

BOHEMIA CENSUS

Data Entry Guide

V1.0 2020-01-28

Executive summary

This document is a guide for data “capture” (aka “collection” or “entry”) for the baseline census of the Bohemia research project. It is meant to facilitate the work of fieldworkers and those who are training fieldworkers in understanding the structure, flow, and use of the Bohemia census digital form. This guide does not include details pertaining to the configuration of tablets, nor instructions regarding server set-up, since these tasks should be handled by data managers and IT specialists using the [“How to set up the data collection device” guide](#) and [“Admin guide for setting up the Bohemia project data system \(ODK+\)” guide](#), respectively

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General instructions

Open application: Turn on your Android device and open the “ODK Collect” application. Its icon has the appearance of a clipboard with paper on it.



Main screen: Once you have touched the ODK Collect icon, you'll be brought to the main screen. It contains six options, each represented by a horizontal grey block with text. The below text from the ODK Collect official [documentation](#) explains what each menu option does.

Fill Blank Form

Lists available blank forms and lets you select a form to begin filling out.

Edit Saved Form

Lists completed and saved forms and lets you select a form to edit.

Send Finalized Form

Lists finalized but unsent forms and lets you select forms to send to the server.

View Sent Form

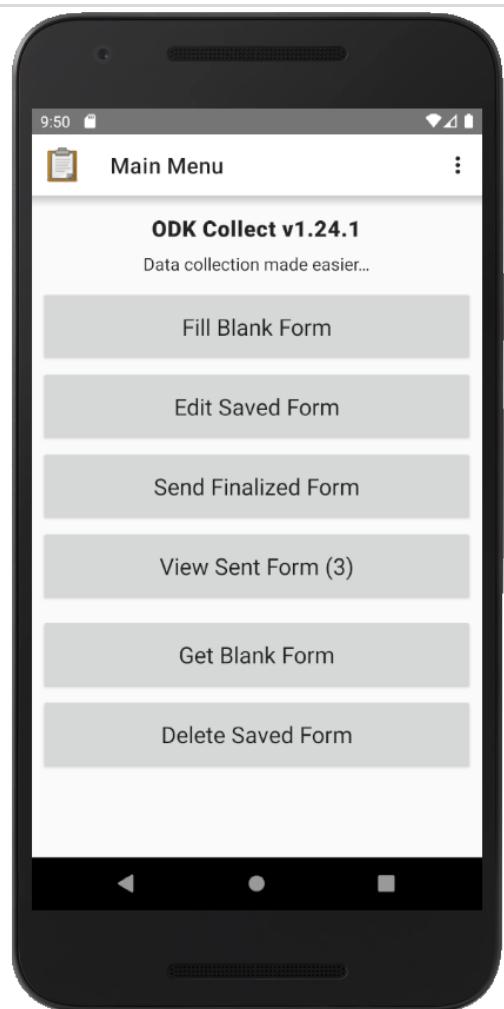
Lists forms that have been sent, even if they were deleted.

Get Blank form

Lists blank forms available on the server and lets you download them.

Delete Saved Form

Lists all the Saved and Blank Forms and lets you delete them.

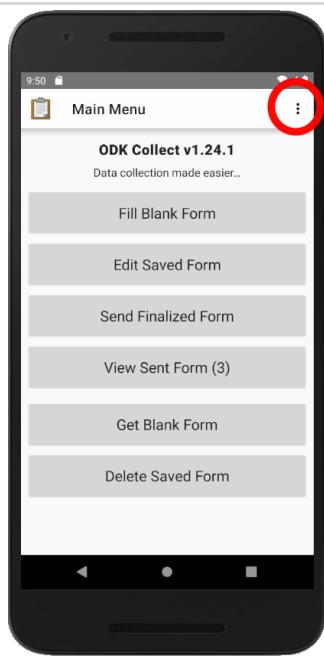


Change language:

In order to change the language, click the vertical line of 3 dots in the upper-right corner of the application interface. Then click, sequentially, the following:

- General Settings
- User interface
- Language

You can select the menu language of your choice. Note that, by default, the language used will be the language of the device itself.



Fetch census form:

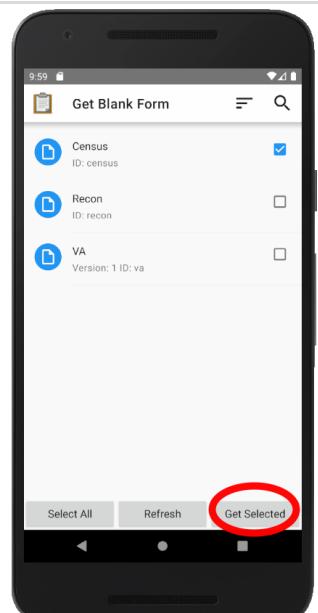
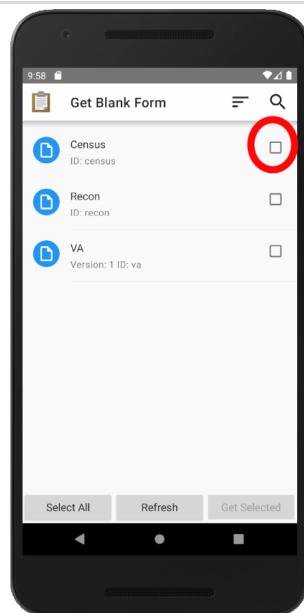
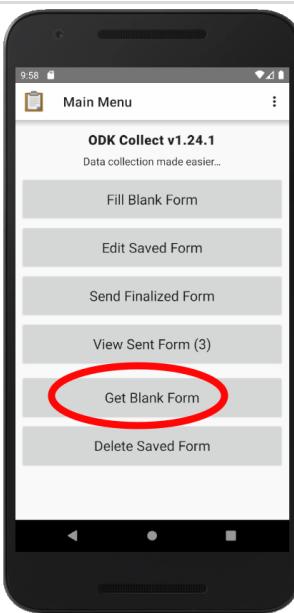
To “fetch” the census form, click on “Get Blank Form”.

If your android device is correctly configured, you’ll see an option for the “Census” form. Click the box next to it.

Once the box is checked, touch the “Get Selected” button in the bottom right.

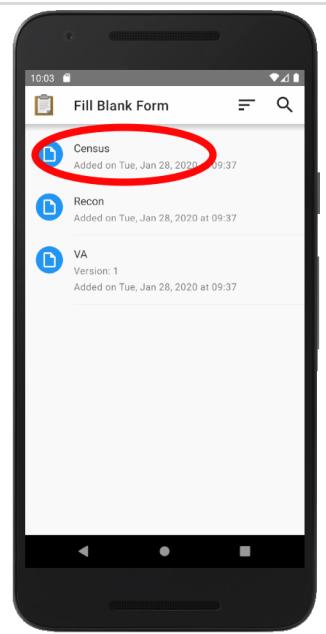
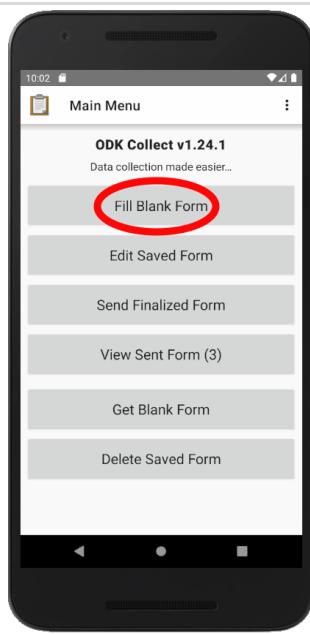
The most recent version of the form will not be retrieved from the server.

If you do **not** see the “Census” option, speak to a data manager.



Select the Census form:

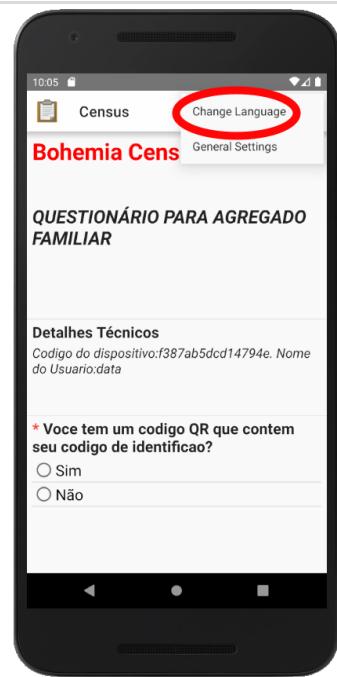
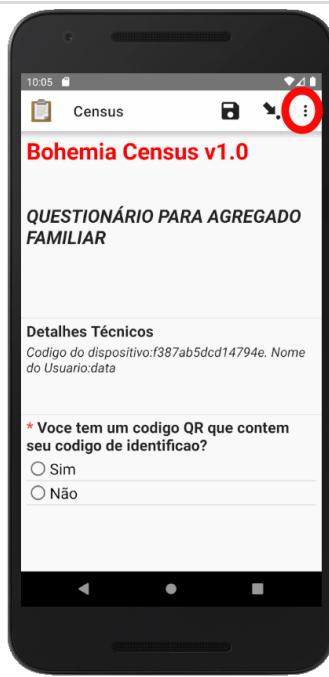
Now click on “Fill Blank Form” at the top of the menu. You’ll be brought to a form selection page where you can select “Census”.



Welcome page:

You are now at the welcome page of the Bohemia census form. To change the language, click again on the 3 vertical dots in the upper right. Then, select “Change language”.

The language options available for the census form are: English, Swahili, and Portuguese. Swahili should be used in Tanzania, and Portuguese in Mozambique.



Worker identification:

All workers have a 3 digit ID number. The first question asks you to identify yourself via this number (A). If you have a QR code, you can simply scan it (B); if you don't, you'll need to manually type it (C).

Bohemia Census v1.0
Household Questionnaire
Technical details
Device id:f387ab5dc14794e. Username:data
* Do you have a QR code with your worker ID?
○ Yes
○ No

A

Bohemia Census v1.0
Household Questionnaire
Technical details
Device id:f387ab5dc14794e. Username:data
* Do you have a QR code with your worker ID?
○ Yes
○ No
Scan your worker ID QR code
Get Barcode

B

Bohemia Census v1.0
Household Questionnaire
Technical details
Device id:f387ab5dc14794e. Username:data
* Do you have a QR code with your worker ID?
○ Yes
○ No
* Manually write your 3 digit worker ID here
123

1	2	3	-
4	5	6	—
7	8	9	✖
,	0	.	✓

C

Navigation:

To navigate through the rest of the form you can swipe left (to advance forward) or right (to go back).

You can also save the form to return to at any time (A), or "zoom out" of the specific page you're on to view the form's entirety (B).



10:13 Census A B :
Technical details
Device id:f387ab5dc14794e. Username:data
* Do you have a QR code with your worker ID?
○ Yes
○ No
* Manually write your 3 digit worker ID here
123

1	2	3	-
4	5	6	—
7	8	9	✖
,	0	.	✓

Location, enumeration, and member identification

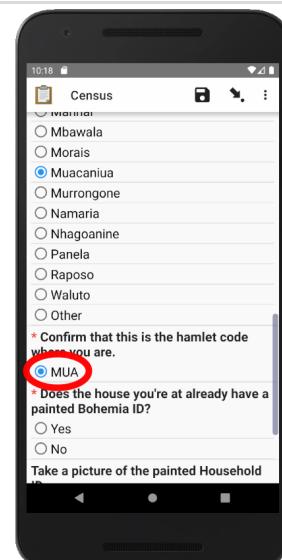
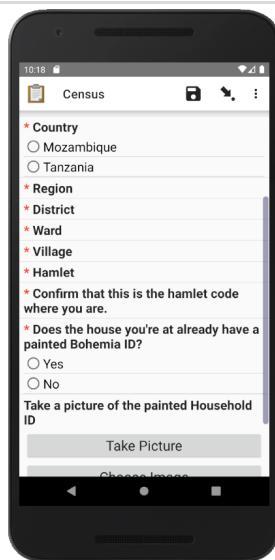
Before answering detailed questions on the household or the individual members of it, three prior steps need to be taken:

1. Your location needs to be recorded, both in terms of (a) the administrative names (Village, Hamlet, etc.) as well as the GPS coordinates, and
2. The household needs to be enumerated (ie, assigned an ID number and painted)
3. The household members need to be identified

Location selection:

Go through each administrative level (Country, Region, District, etc.), selecting your current location. At the village and Hamlet level, free-form entries are allowed if “Other” is selected.

Once your location has been finalized, you’ll be prompted to confirm the hamlet code. If there is any confusion about hamlet code or location, you should contact a data manager.

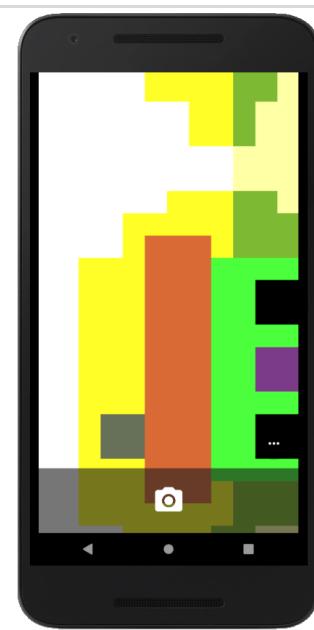
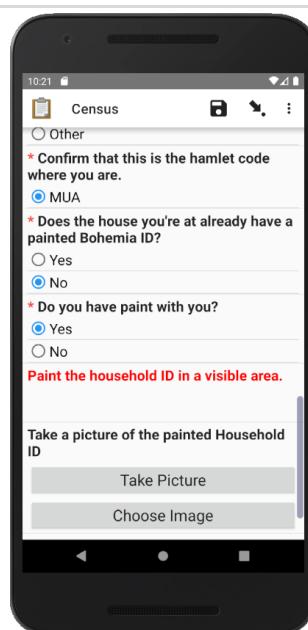


Household enumeration:

You'll be asked whether the house already has a Bohemia ID or not. If a separate enumeration team already came and painted the house, you'll answer "Yes"; otherwise "No".

If "No", you'll need to paint the ID yourself. If you don't have paint, you should stop and contact a data manager.

Once the household has a painted ID, you'll be prompted to take a photograph of it. This photograph should include only the household ID - not the members of the household.



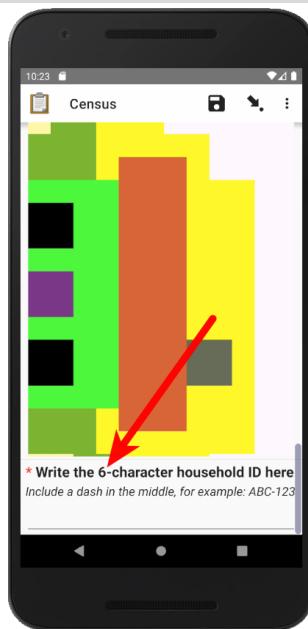
Writing the household ID:

After photographing the ID, you'll be prompted to write it as well. The format should be :

xxx-xxx

Note the horizontal dash between the first three characters (the location code) and the last three characters (the household number).

Be extra careful to ensure accuracy.

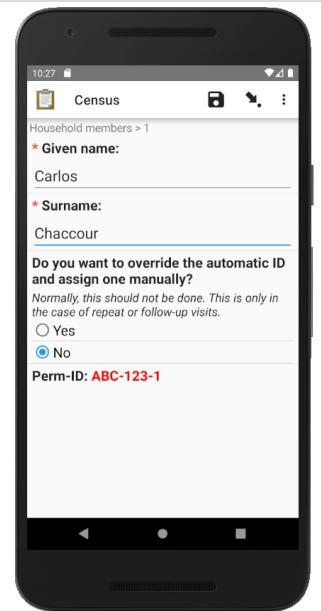
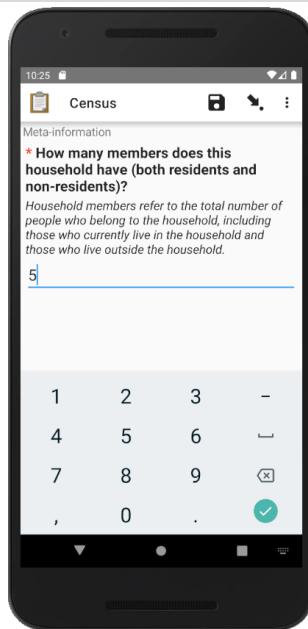


Counting household members:

The next question asks how many members the household has. It is very important that you answer this question accurately, as it will affect the flow of the rest of the form.

Once you enter the number, you will automatically be brought to subsequent data-entry menus, one for each person. For example, if the household has five members, 5 data-entry menus will show up sequentially, in which you'll write the first and last name of each person.

The application will automatically assign an ID number to each person. You might consider writing this number down to help your memory, particularly in cases of (a) a large household or (b) a household with identically named members.



Geocoding:

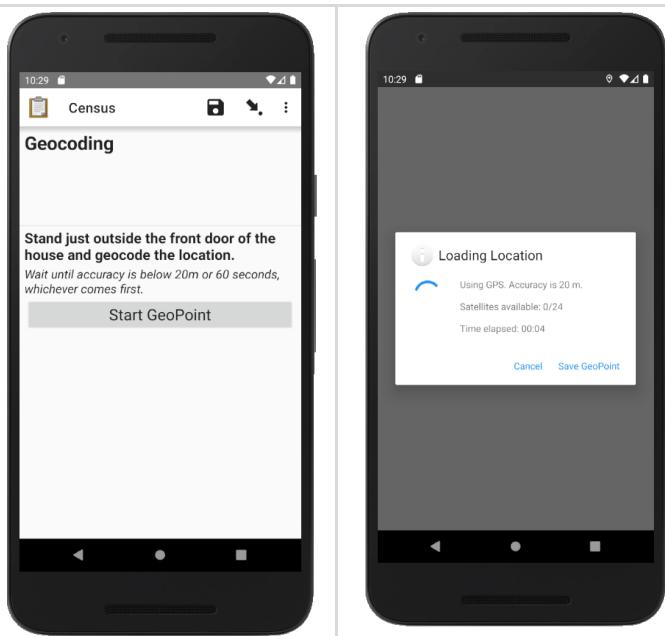
Next, you'll be brought to a geocoding page.

To geocode, you should stand just outside the front door and then click "Start GeoPoint". Do not click until outside.

The longer you wait, the more accurate the GPS coordinates will be. You should wait until the app says "Accuracy is 20m" or less. If this takes more than 60 seconds, stop at the 60 second mark.

Once done, click "Save GeoPoint".

If you make a mistake, you can simply click "Change Location".

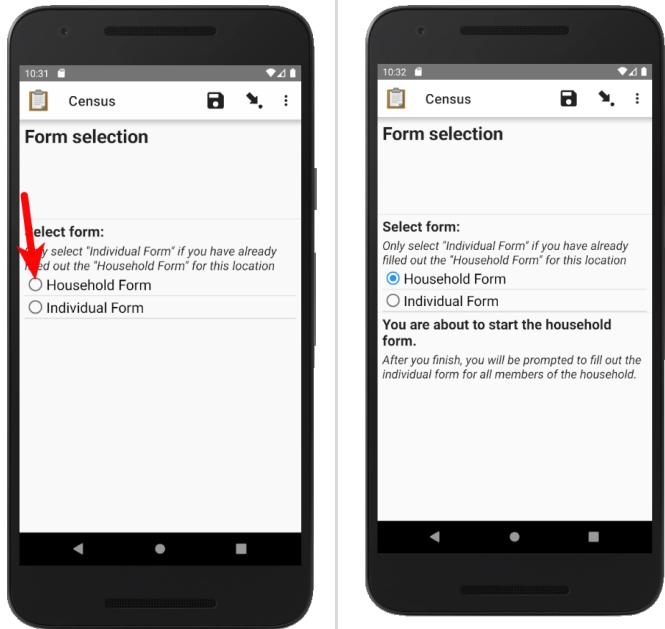


Household vs. Individual Form

Form selection:

You'll now be brought to the "Form selection" menu. You should first do the "Household Form" and then the "Individual Form".

The reason the "Individual Form" can be selected now is in the case of an interrupted visit in which you have already finished the household form and simply want to go directly to the individual section.



Household form

Household head identification:

The household form starts with the obligatory identification of the household head. All households must have a head. Select who it is from the menu.

10:34 ■ Census ■ Household head

* 1. Household head:
 Carlos Chacour (ABC-123-1)
 Elena Moreno (ABC-123-2)
 Charfudin Sacoor (ABC-123-3)
 Issa Lyimo (ABC-123-4)
 Patricia Nicolas (ABC-123-5)

* 2. Household head's Date of birth.
Select date

No date selected

* 3. Household head's Gender.
 Male
 Female

* 4. Household type.

10:36 ■ Census ■

* 2. Household head's Date of birth.
Select date

Jan 28, 2001

* 3. Household head's Gender.
 Male
 Female

* 4. Household type.
 Nuclear
 Polygamous
 Extended
 Polygamous and Extended

5. Where does the household head spend most of their time?
 In this household
 Other household in this village
 Other hamlet within the same district
 Other household in another district
 Other household in another country

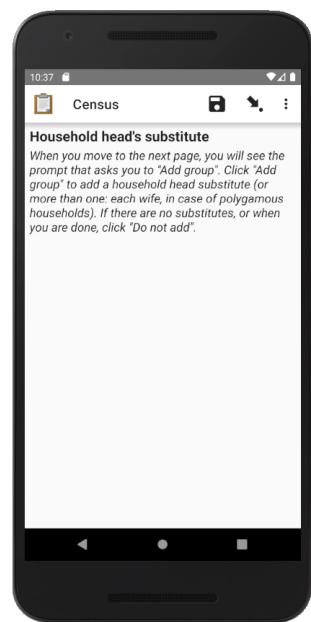
Household head information:

Once you've selected the household head, you'll be prompted to give details on both him/her, as well as the household itself. Depending on the type of expected response (multiple choice, date, number, etc.) different formats will be prompted.

Household substitute identification:

Next, you'll be prompted to identify the household head substitute. This is a person - or persons - who can make decisions on behalf of the household head in the case of the latter's absence. This is often, but not necessarily, a spouse (or multiple spouses). In other cases, it can be an adult son or daughter, an uncle or aunt, etc.

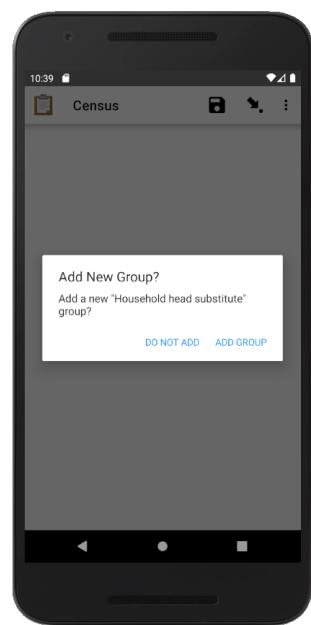
Once ready to identify the household head substitute, swipe to the next page.

**Adding household head substitutes:**

Once you swipe, you'll be met with the following screen (right), asking you to "Add New Group?"

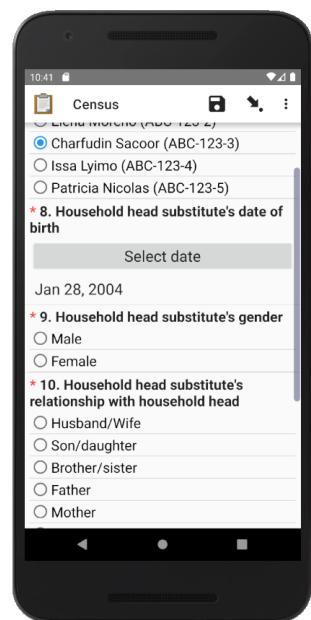
In this case, "Group" refers to a "group" of questions. If there is a household head substitute to add, you should click "Add Group".

If there is no household head substitute, or if you have already filled out the information for all household head substitutes, you should click "Do Not Add".



Household substitute information:

You'll now be prompted to answer questions about the household head substitute.

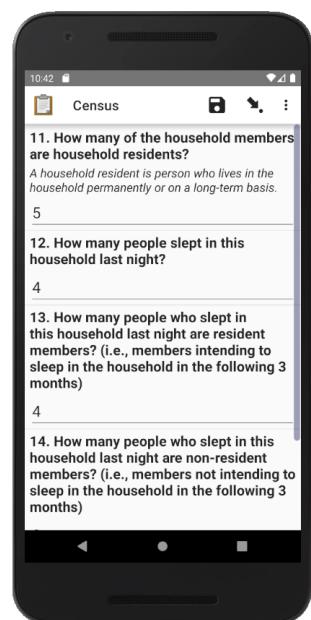


The screenshot shows a mobile application interface titled "Census". At the top, there is a list of household members: Charfudin Sacoor (ABC-123-3) (selected), Issa Lyimo (ABC-123-4), and Patricia Nicolas (ABC-123-5). Below this, question 8 asks for the "Household head substitute's date of birth". A "Select date" button is shown, with the date Jan 28, 2004, entered. Question 9 asks for the "Household head substitute's gender", with options "Male" and "Female" available. Question 10 asks for the "Household head substitute's relationship with household head", with options "Husband/Wife", "Son/daughter", "Brother/sister", "Father", and "Mother" available.

Household residency information:

Once finished with household head substitute information, you'll be asked to fill out information about residence in the household (ie, how many people sleep there).

Note that there are some constraints on these questions in order to ensure coherence with the number of residence previously enumerated.



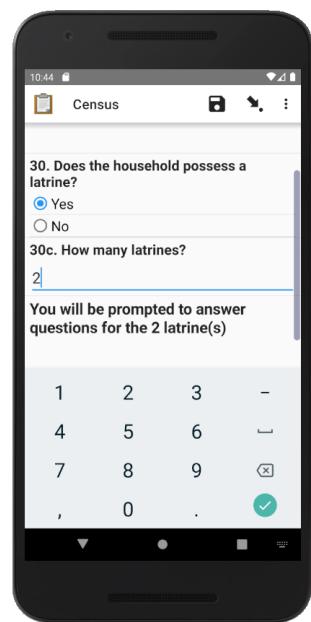
The screenshot shows a mobile application interface titled "Census". It displays four questions related to household residency:
11. How many of the household members are household residents? (Answer: 5)
12. How many people slept in this household last night? (Answer: 4)
13. How many people who slept in this household last night are resident members? (i.e., members intending to sleep in the household in the following 3 months) (Answer: 4)
14. How many people who slept in this household last night are non-resident members? (i.e., members not intending to sleep in the household in the following 3 months) (Answer: 0)

Socio-Economic Information:

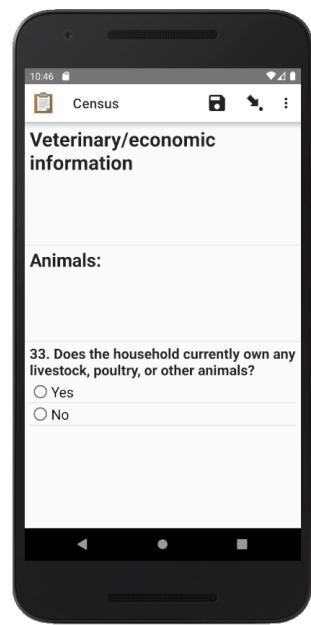
The next section is “Socio-Economic Information”. It is fairly straightforward. It includes questions about the roof, floor, kitchen, bathrooms, etc.

Note that in the “Sanitation” sub-section, there is a “repeat” group of questions for latrines. That is, if the household has more than one latrine, you’ll need to answer some questions for *each* latrine (see right).

This section finishes with some questions on ownership of material goods, vehicles, etc.

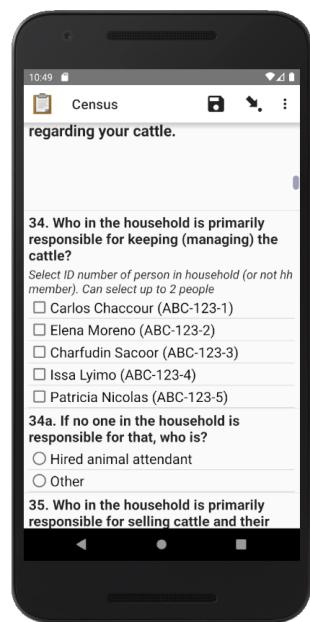
**Veterinary/economic information:**

The size of this question will vary largely depending on responses. Households with no animals will have very few questions, whereas households with many animals (particularly many different species) will have many sub-questions.



Animal caretaker:

For each animal species, the participant will be asked who the primary caretaker(s) of that species is, as well as who the person primarily responsible for selling that species and their products is. This can (and often will) be the same person(s).

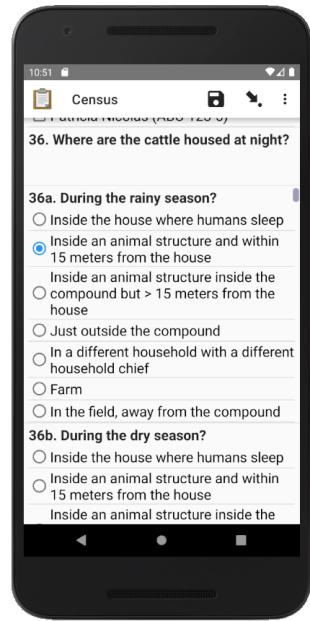


10:49 Census regarding your cattle.

34. Who in the household is primarily responsible for keeping (managing) the cattle?
 Select ID number of person in household (or not hh member). Can select up to 2 people
 Carlos Chacour (ABC-123-1)
 Elena Moreno (ABC-123-2)
 Charfudin Sacoor (ABC-123-3)
 Issa Lyimo (ABC-123-4)
 Patricia Nicolas (ABC-123-5)

34a. If no one in the household is responsible for that, who is?
 Hired animal attendant
 Other

35. Who in the household is primarily responsible for selling cattle and their



10:51 Census regarding your cattle

36. Where are the cattle housed at night?

36a. During the rainy season?
 Inside the house where humans sleep
 Inside an animal structure and within 15 meters from the house
 Inside an animal structure inside the compound but > 15 meters from the house
 Just outside the compound
 In a different household with a different household chief
 Farm
 In the field, away from the compound

36b. During the dry season?
 Inside the house where humans sleep
 Inside an animal structure and within 15 meters from the house
 Inside an animal structure inside the

Animal housing/locations:

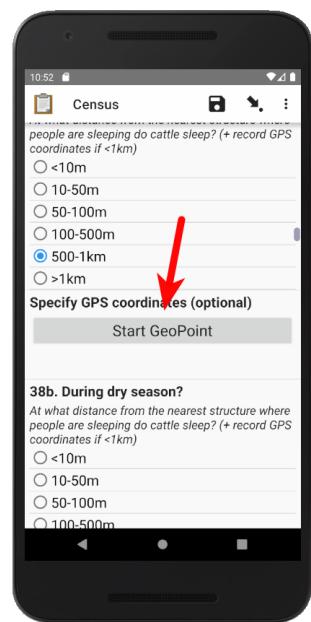
For each large ruminant species, you'll ask where the animals spend the day/night during rainy/dry season.

In the case of the locations being different from the household itself, you'll be prompted to geocode those locations.

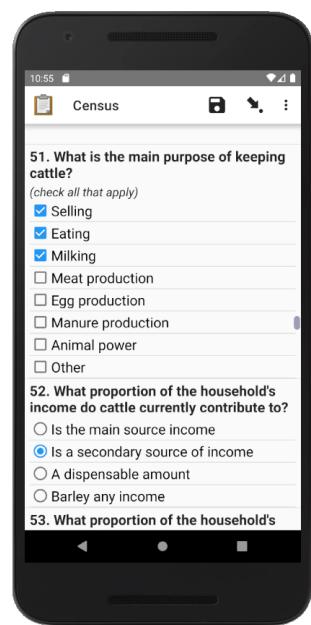
Optional geocoding for animal locations:

Depending on the locations of animal, you'll be prompted with a geocode menu (see right). If nearby, and time permits, you should go and geocode the site(s) in question.

If, however, the site is not nearby or time does not permit, you should simply skip this field (which will prompt a geocoding team to capture the GPS coordinates at a later date).

**Animal details:**

For each large ruminant, you'll be asked to answer questions on its uses, implications, etc. These questions are straightforward.

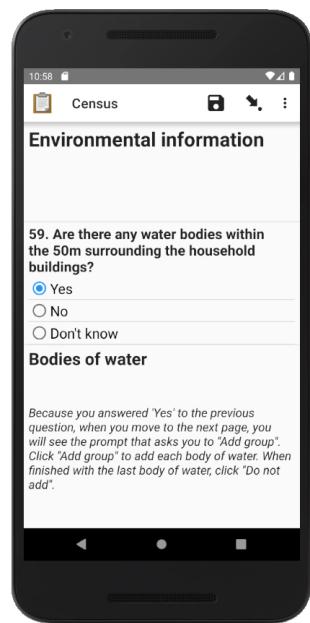


Animal health:

The animal health section goes over conditions that have affected or are currently affecting each animal type.

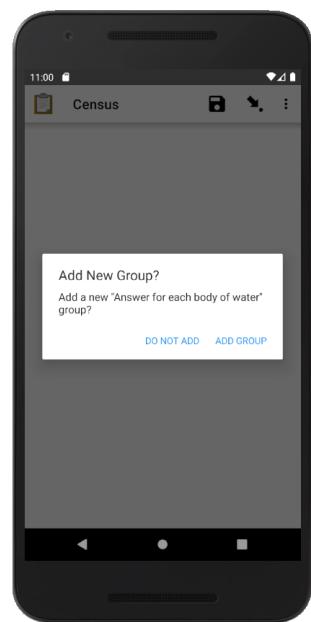
**Environmental information:**

The first question in the "Environmental information" section pertains to bodies of water. Depending on the answer to this question, follow-up questions will be asked.



Body/bodies of water (repeated group):

As with some previous sections, a group of questions will be answered for each body of water. Accordingly, you'll need to "Add Group" each time. Once you've finished collecting data on all the bodies of water, you'll select "Do Not Add".

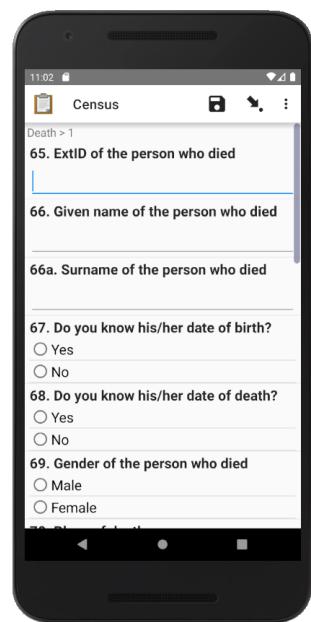
**Malaria prevention tools information:**

This section is fairly straightforward. Note that there is a repeated set of questions for each mosquito net in the household. As with previous repeats, you'll need to "Add Group" until data on each net has been collected, at which time you can select "Do Not Add".



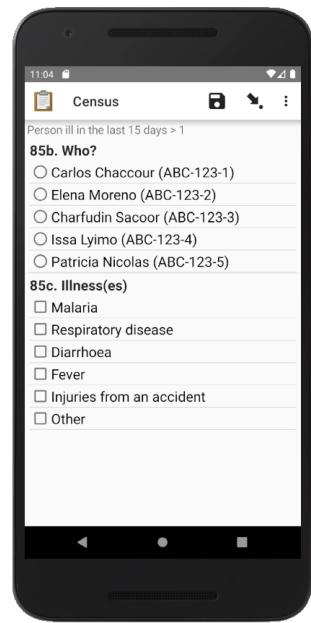
Demographic changes:

The demographic changes section asks about deaths and migration. If any have occurred, you'll need to answer a group of questions for *each*. As with previous repeats, you'll need to "Add Group" until data on each death/migration has been collected, at which time you can select "Do Not Add".



The screenshot shows a mobile application interface titled "Census". It displays a series of questions related to demographic changes:

- 65. ExtID of the person who died
- 66. Given name of the person who died
- 66a. Surname of the person who died
- 67. Do you know his/her date of birth?
 Yes
 No
- 68. Do you know his/her date of death?
 Yes
 No
- 69. Gender of the person who died
 Male
 Female



The screenshot shows a mobile application interface titled "Census". It displays a question related to health and morbidity:

Person ill in the last 15 days > 1

85b. Who?
 Carlos Chaccour (ABC-123-1)
 Elena Moreno (ABC-123-2)
 Charfudin Sacoor (ABC-123-3)
 Issa Lyimo (ABC-123-4)
 Patricia Nicolas (ABC-123-5)

85c. Illness(es)
 Malaria
 Respiratory disease
 Diarrhoea
 Fever
 Injuries from an accident
 Other

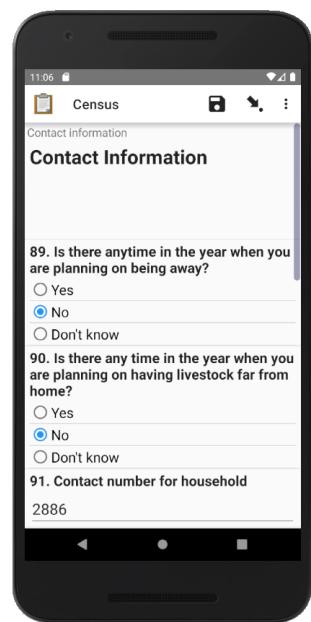
Information on health and morbidity:

This question asks about the health status of the household residents, as well as their health-seeking behavior. It is fairly straightforward.

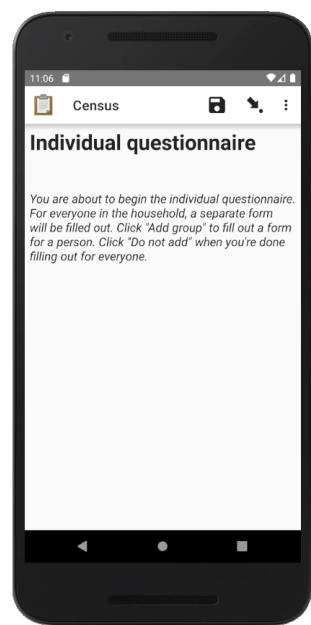
In the case of a recently ill household member (or more than one), you'll be prompted to answer questions on each of them. Likewise, there will be repeated groups of questions for member(s) who have been victims of snake bites, member(s) who have visited a health facility recently, and member(s) who have visited a Community Health Worker recently.

Contact information:

The last section of the household form asks for the contact information for the household, details on potential absences from the house, and alternate contact numbers. It is important that this data is accurate and complete, so as to ensure that the household can be reached for study-related issues.

**End of household questionnaire:**

At the end of the household questionnaire, there is no need to select the individual questionnaire - you'll be navigated to there automatically.

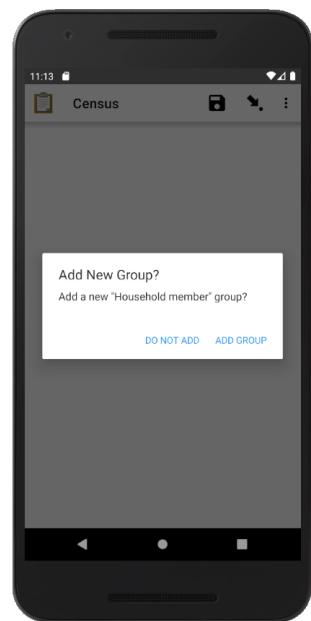
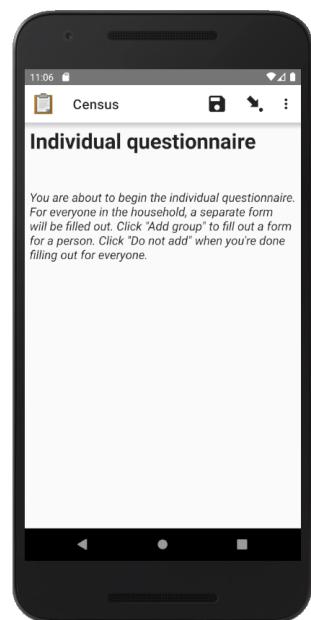


Individual questionnaire

Welcome screen:

The individual questionnaire is itself a repeated group of questions - that is, you'll need to answer the same questions for every member of the household.

Note, however, that the number of questions asked to "resident" members is significantly more than those asked to members who are not "residents".

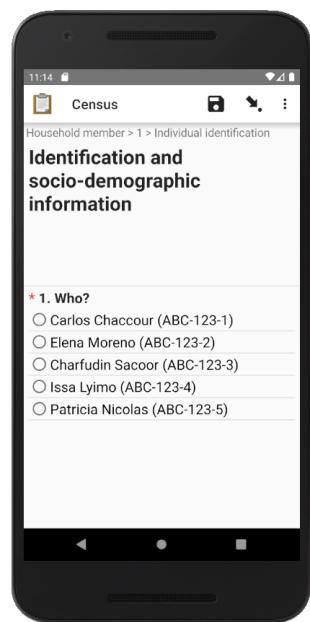


Adding a member:

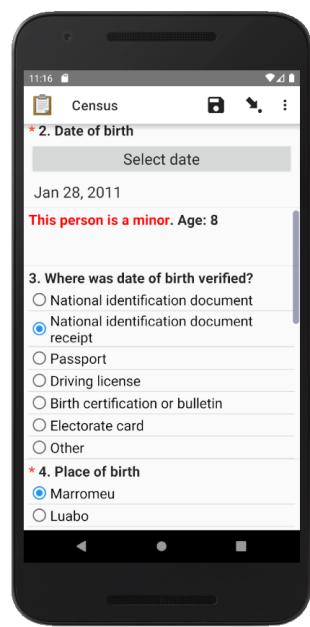
At the beginning of the form, and after finishing each member, you'll be asked whether you'd like to "Add a New Group" or not. If there are remaining members, you should select "Add Group"; when finished, you should select "Do Not Add".

Member identification:

The first question in the individual questionnaire is to identify the member. If the member you are trying to identify does not show up in the menu, it means that this person was not correctly enumerated in the household questionnaire; in this case, you should return to the household questionnaire and add a new member.

**Member demographic details:**

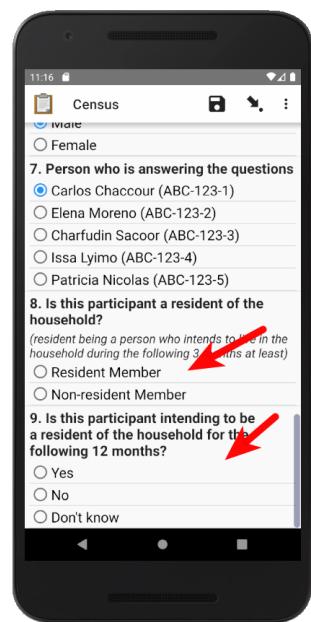
Once a member has been selected, you'll be asked to answer questions on age, birth place, etc. These questions are straightforward.



Residents vs. non-residents:

You'll be prompted to say whether the member is a resident or intends to be a resident. If (s)he is neither, then no further questions will be asked on that member.

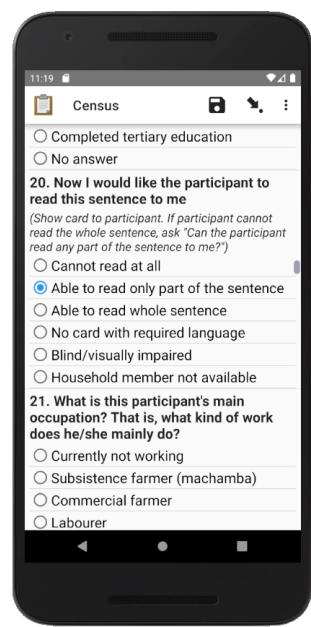
However, if "Resident Member" is selected, or the non-resident member intends to live in the household for the next 12 months, then further questions will be asked.



Member details:

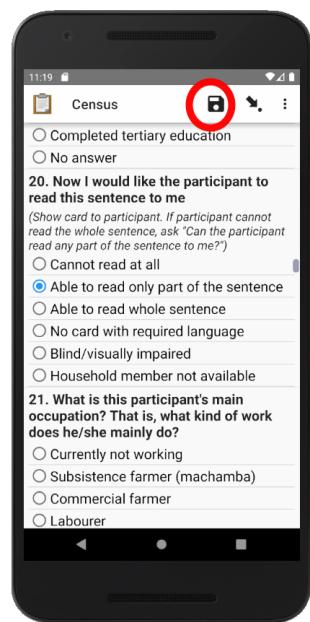
Much of the individual questionnaire are multiple-choice questions about the member; his/her religion, relation to head of household, language, etc.

Note that there are several sections with conditional follow-up questions (such as those relating to disease, travel, etc.).

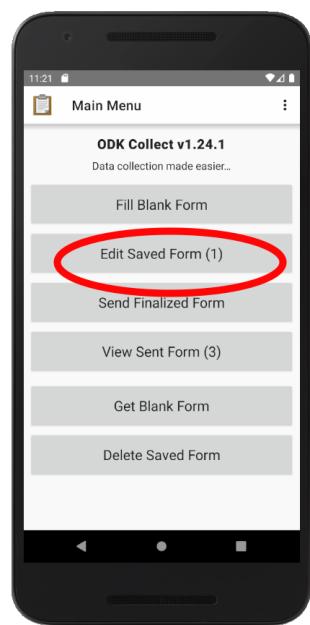


Interrupted or non-present members:

In the case of a visit being interrupted, or a member not being present to answer questions, the form can be saved at any point by clicking the floppy-disk icon in the upper right.

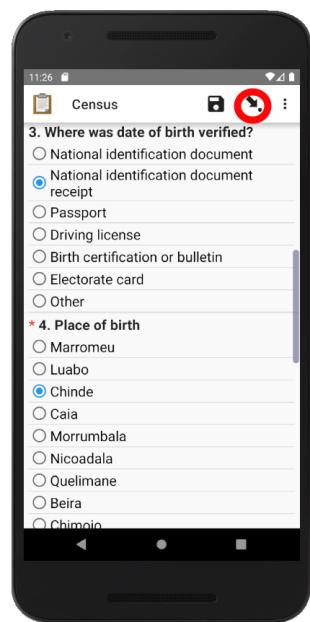
**Retrieving a saved form:**

After the interruption, or upon the member's arrival, the saved form can be continued by clicking on "Edit Saved Form"

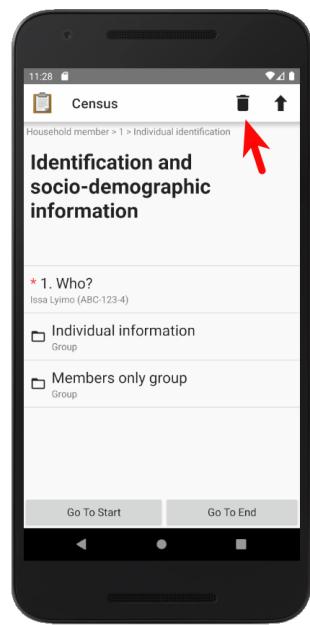


Navigating between members:

There may be some cases where, despite not having finished data entry for one member, the fieldworker needs to enter data for another (ie, someone who was not present shows up, or someone needs to leave soon). One can navigate between members by sweeping left or right, or by clicking the arrow and point icon in the upper right.

**Deleting a member/group:**

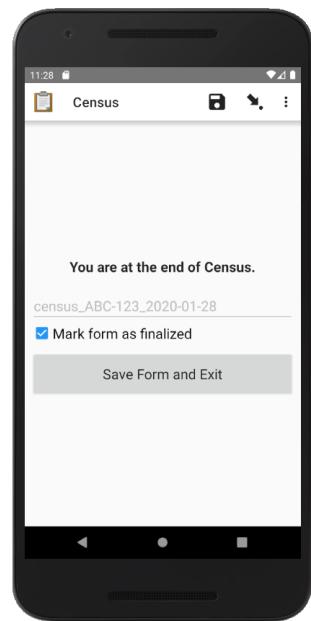
The process for removing an incorrectly entered household member is identical to that for another repeated group of questions: navigate to the main menu (see above), find the group in question, and then click the “trash” icon in the upper right.



Submission and synchronization

When finished with an individual form:

When you are finished capturing data, you'll be brought to the finalization screen (see right). Once here, click "Save Form and Exit".



When ready for synchronization:

When you have an internet connection and want to sync, you'll need to take two steps:

1. Send the saved form to the server by clicking on "Send Finalized Form"
2. Retrieve any possible form updates by clicking on "Get Blank Form"

