#### **BLUEPRINT PROJECT FOR SUSTAINABLE LANDSCAPES**

# Manual for completing Blueprint questionnaire on ODK mobile app

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June 2022

This Project was made possible thanks to a grant from the ISEAL Innovations Fund, which is supported by:



Schweizerische Eidgenossenschaft Confédération suisse Confederazione Svizzera Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER State Secretariat for Economic Affairs SECO





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## Introduction

The function of the ODK tool within the Blueprint project has been to provide offline data collection capabilities and data that can be stored in SAN's technology platform the iHub which provides a secure, agile, and scalable backend for the mobile app. The use of ODK Collect helped the team develop a digital survey tool to systematize primary and offline data collection from local inhabitants in terms of actively participating in the sustainability agenda of their communities being active data enumerators. These features allowed SAN to collect survey responses using a tablet or smartphone without internet connectivity and systematize the data collection and analysis of interviews with the potential to encourage local stakeholders to act as enumerators of a participatory monitoring approach.

ODK Collect is an open-source Android device app that replaces paper forms used in survey-based data gathering. It supports a wide range of question-and-answer type surveys and is designed to work well without connection to the internet via Wi-Fi or mobile data network.

ODK Collect receives forms automatically by scanning a QR code, sent to the user through email. Users run the form by following the prompts and can save their progress at any time. The finalized forms are sent to a server upon submission.

ODK Collect supports GPS antenna location, audio, images, video, barcodes, signatures, multiple choice questions, free text prompts, and numerical responses. You can even accept responses from other apps on your device.

To maintain the privacy of the interviewees, all data obtained through the form will be processed and presented anonymously.

# Mobile application installation

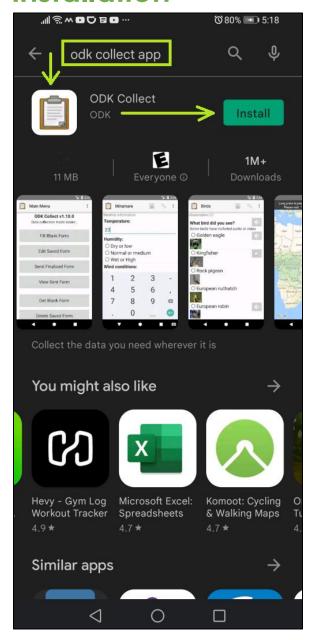


Image 1

Depending on the brand and type of mobile device, download **ODK COLLECT** from your app store. Pay attention to the icon, it should look the same as shown in image 1 and 2.



Image 2

Locate the **ODK Collect** icon on your device and open the application to begin the setup.

# Project Configuration

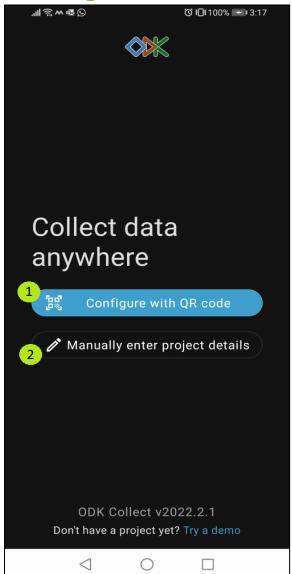


Image 3

When launching the app for the first time (image 3), the user will see two options and must select <u>one</u> of the options. This project will use option 1, but

both will be explained.



Image 4

 Configure with QR code: This option allows you to scan a QR code to set up a project automatically.

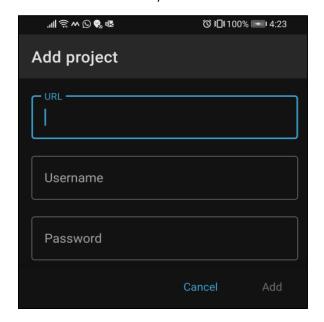


Image 5

Manually enter project details: Enter the URL of the project, the username and the password assigned, which should have been previously sent to the user.

# Application Language

The original language of the mobile application is English, but users can change it to their native language if it is listed in the options:

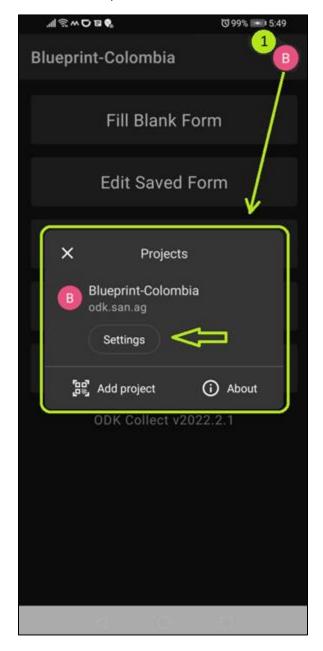


Image 6

- Press the project icon, and in the pop-up window, select the "Settings" option that will show the project settings menu.
- 2. Select the "User Interface" option.

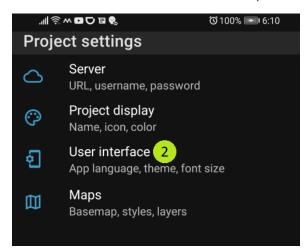
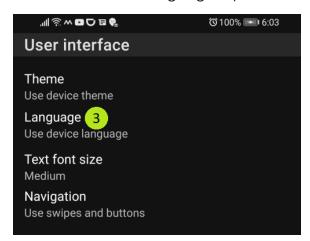


Image 7

3. Select the "Language" option.



**Image 8** 

4. Select the desired language.

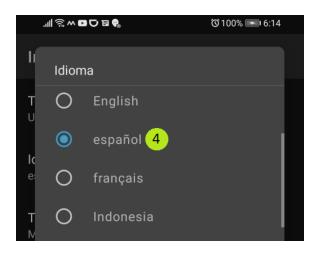


Image 9

# Project Control Panel

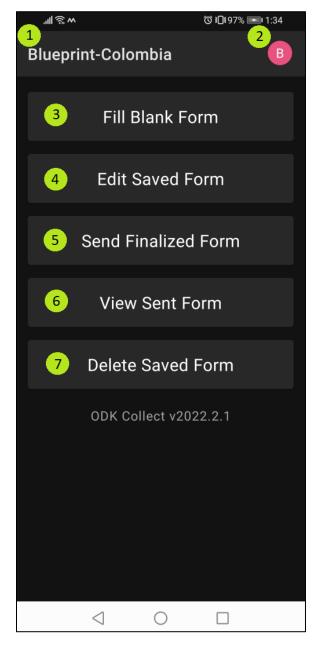
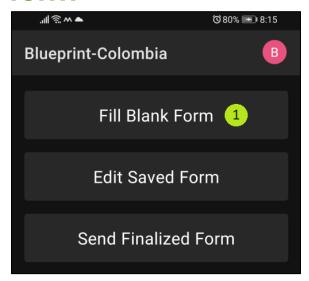


Image 10

These are the project control panel's functions and commands.

- Project Name: This is the name by which each project is identified.
   ODK Collect allows the user to manage multiple projects at once. Each project has its own set of forms.
- 2. <u>Project icon</u>: Displays icon or project images. By pressing it, the user will be directed to the settings section.
- Fill Blank Form: Select this option to view the list of available forms for the project. Select one to start.
- 4. Edit Saved Form: By selecting one of the blank forms and starting to fill it out, the user can save their progress at any time. If it is necessary to stop and resume the form later, here is where those will be stored.
- 5. <u>Send Finalized Form</u>: Once the form is finished, it is stored in this section, but is **not** submitted as a finished form to the server yet. This allows the user to review the form and confirm that all questions have been answered or that there are the same number of forms completed as interviewees / farms.
- View Sent Form: Once the form has been reviewed and submitted, it is stored in this section, showing the interviewer which forms have been successfully submitted.
- Delete Saved Form: This section allows the user of the ODK Collect application to delete forms that could not be finalized, or that were submitted to free up storage space on their mobile device.

# Start with a new form



#### Image 11

First select the <u>Fill Blank Form</u> option. The list of forms available for the project will open. This list could be empty if no form has been made available to the user. If this is the case, you should contact the person in charge of the project.

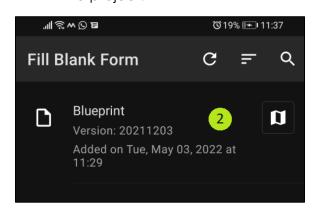


Image 12

2. In the list of forms (image 12) select the appropriate form as desired. Different forms serve different purposes, and will

contain different questions for different participants, and may be of varying lengths. For that reason, it is recommended to be precise when choosing a form.

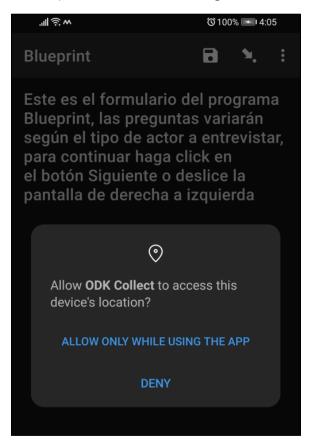


Image 13

The first time you use the **ODK Collect** application, and start the first form, it will ask the user for permission to use the GPS antenna to be able to record geolocation data (select first option). Since the forms can have questions where a geographical point is requested or necessary for drawing a polygon in a map, these permissions should be allowed. If not allowed the corresponding permission these questions cannot be answered correctly.

# Running a form

As an important clarification, changing the language of the application <u>does</u> not change the language of the form. If the language of the form is different from the native language of the person answering the questions, ask the person in charge for a form in the appropriate language.

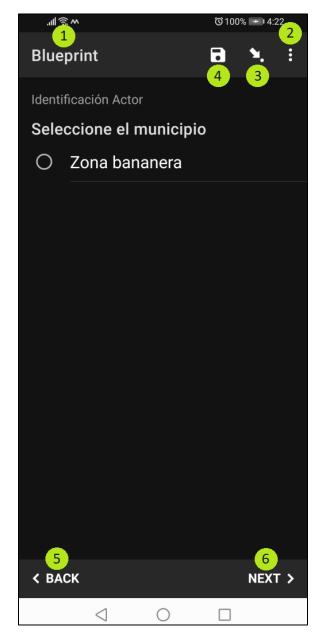


Image 14

When the user is running the form, the controls available are those marked in image 14:

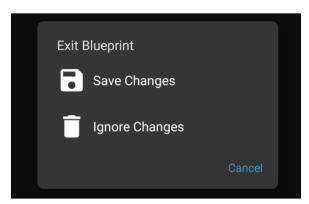
- Form Name: Since a project can contain multiple forms, each will have a name that describes its goal and/or type of participant.
- 2. <u>Settings menu</u>: This menu allows the user to access the configuration of the form and the project.
- 3. Form navigation button: Forms are designed in such a way that they can contain sections and parts to order and structure the questions. This design and structure can be navigated, to go from one section to another without the need to pass each individual question back or forth. This button displays the section of the form and the questions in that section (see image 15):



Image 15

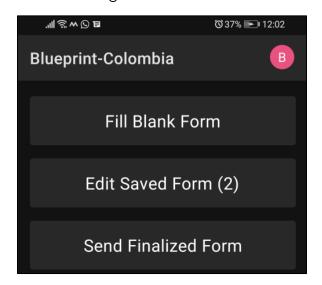
 a. <u>Root navigation</u>: by pressing this button, users exit the section in which

- they are and go to the root where they can see and navigate all the sections, areas and questions of the form.
- b. <u>Section's Name</u>: Identifies each section of the form.
- Section's Description:
   Describes what is the objective of the section.
- d. <u>Questions Area</u>: The questions in the section are shown here.
- e. <u>Go To Start</u>: This button directs the user to the beginning of the form.
- f. <u>Go To End</u>: This button directs the user to the end of the form.
- 4. Save button: This button (see image 14) allows the user to save the progress of the form, so, if the form is closed, it will be stored in the "Edit Saved Form" section (see image 10 point #4). When the user opens the form, it will continue from the last question answered. If the user leaves the form without saving the progress, the ODK Collect application will request to save the changes as shown in image 16:



#### Image 16

Saved forms will be displayed in the project control panel (see image 10) under the <u>Edit Saved Form</u> option, as shown in image 17 for reference:



#### Image 17

- 5. <u>Go back</u>: Return to the previous question (see image 14).
- 6. Next: Move on to the next question (see image 14).

The user must consider the forms are saved on the cell phone or any mobile device automatically, every 15 minutes, but the process presented above allows you to save at any time.

# **Question Types**

Throughout the form, the user will find different types of questions. This section will show how to use each one.

### Multiple-Choice:

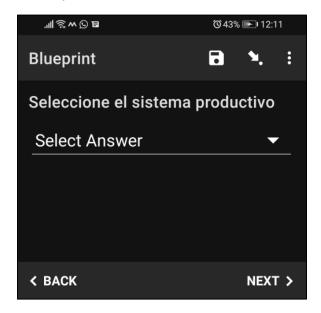


Image 18

Click on "Select Answer" to display a list of options like this one:

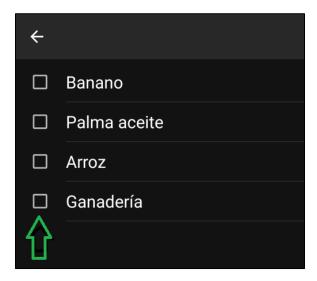


Image 19

When the selection list is presented with square boxes (image 19, green arrow) it

tells the user that more than one option can be selected at a time:

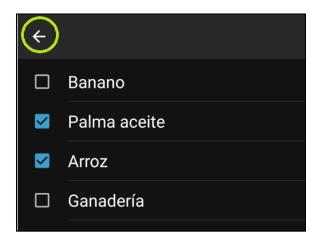


Image 20

Once the user finishes the selection, press the back arrow at the top, as shown in figure 20. The user returns to the question again, but now the selected options are displayed:

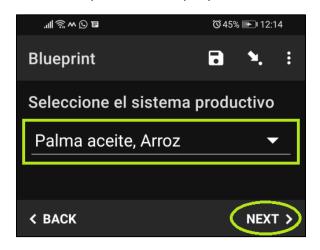


Image 21

To move on to the next question, press **NEXT >** at the bottom right of the screen to move to the following question.

## Single-Choice:



Image 22

When the selection list is presented with circles instead of squares (image 22, green arrow) only one answer can be selected at the time. if the user marks another option, the previous one will be unselected automatically:

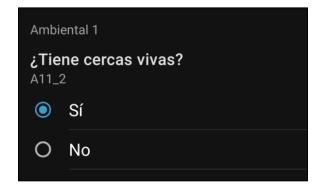


Image 23

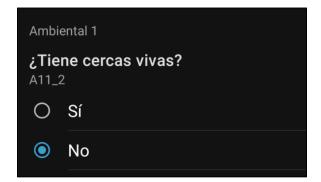


Image 24

The options shown in the single-choice questions must have at least two options. If the options displayed are more than the screen can display at once, the user will see a small sidebar (see *image 25*, green arrows) indicating the screen can be scrolled down to see the options at the bottom.

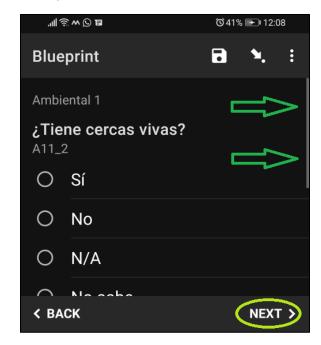


Image 25

To move on to the following question press **NEXT >** at the bottom of the screen.

### Numeric Value:

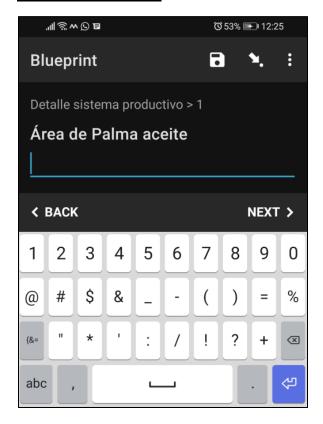


Image 26

When the answer to the question asked is a number, either <u>integer</u> or <u>decimal</u>, the numeric/symbol keypad will be immediately displayed on the mobile device.

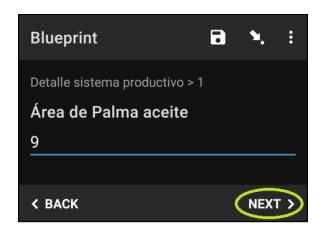


Image 27

Numeric value means answer should <u>not</u> have letters, only numbers. Press **NEXT >**.

### Alphabetical Value:

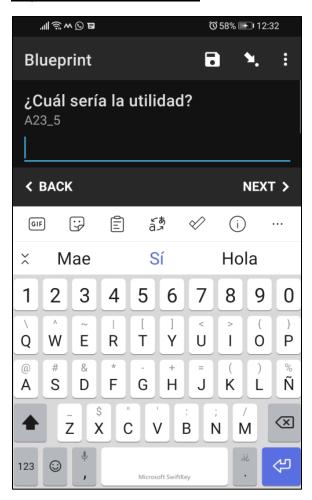


Image 28

When the answer to the question is open text, the alphanumeric keypad of the mobile device will be displayed (see image 28).

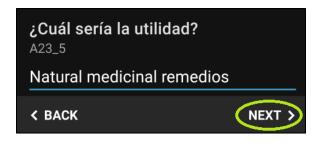


Image 29

The answer can receive any letter, number, or symbol. Press **NEXT >**.

### Image or Photograph:

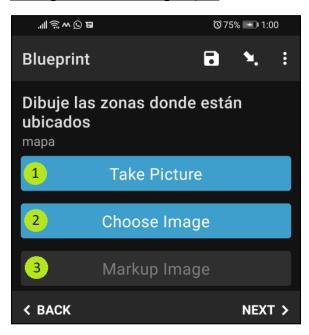


Image 30

This type of question can be presented with only the "Take Picture" option, or only the "Choose Image" option, in addition to this where the 3 options are shown.

- 1. <u>Take Picture</u>: This option will use the main camera of the mobile device to take a picture. Once taken, you can accept or reject the photo with the controls at the top (see *image 31*), if the user rejects the picture, it must be taken again until the picture is of the user's liking.
- 2. Choose Image: If the image to be added is stored as a file on the mobile device, the user must use this option, which opens a window to explore the files and images of the mobile (see image 32). The device might have extra storage in the form of and SD Card, so keep an eye on that

when searching for an image. The Image 32 acts as a reference as different devices might display different ways to present the search view, but the search process works almost the same.

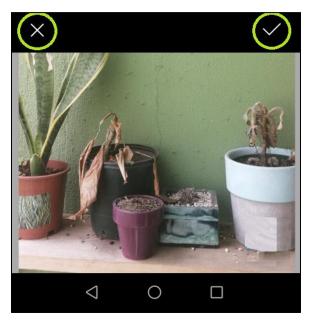


Image 31

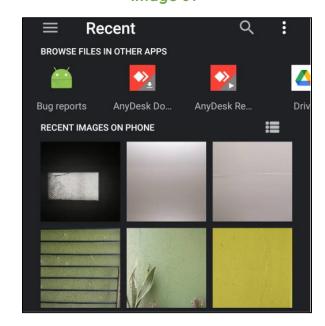


Image 32

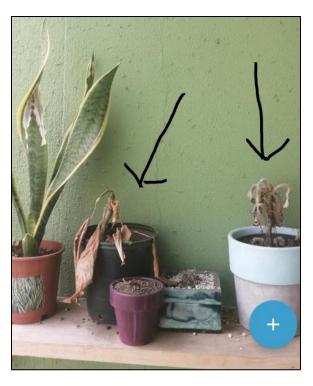


Image 33

3. Markup Image: Allows you to draw or make marks with your finger (see image 33, arrows in black), which can help highlight an important section of the image. Once the user has finished the marks or annotations, press the circular button with the "+" sign to display the actions menu (see image 34). Reset deletes all marks and annotations of the image, Save and Close saves the marks and annotations made in the image, <u>Select Color</u> allows you to change the color to draw the annotations. "X" marked button: This button closes the menu displayed.

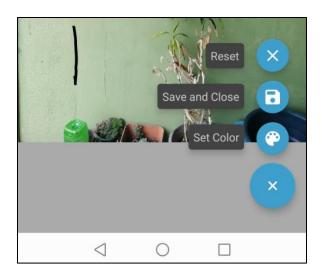


Image 34

Once the picture or image is saved with the changes of the marks and annotations, the question should look like image 35. Depending on the size and orientation of the photograph this can be partially displayed before moving on to the next question, but the user can be sure the whole image was saved successfully.

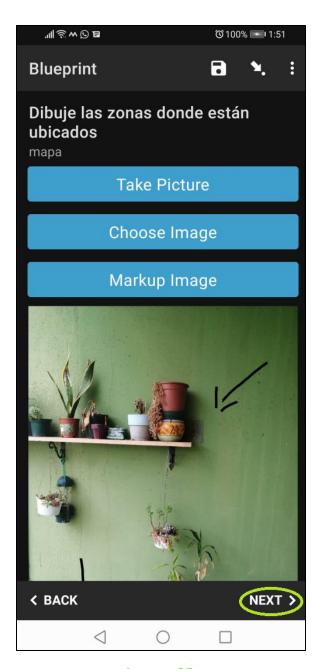


Image 35

Press **NEXT >** to continue to the following question.

### **Geographical Coordinates:**

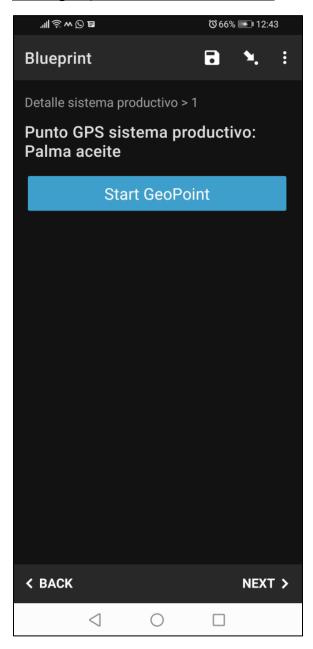


Image 36

The user should remember that the GPS antenna of the mobile device must be active. The user must be located outside buildings to obtain the geographical coordinate or coordinates required from the satellites. If the sky is cloudy, or there are many trees obstructing the passage between the satellite and the mobile

device, the coordinate might not be possible to obtain.

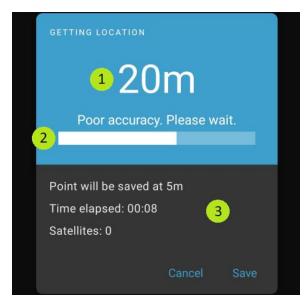


Image 37

By pressing the "Start GeoPoint" button, **ODK Collect** will show the progress of the process:

- This option shows the accuracy, the lower the number, the higher the accuracy.
- 2. Calculation progress bar.
- 3. Description of the calculation process.

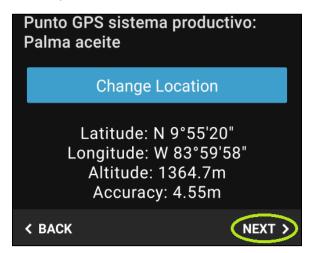


Image 38

Once the coordinate is captured, the result's (*image 38*) info is displayed. Press **NEXT >**.

## **End form**

Once the users have reached the last question, as they move forward, they will see the following:

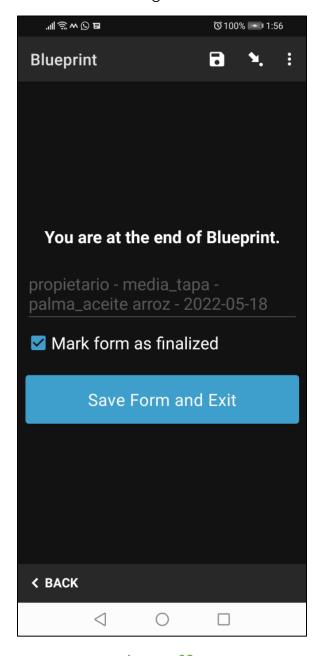


Image 39

The user will be informed that the end of the form is reached, and the name of the form is displayed (grayed out).

At this point the user will be able to choose to mark the form as finished. If so, by pressing the "Save Form and Exit" button, the form will be sent to the servers and the data will be stored automatically. The form will still be available on the mobile device in the project control panel under the "View Sent Form" option (the above will occur if the user has internet connection either by Wifi or by mobile data. Otherwise, the form will be stored under the section "Send Finalized Form"). If on the contrary the user chooses not to mark the form as finished, it will be kept on the mobile device under the option "Edit Saved Form".

The user is recommended to enter the "Delete Saved Form" option to clean the executed forms, since these can only be identified by execution date and having several forms completed could be difficult to identify them.

If the user wishes to review a more detailed technical guide, please go to the official website of <u>ODK Collect.</u> This page is available in English only.