and look after your forms at all times.

It is a serious offence in this project to write down incorrect information or to lose or spoil forms in the field. Lack of care with data collection or falsification of data may lead to dismissal.

Chapter 3: Conducting an interview

Your main task, as a fieldworker, is to interview informants and to obtain reliable and accurate information from them. In order to do this you will need to conduct the interview carefully and sensitively. In this section we provide you with some guidelines to help you with this task. You will become more and more skilled at conducting these interviews with practice.

(a) Building rapport and trust

The relationship that develops between you and your informants will affect the quality of the information you collect. It will also influence the willingness of the informant to continue participating in the BIS project over a longer period of time. Try and make a good first impression. Do your best to make your informant feel at ease. Greet the respondent with a smile and introduce yourself. Respect the cultural beliefs and practices of your informants at all times. Try and fit in with household routines, and do not impose yourself on informants at times that are obviously inconvenient. Be professional in your relationship with community members. This is particularly important and may be difficult to do since many of you are known in this community. Maintain complete confidentiality and do not share any of the things you have learned with anyone besides your supervisor or fieldwork manager. Be open, friendly and interested in the informant's responses. Avoid becoming personally involved with your informants or treating any of them differently or preferentially. Do not hurry the interview. The informant will sense your impatience and give you answers that are incorrect. Try and conduct the interview in a quiet place where you can work privately and without interruptions. Always have a positive approach. Tell the respondent "I would like to ask you a few questions". Never use words like "Are you too busy?" Such questions invite refusal before you start.

(b) Language and culture

Interviews will be conducted in Lugbara since the population is Lugbara speaking and are more likely to understand the questions in their own language. The forms are written in English, but they have been carefully translated into Lugbara, using words that are known and are understood in the local community. In this way we can be sure that each of you are asking the same questions of each informant and using the identical words to phrase the questions. It may be necessary to rephrase the question if the informant does not understand it the first time. It is

Chapter 3: Conducting an interview

important not to change the meaning of the question when you rephrase it, or to phrase it differently for different informants. Make sure when you rephrase questions that they are expressed in a manner that is culturally acceptable. All of the informants in this area should be Lugbara speaking but you may occasionally come across someone who is not comfortable with Lugbara as the language of interview. If you cannot manage to conduct the interview in English, we suggest you refer this matter to your supervisor.

(c) Asking questions

Be sure that you know the forms and you are familiar with all the questions on the form before you conduct the interview. If you do not understand the questions, you will not be able to guide your informants through the interview. You will certainly not be able to rephrase questions, nor to assist informants with questions that they do not understand.

- Be neutral throughout the interview.
- Never suggest answers to the respondent.
- Do not change wording or sequence of questions.
- Never allow the informant to think that she has given right or wrong answer to the question either by your tone of voice or facial expression.
- Never appear to approve or disapprove of any of the informant's responses.
- Do not form any expectations about the ability or knowledge of the informant.
- Deal with all the informant's questions or concerns as frankly as possible

(d) Recording answers

Be sure that you know how to fill in the forms

Be sure that you know how to use the various documents that you are carrying with you in the field.

Chapter 4: Rules & Standards for questionnaire Completion

When you have worked through this section, you will know how to ask and complete the different questions on the questionnaire. We will practice filling in forms during the training, but you need to have read this section carefully beforehand.

In 'General rules for completing forms' we will describe aspects of questions, codes, and sequence.

Different questions have different types of answers. Here are some examples of different questions extracted from your questionnaire. Think about the answers that are possible:

SINGLE RESPONSE QUESTIONS eg.

Are you 15 years of age or older? Yes or NO. One response is expected

CODED QUESTIONS eg

In the last 4 weeks, how frequently did you of anyone in your household **worry** you would not have **enough water for all of** your household needs? Although responses are pre-coded, the respondent may not mention exactly the coded response but the interviewer has to think through where the response of the client falls. Most of the questions in this study are of this type. You need to practice how to respond.

- 0....Never
- 1....Rarely (1–2 times in the last 4 weeks)
- 2....Sometimes (3–10 times in the last 4 weeks)
- 3....Often (11-20 times in the last 4 weeks)
- 4....Always (More than 20 times in the last 4 weeks)
- 9....Don't know
- 88...Not applicable/I don't have this

Chapter 4: Rules & Standards for questionnaire Completion

WRITTEN ANSWERS

In answer to the question 'What were you expected to give in return? you must write down the name of what should be given in return. We call this a written answer or open answer.

NUMBER ANSWERS

The answer to 'How old are you?' would be the number of years old the person is, for example 46. We give you an answer box in which to record numbers:

OR How many children (≤18 years) live in your household?

DESCRIPTIVE TEXT

Sometimes you will need to record quite a large amount of written information. For example in answer to the question eg 'Can you tell me some ways that the water situation here affects how infants (under 12 months of age) are fed?' (*Interviewer, prompt for three ways.*). Here we provide you with more space than for written answers and give you dotted lines on which to write the details:

NOW READ THROUGH THE ENTIRE QUESTIONNAIRE TOGETHER AS A GROUP TO UNDERSTAND THESE TYPES OF RESPONSES.