

ADMINISTERING CENSUS UPDATES

1. PURPOSE

This document describes the process of administering household census updates. The purpose of the census updates are to renew the existing socio-demographic database that constitutes the sampling frame for DeWorm3 activities and provide an up-to-date quantification of the population size of the DeWorm3 study sites.

2. INTENDED USERS

The intended users of this SOP are the census team, the data management team, and other relevant Deworm3 staff members.

3. RESPONSIBILITIES

All DeWorm3 personnel should understand and follow this SOP during census update administration. It is the responsibility of the site principal investigators (PI) to ensure that study staff comply with this SOP when administering the baseline census.

4. DEFINITIONS

- 4.1. **DeWorm3 census:** The baseline exhaustive survey of all inhabitants living in the DeWorm3 study clusters in the study site, describing key demographic, economic and social attributes of the population.
- 4.2. **DeWorm3 census update:** Where all households are re-visited and any changes recorded. Additional household members or households that are newly identified in the study area are also added.
- 4.3. **Structure:** A building constituting a single, in the case of a house, or multiple residences, in the case of an apartment building.
- 4.4. **Compound:** A group of houses, generally found in a rural setting
- 4.5. **Household:** A person or group of persons, who consider the house their permanent residence, who acknowledge one adult male or female as the head of the household and who share a cooking pot. A household member may travel for work or education, but regularly returns to the household as their primary permanent residence.
- 4.6. **Resident:** An individual that has slept in the targeted geographic area (in this house or another house) for the majority of nights over the past six months prior to the most recent census.
- 4.7. **Present resident:** A resident who is physically present at the time of the census.
- 4.8. **Absent resident:** A resident who is not physically present at the time of the census. They may be in school, work or the shops and will be home in the evening, or they could be living away for studies, or staying in another home on some nights, on a short trip for social or business reasons or be temporarily employed elsewhere. The absence should not exceed six months, or the individual is considered a migrant.
- 4.9. **Visitor:** A non-resident person who spent the night in a household the day prior to an enumerator visit to the household, but whose presence in the household is temporary and does not exceed six months.
- 4.10. **Daily visitor:** Individuals who spend every day in the household, but who do not sleep there.
- 4.11. **Household ID Barcode:** A seven-digit unique ID assigned to each household during the census. The household ID is encoded within a barcode/QR and printed on a sticker.

5. REQUIRED MATERIALS

- 5.1. Smartphones preloaded with SurveyCTO Census Update Form

- 5.2.** Census Consent Forms in local language
- 5.3.** SurveyCTO Household Grouping Form
- 5.4.** Folder for filing all completed Census Consent Forms
- 5.5.** Four Household ID barcode stickers per household (for new households)
- 5.6.** Study information sheets in local language (for new households)
- 5.7.** Study identification card (for new households)
- 5.8.** Sharpie or other permanent marker
- 5.9.** Pen
- 5.10.** Inkpad
- 5.11.** Clipboard
- 5.12.** Power banks for smartphones
- 5.13.** Study staff ID and introduction letter

6. PROCEDURE

6.1. Census Update Form design and purpose

- a. The Census Update Form will pull in information collected during the most recent census and during previous rounds of mass drug administration in order to facilitate and ease the process of data collection. For example, if a household visited during the baseline census is revisited during the census update the relevant information collected during the first visit will be displayed for enumerators to confirm (and edit if necessary) rather than re-enter all information from scratch.
- b. However, households and individuals that are not contacted during the census update will not be included in the denominator nor sampling databases for future activities, regardless or not of whether they were previously contacted during a previous census.
- c. Households that provided consent during a previous census do not need to be re-consented. However, this is dependent on the member who previously provided consent continuing to be a member of the household at the time of the census update. If the member who provided consent has died, joined another household within the study area or migrated outside of the study area enumerators will need to re-obtain consent from the household.
- d. Consent must be obtained from all households contacted after the baseline census. This includes those contacted during previous rounds of MDA as well as households not previously contacted.
- e. A paper list of households identified during the previous census and the most recent two rounds of MDA will be provided to site teams in advance of the census update. Site teams should use these lists to support data collection activities and as an aid to quantifying household numbers across clusters and villages in advance of data collection. These lists will only include households that were previously contacted and will not include residences that were marked as vacant during the most recent census.
- f. Study staff should pay particular attention to households in control clusters as, unlike intervention clusters that have been revisited on the community-wide level multiple times since the previous census, data from the control clusters will not have been updated since the previous census.

6.2. Finalization of Census Update Form

- a. The SurveyCTO Census Update Form should be fully adapted to the local setting at least one week prior to census administration: the census will be translated to the local language and the form must be fully reviewed to ensure that local terms and

answer options are tailored according to the local setting. This is the responsibility of the Trial Coordinator and Data Manager.

- b. Study supervisors should pilot the SurveyCTO Census Update Form at least two weeks before administering the census update to provide feedback on content and any technical issues.

6.3. Sensitization

- a. Awareness-raising activities will be targeted at administrative authorities, traditional authorities, and community members.
- b. Sensitization should start at least two weeks prior to census administration and can continue throughout the duration of census administration.
- c. The awareness campaign should include information, educational and communication (IEC) tools in appropriate local languages using a variety of communication strategies (verbal and written materials).
- d. The Census Update Form relies on households being able to present either ID cards or copies of consent forms in order to confirm their identity. As such, site teams should consider including “location of ID cards” as a theme in their sensitisation activities.
- e. Refer to *SOP_104. Conducting pre-trial sensitization activities* for more details on pre-trial sensitization.

6.4. Recruitment of enumerators

- a. Enumerators should be recruited at least four weeks prior to census administration, to allow for adequate planning and training activities. These individuals should speak the local language and be able to operate mobile smartphones for data collection.
Refer to SOP_106. Recruitment procedures

6.5. Pilot Census

- a. At least one week prior to full administration, the census should be piloted by all trained field officers, ideally in an area not included in the DeWorm3 study site.
- b. During the pilot, the following aspects of the census should be evaluated: data collection tools, interview techniques and implementation logistics.
- c. Feedback from the pilot census should be provided to the core DeWorm3 team at least 48 hours before the census is to take place.

6.6. Data collection overview

- a. Administer the census house-to-house throughout the entire site.
- b. Field officers should be assigned to specific geographic areas within the site based upon their ability to speak the local language.
- c. It is very important to log all structures with a floor space of 2 square meters or greater (whether there are households living in them or not) in the study site, as high-resolution satellite imagery will be used to verify census completion.
- d. Phones should have at least 50% battery power prior to beginning an interview. Always carry a battery pack in case of low battery.
- e. Census questions will be administered to the head of household, or to a present adult who has provided written informed consent.
- f. Ask and document answers for all survey questions.

6.7. Starting the Census form: Household or other structure

- a. Open the SurveyCTO Census Update Form and select your name from the list of field officers. Then select the correct geographical administrative area you are currently working in, with the final level being the village.
- b. You will be asked to confirm whether what you are censusing is (a) an individual household in one structure (b) a household in a structure with other households (e.g. apartment) (c) working/studying individuals living together e.g. a hostel or (d) an other place (such as a shop or a place of worship).
- c. If (d) [other place] is selected the form will ask to confirm the type of place that is being censused and then provide a prompt for the recording of any notes or observations. All structures that have a floor space of two square meters or greater should be recorded. After this, save and finalise form.

6.8. Locating a household on the census list

- a. If you select (a) an individual household in one structure, (b) a household in a structure with other households or (c) working/studying individuals living together then you will be given three options – “Scan the household’s ID card”, “select from list” and “search by HOH name”.
 - i. **Scan the household’s ID card:** This will be by far the most common approach for households enrolled during a previous census. Household members will present their study ID card or a copy of their consent form which can then be scanned and their information pulled into the form. **See section 6.9.** for how to proceed when using this approach. Note that “select from list” and “search by HOH name” should only be used as a last resort for previously censused households in instances where they no longer have their ID card or consent sheet.
 - ii. **Select from list:** households added during a previous round of MDA can be searched for in list form (which will be ordered by the head of household). households identified during a previous round of MDA will be flagged with ‘cw-xx’ where xx is the round of MDA. ‘cw’ stands for community-wide and is used to flag households added during a previous round of MDA in contrast to those identified during one of the census activities. Note that previously censused households can be selected by list but this should only be done when a household no longer has its ID card or a copy of its consent form. **See section 6.10.** for how to proceed when selecting a household from the list.
 - iii. **Search by HOH name:** As an alternative, households can be searched by the name of the household head by entering a minimum of three letters of the HOH name. All names with that combination of letters in that cluster will appear and you can select the correct household. It is recommended not to enter the name in full as it will only bring up exact matches and this will increase the chance of spelling errors/mismatches. **See section 6.10.** for how to proceed when selecting a household through searching by HOH name.
- b. **Note that if a previously censused household no longer has its DeWorm3 card it will have to be issued a replacement card at a later date.** If a card has been temporarily misplaced it is preferable to arrange a return visit in order to allow the household time to locate the card rather than proceed with the form and mark the household as no longer having their card.
- c. If a household does not have an ID card or a consent sheet, cannot be found on the census list (either through searching by HOH name or through selecting manually

from the list) and household members confirm that they have not been previously contacted by DeWorm3 staff, they should be enrolled into the trial as a new household. Follow the [select from list] option and select [household not listed] at the top of the list. **Skip to section 6.11** for guidance on how to proceed.

- d. In some scenarios, two previously separate households will have joined together to form one household and members may present two ID cards. In this instance the household that originally occupied the residence should retain their ID and all members from the second household should be added as new members to this household. Once the census has been completed for the first household and all additional members added, begin a new form for the second household and record the household as being vacant. In the notes write "household joined <ID of household joined>".

6.9. Confirming key household members after scanning ID cards/consent sheets (PREVIOUSLY CENSUSED HOUSEHOLDS ONLY)

- a. Once you have scanned the barcode the phone will display key household information (name of head of household, address and phone number of head of household) which you should confirm with the respondent to ensure that the details of the correct household have been pulled on to the form. If the details are not correct, select [no] and contact a supervisor. If the details are correct, select [yes] and the form will follow through to display the number of times the household has been previously visited during the census update.
- b. You will then be asked to confirm if an adult member of the household or the head of the household is present. If they are not, select [no] and arrange to return to the household at a later date.
- c. Confirm with the adult member or head of the household that they agree to participate in the census. There are three responses to this question:
 - i. **[Yes]** – The respondent agrees to participate. This will be the most common response
 - ii. **[No, unable to answer at this time]** – The respondent is present but is not able to complete the census at this time. Select this and then arrange a convenient time to return to the household to complete the census. Record any notes or observations and then save and finalise the form.
 - iii. **[No, refused]** – The respondent refuses to participate in the census. Select this option and then record why they have refused to participate. Following this, read the text presented on the device informing the respondent that they may be visited by DeWorm3 personnel as part of the next activity. If the respondent expresses that they do not wish to be visited during the next activity, record [household does not want to be visited for future treatment activities]. Otherwise record [Household is happy to be approached for future treatment activities] and proceed to record any notes before saving and finalizing the form. **Note that unless the household explicitly requests that they are not revisited the enumerator should assume that the household is happy to be contacted during the next activity.**
- d. If an adult is present and agrees to participate the form will then display the name of the member who previously signed the consent form and ask if they are still resident at the household. If they are still resident at the household, select [yes]. This indicates that the household does not need to be re-consented. **Note that the consenter does**

not need to be present at the time of the visit, simply confirmed as still being a resident.

- e. If the consenter is no longer a resident, select [no]. The household will then need to be re-consented. Follow the procedures outlined in section 6.11 but **note that stickers do not need to be applied to the new consent sheets as the household already has a household ID**. Instead handwrite the existing household ID on to the new consent forms.
- f. The form will then ask to confirm whether the individual who was recorded as being the head of the household in the previous census is still the head of the household. If they are not, select [no] and record the name of the current head of household.
- g. After this, the form will ask you to confirm that the cluster and village that the household has been assigned to is correct. There are three possible responses:
 - i. **[Yes]** – the household is recorded in the correct cluster. This will be, by far, the most common response.
 - ii. **[No, cluster is not correct]** – the household you are surveying is not in the correct cluster. If you select this option, you can reassign a household to any cluster but you will need a PIN code which will be supplied by a supervisor.
 - iii. **[No, village is not correct]** – the household is in the correct cluster but the village is incorrect. If you select this option, you can reassign the new village without a PIN code. However, the new village must be in the same cluster. If the new village is in a different cluster, then you will need to go back to the previous question and select “No, cluster is not correct”.
- h. If you update the cluster and/or village information, the next time the field officer targets this household, they will find their information under the updated cluster and/or village.
- i. After confirming the cluster and village location the form will proceed to confirming the household roster information. **Proceed to section 6.16** for guidance on this.

6.10. Confirming household location after selecting household from list (PREVIOUSLY CENSUSED HOUSEHOLDS OR HOUSEHOLDS CONTACTED DURING PREVIOUS MDA)

- a. Once you have selected the household, the address and/or phone number entered during the baseline census or previous round of MDA will be displayed to help you confirm that you have selected the correct household on the phone.
- b. If you are targeting households from the list, rather than proceeding house by house, you can use the next screen that displays a note with the household head and information to locate the household in Google maps. This functionality will work if you have a SIM card installed with data available.
 - i. If you have data available, click on the displayed link at the bottom of the note, and the phone will switch to Google Maps and display directions to the household. Once you have arrived at the household, you can switch back to SurveyCTO and swipe to the next screen. The form will ask you if you have internet access to allow the link to the map to work. Select [yes] in this case, as you were able to use the link directly.
 - ii. If you do not have data available, it's possible to copy the coordinates into Google Maps manually and obtain directions. Swipe past the note with the link, and the form will ask you if you have internet access to allow the link to the map to work. If you

- select [no] then the form will present the option of searching for the household using the GPRS functionality of the phone (which does not require internet access).
- c. If you do not need to use the Google Maps navigation to locate the household, then you can swipe to the next question.
 - d. If you were able to find the household on the census list, you will then be asked if you were able to navigate to and locate the household in person. There are two possible responses.
 - e. **Yes** – you were able to locate the household and are standing in front of it. This will be, by far, the most common scenario.
 - f. **No** – You have not been able to locate the household. You will see a message informing you that the form “will now proceed through this household’s listed members to update their status”. You will then need to swipe through each of the household members and SurveyCTO will record each individual as “Not located”. You can then finalise the form.
 - g. If this is a follow-up visit to the household, and you or another field officer has already visited the selected household then this question will not appear.

6.11. Confirming habitation of households and establishing whether an adult is present after selecting “household not listed” (NEW HOUSEHOLDS ONLY)

- a. You will be asked to confirm that members of the household are present at the time of the visit. There are three options for this:
 - i. **[Members present]** – There are members of the household present at the residence at the time of the visit.
 - ii. **[Vacant]** – The residence is uninhabited. This should only be selected if there is clear evidence that no one lives there (i.e. informed by a neighbour, no one present after three or more visits etc). Selecting **[Vacant]** means that the household will be removed from the list and should not be revisited. For this reason, you should not select this option if there is any doubt that the residence is uninhabited.
 - iii. **[Appears inhabited but no one present]** – If no one is present at the time of the visit but there is evidence that the household is inhabited, you should select this option and arrange to return to the household at a later date. You should **visit a household at least three times** before marking it as vacant although you can revisit more than three times if deemed necessary.
- b. If members are present, greet them and confirm that either the HOH or an adult member of the household is present. If they are not, select [no] and arrange to return at a later date when they are present.
- c. If an adult member is present, confirm that they agree to participate in the census. There are three responses to this question:
 - i. **[Yes]** – The respondent agrees to participate. This will be the most common response
 - ii. **[No, unable to answer at this time]** – The respondent is present but is not able to complete the census at this time. Select this and then arrange a convenient time to return to the household to complete the census. Record any notes or observations and then save and finalise the form.
 - iii. **[No, refused]** – The respondent refuses to participate in the census. Select this option and then record why they have refused to participate. Following

this, read the text presented on the device informing the respondent that they may be visited by DeWorm3 personnel as part of the next activity. If the respondent expresses that they do not wish to be visited during the next activity, record [household does not want to be visited for future treatment activities]. Otherwise record [Household is happy to be approached for future treatment activities] and proceed to record any notes before saving and finalizing the form. **Note that unless the household explicitly requests that they are not revisited the enumerator should assume that the household is happy to be contacted during the next activity.**

6.12. Confirm household identity, presence of conserver and cluster/village information (PREVIOUSLY CENSUSED HOUSEHOLDS WITHOUT CARD OR CONSENT SHEET)

- a. If a previously censused household no longer has their card or a copy of their consent sheet and there is no reasonable chance of members locating it before the end of the census you can continue with the census questions. However, this household will have to be revisited at a later date and supplied with a replacement card. After selecting the household and confirming the identity through name, address and telephone number of head of household. Inform them that they will be visited over the coming months to be supplied with a new card. **previously censused households should not be given a study card with a new study ID that does not match their previous study ID.**
- b. The form will then display the name of the member who previously signed the consent form and ask if they are still resident at the household. If they are still resident at the household, select [yes]. This indicates that the household does not need to be re-consented. **Note that the conserver does not need to be present at the time of the visit, simply confirmed as still being a resident.**
- c. If the conserver is no longer a resident, select [no]. The household will then need to be re-consented. Follow the procedures outlined in **SOP_201. Census Informed Consent** but **note that a sticker does not need to be applied to the new consent sheet as the household already has a household ID**. Instead, handwrite the existing household ID on to the new consent forms.
- d. After this, the form will ask you to confirm that the cluster and village that the household has been assigned to is correct. There are three possible responses:
 - iv. **[Yes]** – the household is recorded in the correct cluster. This will be, by far, the most common response.
 - v. **[No, cluster is not correct]** – the household you are surveying is not in the correct cluster. If you select this option, you can reassign a household to any cluster but you will need a PIN code which will be supplied by a supervisor.
 - vi. **[No, village is not correct]** – the household is in the correct cluster but the village is incorrect. If you select this option, you can reassign the new village without a PIN code. However, the new village must be in the same cluster. If the new village is in a different cluster, then you will need to go back to the previous question and select “No, cluster is not correct”.
- e. If you update the cluster and/or village information, the next time the field officer targets this household, they will find their information under the updated cluster and/or village.

6.13. Obtaining consent (HOUSEHOLDS CONTACTED DURING PREVIOUS MDA OR NEWLY ADDED HOUSEHOLDS)

- a. For listed households added during a previous round of MDA and newly added unlisted households, consent must be obtained from the head of the household and a study card with an ID must be provided to the household.
- b. If there is an adult present, select [**Yes**] for “Is there an adult member of the household present”.
- c. If they confirm that they have not previously been enrolled, get out a consent form for the household to keep, and stick the barcode with [**hhold**] on it. Then the survey will ask you to scan the sticker on the household copy of the consent form.
- d. **It is crucial that the household ID on the hhold barcode stuck onto the consent form matches the household ID on the study barcode used for the study consent form.**
- e. Seek informed consent from the head of household or participating adult on behalf of the household. Refer to **SOP_201. Census Informed Consent**.

6.14. If consent is not given by the household

- a. If consent is refused, select [**No, refused**] in the form, and then select the reason why they refused to provide consent. Thank them and end the interview.
- b. Write ‘No Consent’ on the back of the household consent form and the study consent form with the sticker and put both in the binder to return to the office. Write the name of the household head/adult who refused consent on each of the consent forms.
- c. **Finalise the form and make sure you write on the study consent form that the adult has refused consent.**
- d. If the respondent is present but is not able to complete the census at this time select [**No, unable to answer at this time**] and arrange a convenient time to return to the household. Record any notes or observations and then save and finalise the form.

6.15. If consent is given by the household

- a. If the adult provided consent, select [**Yes**] for “was consent to continue given by an adult member of the household”.
- b. Get out a Study ID Card for the household to keep safely (for example clipped with the child health card for the duration of the study), and stick the barcode with [**icard**] on it. Then the survey will ask you to scan the barcode on the Study ID Card given to the household. Also, write the name of the household head/adult who provided consent on the ID card with a permanent marker.
- c. **It is crucial that the household ID on the icard barcode stuck onto the Study ID card matches the household ID on the study and hhold barcodes used for the study and household consent forms.**
- d. Scan the **ICARD COPY** on the Study ID Card with the smartphone.
- e. Collect the GPS coordinates. Note down the address or any landmarks or features that would help you locate the residence again if you or another field officer needed to visit again.

6.16. Overview of the census questionnaire (ALL HOUSEHOLDS)

- a. The questionnaire covers household roster information, household information and asset ownership and WASH information. Depending on what data has previously been collected from households, the form will require you to confirm existing information or

add new data that has not previously been recorded. An overview of what is required depending on when a household was first contacted is described in Table 1.

Table 1. information requirements

Household type	Roster information	Household information	Asset information	WASH info
previously censused HH (same residence)	Confirm existing hh roster information (<i>section 6.17</i>)	No action required	No action required	Add limited WASH information (<i>section 6.22 e-f</i>)
previously censused HH (new residence)	Confirm existing hh roster information (<i>section 6.17</i>)	Add new hh information (<i>section 6.20</i>)	No action required	Add new WASH information (<i>section 6.22</i>)
Uncensused HH added during previous MDA	Confirm existing hh roster information (<i>section 6.17</i>)	Add new hh information (<i>section 6.20</i>)	Add new asset information (<i>section 6.21</i>)	Add new WASH information (<i>section 6.22</i>)
Newly added HH	Add new hh roster information (<i>Section 6.18</i>)	Add new hh information (<i>section 6.20</i>)	Add new asset information (<i>section 6.21</i>)	Add new WASH information (<i>section 6.22</i>)

6.17. Confirming existing members' information (PREVIOUSLY CENSUSED HOUSEHOLDS OR HOUSEHOLDS CONTACTED DURING PREVIOUS MDA)

- a. If an adult member of the household is present and they consent you can begin the census questionnaire.
- b. To begin with, the form will cycle through each household member in turn, displaying identifying variables and asking you to confirm members' living status. Each page will contain the following information
 - i. **Name** – This should be used to confirm the identity of the individual and will not be editable.
 - ii. **Sex** – This should be used to help confirm the identity of the individual and will also be locked. If you indicate that this is incorrect at the bottom of the page it can be edited.
 - iii. **Age** – This should be used in conjunction with name and sex to confirm the identity of the individual and will also be locked unless you indicate that it should be edited.
 - iv. **Is the individual present?** – Record whether the individual was present at the time of the questionnaire. If they are recorded as not being present the form will ask you to provide information on where they are.
 - v. **Have they lived at the residence for the majority of the past 6 months?** – Record whether a member has spent the majority of days over the past 6 months at the residence.
 - vi. **Did they stay at the residence the previous night?** – This is to determine whether the individual has been present at the recently.
 - vii. **Information correct?** – If the age or sex of the individual is incorrect you should mark this as [no] and proceed to edit the relevant information.
- c. If you indicate that sex or age is incorrect the form will ask you which variable you would like to edit. If possible, ask to see identification to confirm the new information. Note that age will have been updated from when an individual previously supplied this information so the age that is displayed should reflect their current age.

- d. When you have finished going through all existing household members the form will ask if there are any members who were not listed. If there are, select [yes] and indicate how many unlisted members should be added to the household. The form will then cycle through each new member, displaying their individual unique ID and asking for the following information:
 - i. **Identification document** – Indicate what identification document can be presented.
 - ii. **Full name** – Record the full name of the individual as it appears on the identification document.
 - iii. **Other names** – Record any alternative or nicknames that the individual uses.
 - iv. **Sex** – Indicate the sex of the individual.
 - v. **Date of birth/age** – If an identification document is available or the individual knows the date, record their date of birth. If no documentation is available ask for their age. If they are not able to identify their age indicate which study age category you think the individual falls into (<1, PSAC, SAC or adults) based from their appearance.
 - vi. **Reason for absence from previous census** – Indicate the reason why this individual was not recorded during the previous census. If you select [moved into household from other DeWorm3 household] the form will ask you to identify the household from which the individual moved. Select the appropriate site, cluster and village and household from the list. If you cannot identify the household, select [household not listed].
 - vii. **Present:** Select [yes] if the person is currently in the house or compound at the time of the survey. Do not select yes if they are at school, work, or conducting chores, (e.g. collecting water) or anywhere else outside of the compound.
 - viii. If the person is not currently present, you will be prompted to ask the reason for their absence in the next screen.
 - ix. **Lived here the majority of days in the last 6 months:** Select [yes] if the person is at the house for multiple days in a month or more and select [no] if the individual is away at boarding school or spends extended periods away for work.
 - x. If the person has not lived here for the majority of the past six months, you will be prompted to ask the reason for their absence in the next screen.
 - xi. **Stay here last night:** Select yes if the person slept at the house the previous night.
 - xii. If the person did not sleep here last night, you will be prompted to ask the reason for their absence in the next screen.
- e. Indicate whether there are any other individuals that have not been recorded who spend the majority of days elsewhere but consider the household their home. If you select [yes] the form will ask you to go back to and add these members to the roster. Selecting the link on the screen below the question will take you back to the question on the number of individuals in the household.
- f. When there are no further members to add the form will cycle through household members again, this time asking you to record information about who provided consent for the questionnaire and what their relationship is to the HOH. Each page will contain the following information:
 - i. **Name** – This should be used to confirm the identity of the individual and will not be locked.
 - ii. **Sex** – This should be used to help confirm the identity of the individual and will be locked.
 - iii. **Age** – This should be used in conjunction with name and sex to confirm the identity of the individual and will also be locked.
 - iv. **Status** – This will display the status of the household member. If they have been recorded as being deceased, permanently migrated, moved to another household or as a duplicate then their status will be “Inactive” and no further information will

- be recorded on this member. If they are still a member of the household their status will be “Active” and the following questions will be asked:
- v. **Same person as [name of HOH]** – If the name displayed at the top of the screen is the same as the name displayed in the question (this will be the name of the recorded HOH) then you should record [yes]. If you record [no] you will be asked to confirm what this member’s relationship is to the head of the household in the following screen.
 - vi. **Provided consent for household** – Record [yes] if this was the household member who provided consent for the census to be undertaken. Otherwise record [no]
 - vii. **Primary respondent to questions** – Record [yes] if this is the member of the household who you are primarily conversing with to answer the census questionnaire, even if they are not the HOH. Otherwise record [no]
 - g. For each adult member, on the following screen you will be asked to record their highest level of education and what their marital status is. For children between 2-18 years, you will be asked to record whether they are currently in education in for information on what school they attend if they are in school.
 - h. Note that **only one** household member should be recorded as:
 - i. Being the same person as the HOH
 - ii. Being the person who provided consent
 - iii. Being the person who was the primary respondent.
 - i. If you record more than one member for any of these three roles the form will display a note once you have finished recording information for members, directing you to go back and correct this. This flag will only appear once all household members have been completed so make sure to carefully record the information the first time around.
 - j. Record whether the household has any daily visitors that have come to the house regularly over the six months but do not live there (e.g. daily help) and if so, how many.
 - k. The following question asks how long the household has been living in their current residence. Here the form will follow different paths depending on when the household was first contacted. Go to section 6.19 for guidance on this.

6.18. Entering the household head and members’ information (NEWLY ADDED HOUSEHOLDS ONLY)

- a. If the household has not been visited during a previous activity you will need to record head of household and other household members’ information.
- b. Record the door number of the residence. Leave this field blank if the household has no door number.
- c. Select the road that the household is located on. Select [street not found] if it cannot be located on the list. Following this record any landmarks or notes that could be helpful in locating the household at a later date
- d. Write the name of the head of household. Please take this name from a national ID or health passport if possible. Give three names if possible.
- e. Record the household ownership status - whether it is owned, leased, government built etc. If it is occupied or leased, the survey will ask for the name of the landlord or residence owner. This landlord name may help you trace the household again in the future.
- f. Enter the household head’s phone number. This is collected so that the household can be contacted again for any reason, such as treatment. If the household head

does not have a phone but another household member does, you should enter this, as it will assist in contacting the household head

- g. The form will then ask how many people live in the household. It is important that this number is correct, as it will determine how many individual members (according to the definition in section 4.6) the form will allow you to enter.
- h. Enter the first household member. This must be the adult who you explained the study to and who provided consent for the household to participate in the census.
- i. The individual's unique ID will appear. This will be a 9-digit number: The household ID is the first 7 numbers and the last two on the end create the individual unique identifier.
- j. Select the identification card, ration card, health booklet or similar for the household member. Any document with the individual's full name and date of birth will be suitable
- k. Enter the full name of the first household member. Try to record all three names so that the individual can be identified if needed in the future. For this question, add a nickname if the individual is known in the community by another name.
- l. Enter the sex of the household member.
- m. Enter the age of the household member. If you selected that the household member had an identification document earlier in the survey, the survey will ask you to enter the day of their birth e.g. 06, 21 etc. Enter the day as it appears on their ID document. If the day is not recorded on the document, enter 99. Enter the month of birth as it appears on their ID document. Enter the year of birth as it appears on their ID document.
- n. The age of the individual will be calculated and shown on the next screen. Confirm with the individual that this date is correct. If it is incorrect swipe back to correct it.
- o. If you selected that the household member did not have an identification document earlier in the survey, the survey will ask you to Ask the listed household member for his/her age. If he/she is less than 1-year-old, select [<1 year]. If he/she is 1-year-old or older, select [1 year or older].
- p. If less than 1 year, enter the age in months. If 1 year or older, record the age in years **COMPLETED**. This means the number of full years the person has been alive.
- q. Enter information about the individual's residency status:
 - i. **Present:** Select [yes] if the person is currently in the house or compound at the time of the survey. Do not select yes if they are at school, work, or conducting chores, (e.g. collecting water) or anywhere else outside of the compound.
 - ii. If the person is not currently present, you will be prompted to ask the reason for their absence in the next screen.
 - iii. **Lived here the majority of days in the last 6 months:** Select [yes] if the person is at the house for multiple days in a month or more and select [no] if the individual is away at boarding school or spends extended periods away for work.
 - iv. If the person has not lived here for the majority of the past six months, you will be prompted to ask the reason for their absence in the next screen.
 - v. **Stay here last night:** Select yes if the person slept at the house the previous night.
 - vi. If the person did not sleep here last night, you will be prompted to ask the reason for their absence in the next screen.
- r. Once you have finished entering information for the first household member the form will cycle back and ask you to complete the same information for the next. The form will do this until you have added information for all members.

- s. After this the form will cycle through household members again, this time asking you to record information about who provided consent for the questionnaire and what their relationship is to the HOH. Each page will contain the following information:
 - i. **Name** – This should be used to confirm the identity of the individual and will not be locked.
 - ii. **Sex** – This should be used to help confirm the identity of the individual and will be locked.
 - iii. **Age** – This should be used in conjunction with name and sex to confirm the identity of the individual and will also be locked.
 - iv. **Same person as [name of HOH]** – If the name displayed at the top of the screen is the same as the name displayed in the question (this will be the name of the recorded HOH) then you should record [yes]. If you record [no] you will be asked to confirm what this member's relationship is to the head of the household in the following screen.
 - v. **Provided consent for household** – Record [yes] if this was the household member who provided consent for the census to be undertaken. Otherwise record [no]
 - vi. **Primary respondent to questions** – Record [yes] if this is the member of the household who you are primarily conversing with to answer the census questionnaire, even if they are not the HOH. Otherwise record [no]
- t. For each adult member, on the following screen you will be asked to record their highest level of education and what their marital status is. For children between 2-18 years you will be asked to record whether they are currently in education and information on what school they attend if they are in school.
- u. Note that **only one** household member should be recorded as:
 - i. Being the same person as the HOH
 - ii. Being the person who provided consent
 - iii. Being the person who was the primary respondent.
- v. If you record more than one member for any of these three roles the form will display a flag once you have finished recording information for members, directing you to go back and correct this. This flag will only appear once all household members have been completed so make sure to carefully record the information the first time round.
- w. Record whether the household has any daily visitors that have come to the house regularly over the six months but do not live there (e.g. daily help) and if so, how many.

6.19. Length of time spent at residence (ALL HOUSEHOLDS)

- a. Following adding/confirming household roster information you will be asked to record how long a household has been staying at their current residence. There are two paths the form can follow here:
 - i. **For previously censused households that have not changed residence since the previous census and indicate that the current listed address is correct:** the form will display three questions on the household's current sanitation arrangements (see the section 6.22 e-f) before proceeding to the end of the census, prompting you to record any notes or observations and then asking you to save and finalise form.
 - ii. **For all households that have not previously been censused and all previously censused households that have changed residence since the last census** the form will proceed to the household questionnaire.

6.20. Adding household information (ALL HOUSEHOLDS EXCEPT PREVIOUSLY CENSUSED HOUSEHOLDS THAT HAVE NOT RECENTLY MOVED RESIDENCE)

- a. Select the **predominant** flooring material observed, meaning the material that **most** of the floor is made of.
- b. Select the **predominant** roofing material observed, meaning the material that **most** of the roof is made of.
- c. Select the **predominant** material that the walls are built from, meaning the material that **most** of the walls are made of.
- d. After completing these questions, the form will proceed to the asset questionnaire unless the household is a previously censused household that has moved to a new residence. In this instance, the form will skip the asset questionnaire and follow through to the water and sanitation questionnaire (see section 6.22)

6.21. Completing the asset questionnaire (HOUSEHOLDS CONTACTED DURING PREVIOUS MDA OR NEWLY ADDED HOUSEHOLDS)

- a. Select the primary activity(s) that are done by individuals in the household as forms of income. You may select as many as are listed.
- b. Select the main type of fuel the household uses to cook with. Only one can be selected, so select the most commonly used fuel by the household.
- c. Ask if the household has a set of listed items. Each item must have either a [Yes] or [No] selected. For electrical items, only record yes if they are functional, i.e. a functional or working television, radio, etc.
- d. Ask if any member of the household owns any of a set of listed items. To answer [Yes], these items **need to be owned by at least one of the household members** and do not need to be owned by all of the members.
- e. Confirm whether the household owns any livestock, herds/other farm animals, or poultry If yes: Enter the number of cows/bulls; other cattle, horses/donkeys; goats; sheep; pigs; chickens; other poultry the household **owns**.

6.22. Completing the water and sanitation questionnaire (ALL HOUSEHOLDS)

- a. Select the main source of drinking water for the household members. The selected answer should reflect the **current primary source of water for drinking**. If there are several sources, probe for which source **provides the household with a majority** of its drinking water. If sources vary by season, record the main source **at the time of interview**.
- b. If [bottled/sachet water] is selected, you will be prompted to identify the household's main source of water for other domestic purposes such as cooking and washing.
- c. Establish how long it takes for an individual to go to the identified main source of drinking water source, collect water and return to the household. This answer should include any time that it would normally take to queue for or wait for the water to be made available.
- d. Ask if the household does anything to their water to make it safer to drink. This could include boiling, chlorinating, filtering etc
- e. Determine the type of toilet facility usually used by the household, e.g. pit latrine with open pit/only branches, pit latrine with slab, ventilated improved pit latrine, flush or pour-flush toilet etc.
- f. Ask if the household shares the toilet facility with other households. If the toilet facility used is at a church or school, estimate how many other households use the facility.
- g. Establish where the toilet facility is located, i.e. in residence, in plot, elsewhere.

- h. If you have answered all the questions, select the status of the survey as [complete]. If it is not complete, select [other], then record why not complete using free type.
- i. When you get to the end of the survey, ensure that it is finalized (you have ticked the box). **You will not be able to finalize unless all the questions have been answered.** Click [Save Form and Exit].

6.23. Household revisits

- a. If the head of household or alternative adult household member is not present to participate in the census or would like to participate at a different time, schedule a time to return to the household to complete the census.
- b. Make at least two additional attempts in the week following the first visit to complete the census with the targeted household. If after three visits the census cannot be completed, you can indicate that the residence is vacant. However, the form will not prevent you from making additional visits if you have reason to believe that the residence is occupied.

6.24. Duplicate households

- a. If you have identified a household record in the list that is a duplicate of another household record, you can use the form to flag this as a duplicate record.
- b. Open the form and select the sub site (India only), cluster and village location of the household.
- c. When prompted to indicate what type of place this is, select [other place] and then select [duplicate household] from the list of places.
- d. The form will then display a list of households showing: [household ID], ([hoh_name]) and when the household was entered into the study (e.g. ce1, cw1 etc). Select the household record from this list that you would like to indicate is a duplicate record
- e. The form will then display the same list of households and ask you indicate which household you think the duplicate is a copy of. Note that in all instances the older record of the household should be marked as the original and the newer record marked as the duplicate.
- f. A household's status as being completed or not will not affect whether or not it appears in the list of households marked to be marked as duplicates.

6.25. Schedule

- a. The census should take no more than 8 weeks to complete in any site to ensure that data are representative of the same period of time.

6.26. Quality assurance

- a. Site supervisors will conduct field spot-checks of the enumerators whilst the census is ongoing as well as phone call spot-checks. In total, 10% (5% field checks and 5% phone checks) of the censused households should be spot-checked within a week of the initial enumerator visit. A separate census validation tool shall be used for this.
- b. Data cleaning and management will be ongoing during the census with data shared between the site and central DeWorm3 teams. The site data managers will be responsible for resolving queries sent by the central data management team.
- c. Once completed, the Census Update data should be sent to the DeWorm3 central team who will compare the data against estimated population sizes and high-resolution satellite imagery for consistency checks.