

Mobile data collection with OpenDataKit solutions

Enumerators training- *presentation to
adapt to each context*

Smartphones for mobile data collection

☾ Increasingly used by NGOs in various contexts (assessments, monitoring and evaluation, communication with beneficiaries...)

☾ Pros

- More accurate results
- Faster
- Easier to review, analyze

☾ Cons

- Expensive and fragile technology



Android smartphones settings



Introducing the Fairphone



ON/OFF

(you can also use this button to put the phone in Flight mode)

MENU
(Button for options)

Home
(Unlock + go to
homescreen)

Back



cartong



Terre des hommes

Helping children worldwide.

Phone interface

Notifications bar

To quickly set up the basic configuration for your phone, press the black bar on the top of the screen and swipe it down.

Battery level

To save power, switch off the WiFi and reduce the screen brightness.

You can also activate the airplane mode by pressing the switch down button and selecting "Airplane mode".

 Airplane mode
Airplane mode is OFF

ODK Collect

Application used to fill the forms

Settings menu

Advanced settings for your phone: time & date, WiFi networks, etc.

Application menu

To restore ODK Collect or open other applications

Switch on the **WIFI**: only when synchronizing the forms.
Make sure you turn data transfer (3G) off when you synchronize and only use WiFi).

Adjust the **screen brightness**.

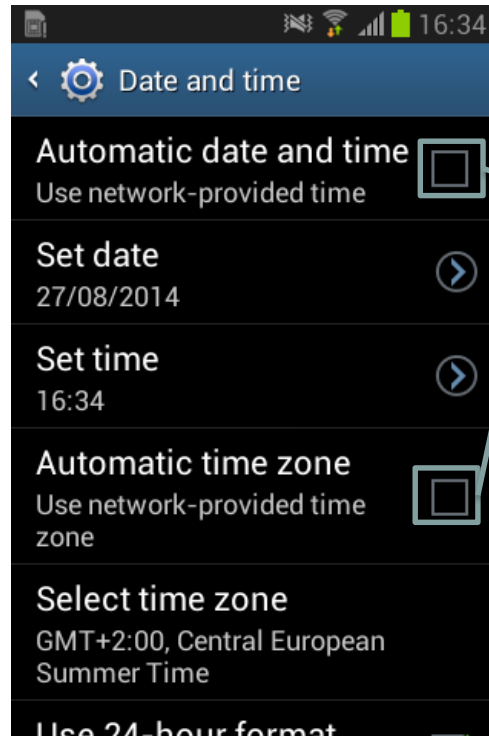
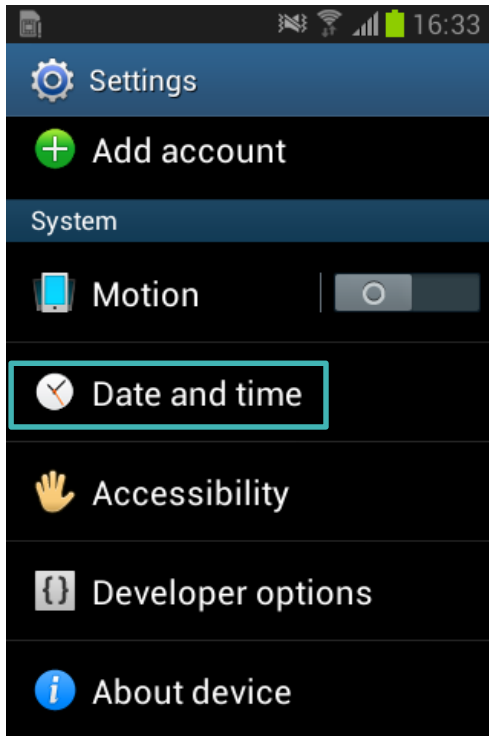
Use this with caution, the brighter the screen is set, the more battery is consumed!

Swipe up from here to close the notification menu.



Phone settings

 Make sure the date is correctly set

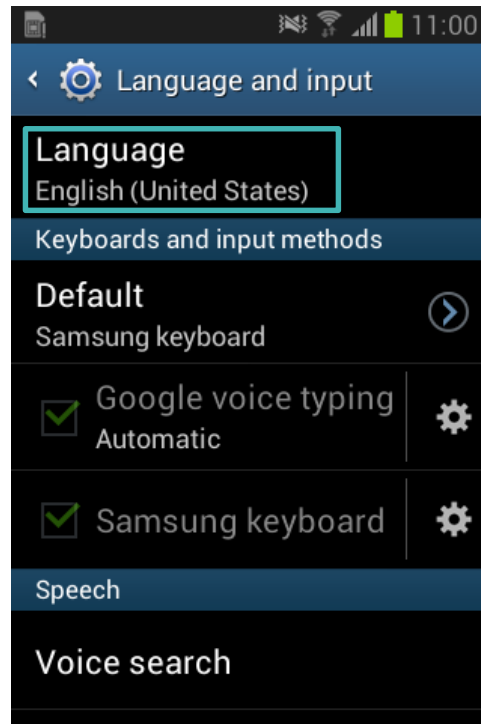
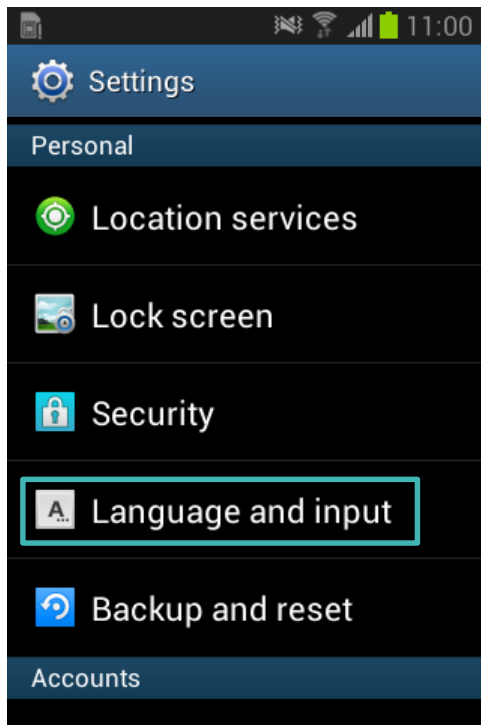


If not, unselect "Automatic" and enter the current date/hour

 Set up first the time zone, and then the date/hour

Phone settings

Change the language



 Changing the language will automatically change the interface of ODK Collect & the virtual keyboard (if Arabic keyboard is available)

Exercise

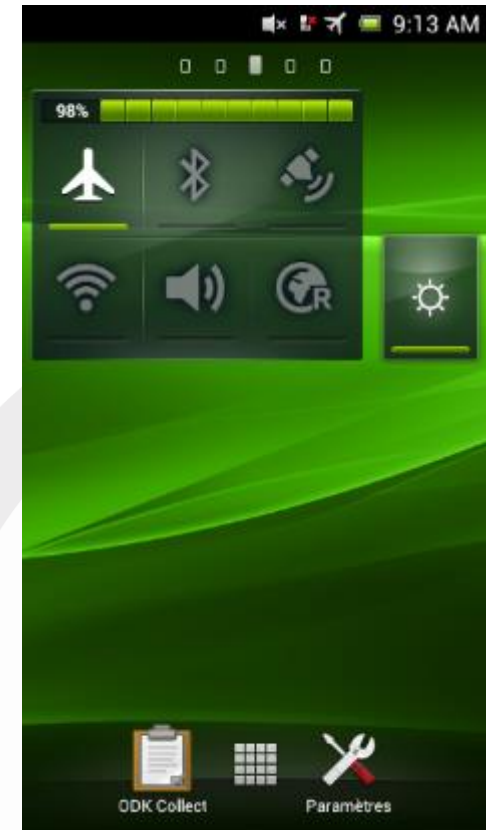
1. Adjust the date to the date of today as well as the hour.
2. Make sure that your phone is in Airplane Mode, that the WiFi is switched off and that the brightness of the phone is set to reduced
3. What happens if you accidentally delete the ODK application from the Home screen?

Exercise

1. What do you think are the different phone settings that can impact the battery?
2. Why do you think having the right date and time set on the phone can be important for your survey?

Battery management

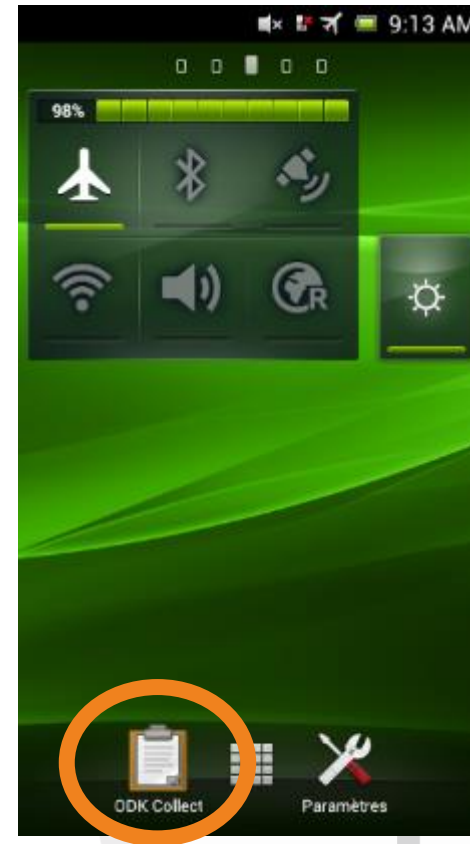
- ❏ To keep the battery...
 - WIFI OFF
 - Airplane Mode
 - GPS off when not used
 - The phone brightness must be as low as possible
 - Adjust screen saver time
 - Make sure that no application is running in the background
- ❏ Other options in difficult contexts
 - Plan a second battery
 - Plan a battery pack to recharge it
 - Plan car chargers etc if relevant



THE ODK APPLICATION

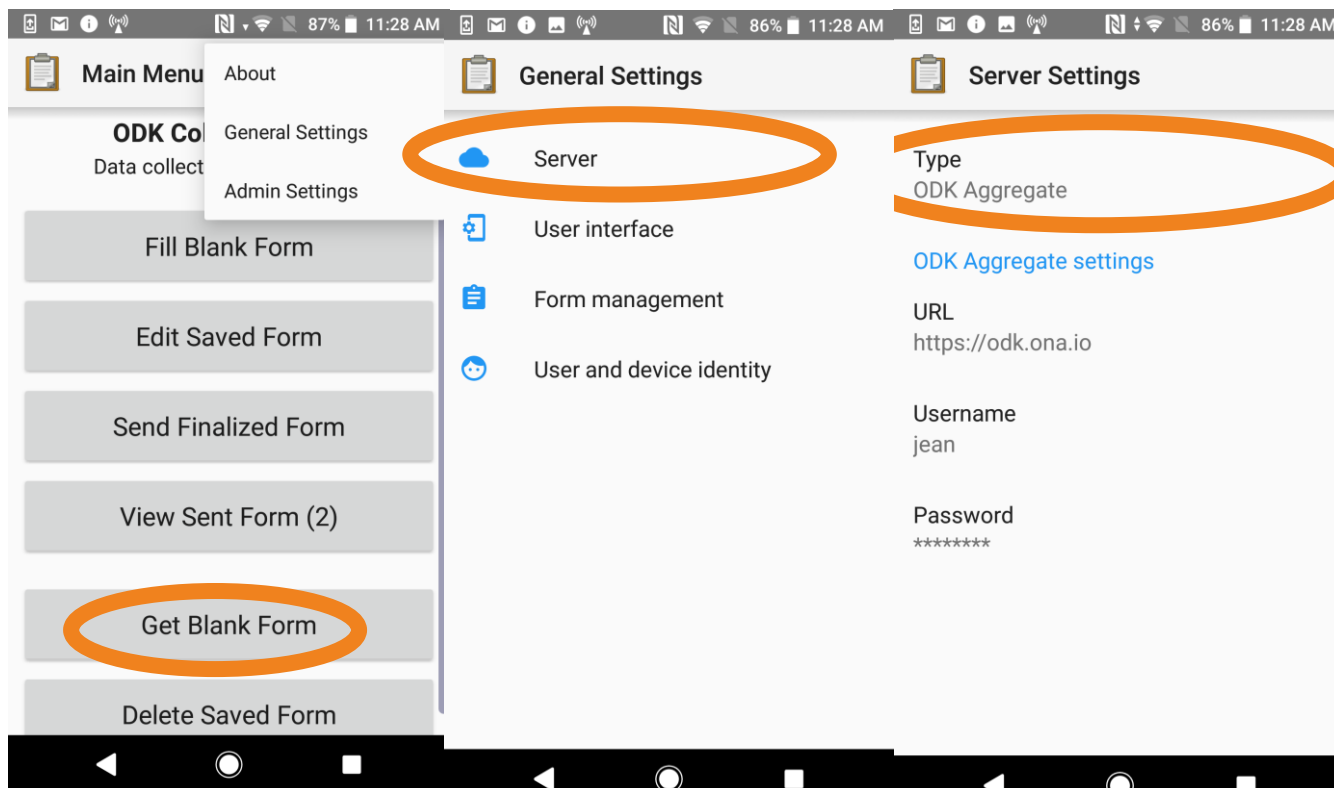
First taking in hand of ODK

- 👤 Open the « ODK Collect » app



Connect your phone to Kobo

- ❗ You need to connect to the right website so:
 - that it can access the blank forms
 - That it can send the submissions to the right place



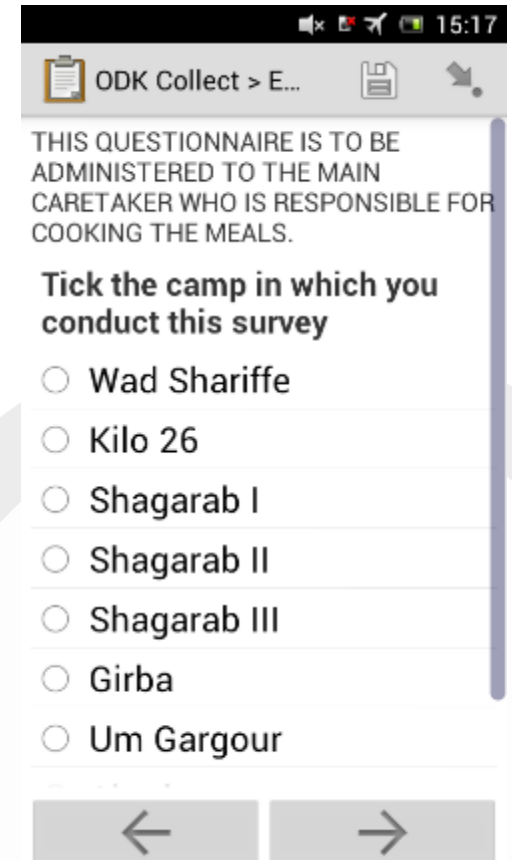
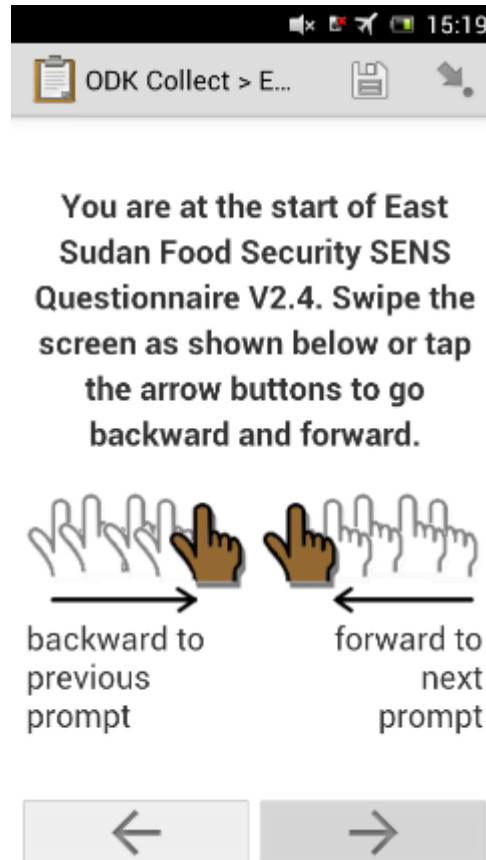
Exercise

Open the « getting to know you » form, fill it, finalise the form (tick the box on the last screen) and save the submission



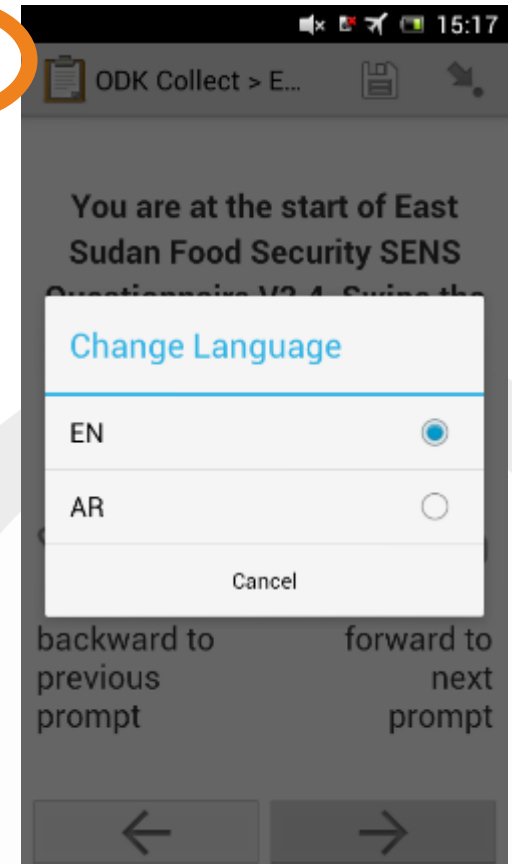
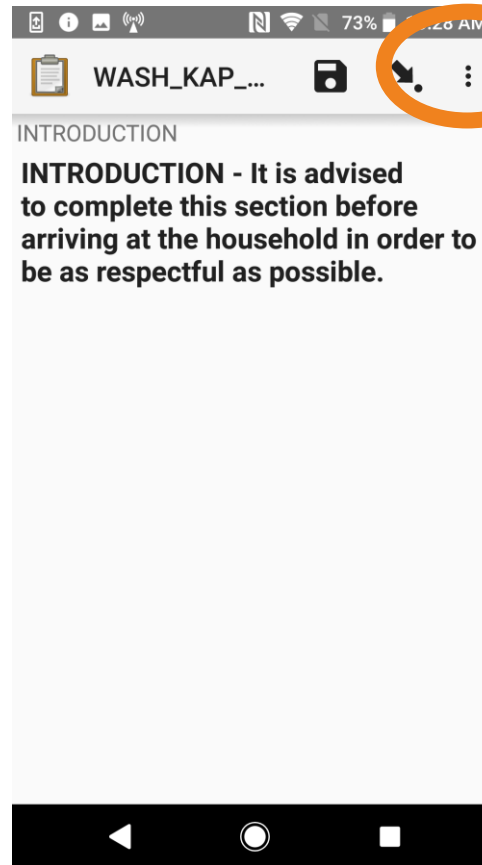
ODK Browsing through the form

- 👤 To go to the next question of the form you can either “swipe” the screen with the finger, or use the button at the bottom of the screen.



ODK Changing the language

- 👤 To change the language of a questionnaire: once the form is opened, click on the Menu button (bottom right button of the phone) and choose "change language"



ODK Select an option

- ❶ This is an example of selecting one of the items from the list of options.
- ❷ When there is a circle (radio button), only one can be checked.

ODK Collect > E...

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO THE MAIN CARETAKER WHO IS RESPONSIBLE FOR COOKING THE MEALS.

Tick the camp in which you conduct this survey

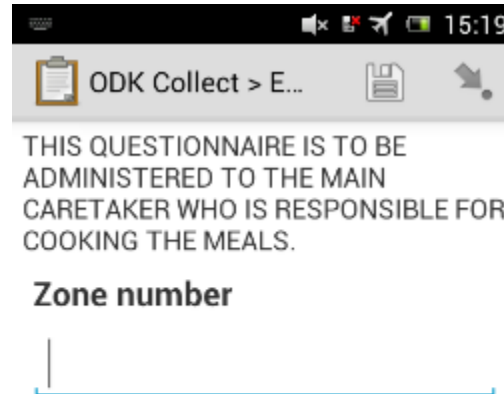
- ☐ Wad Shariffe
- ☐ Kilo 26
- ☐ Shagarab I
- ☐ Shagarab II
- ☐ Shagarab III
- ☐ Girba
- ☐ Um Gargour

← →

ODK Enter numbers/text

Example:

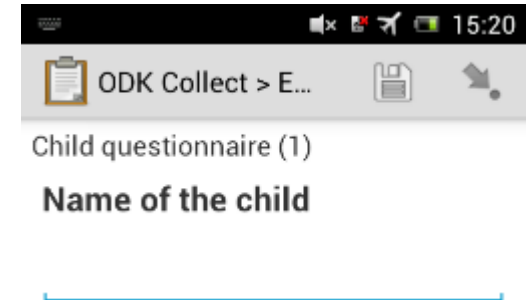
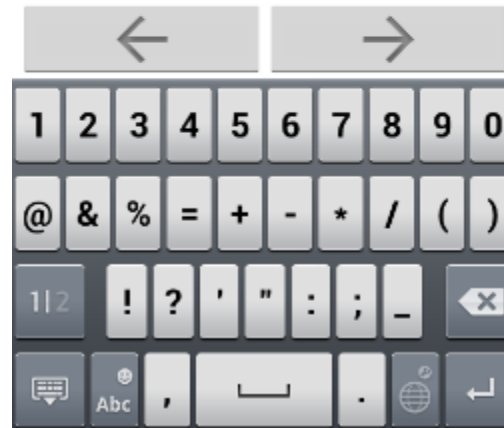
- ❶ This is an example of where an enumerator would fill out a form with text.
- ❷ The enumerator can use the key pad on the screen, or the phone key pad.
- ❸ For some fields, **only** letters can be used, and for other fields, **only** numbers can be used. Ranges can be set by managers.



ODK Collect > E...

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO THE MAIN CARETAKER WHO IS RESPONSIBLE FOR COOKING THE MEALS.

Zone number



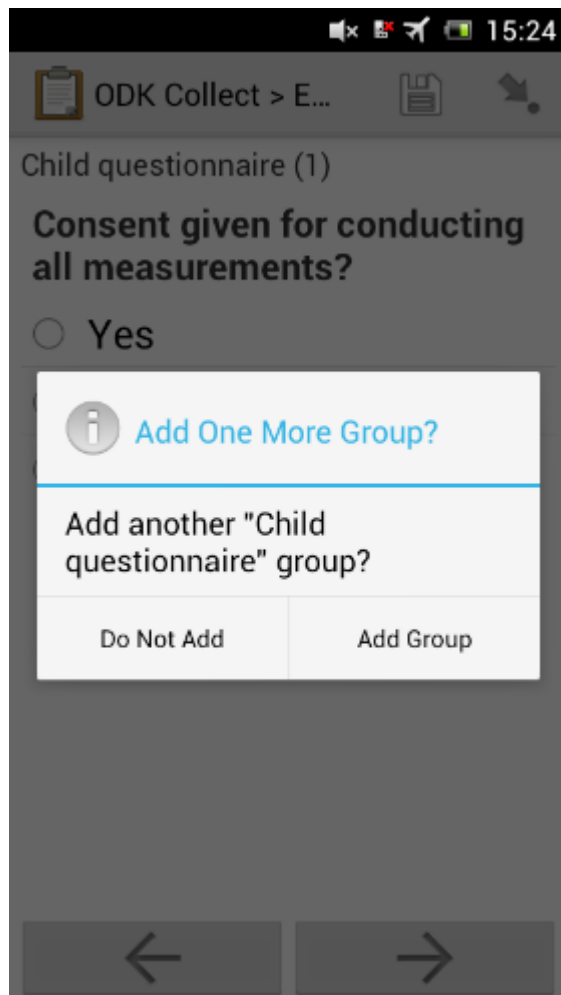
ODK Collect > E...

Child questionnaire (1)

Name of the child



ODK Add a group



The screenshot shows the ODK Collect app interface. At the top, the status bar displays the time as 15:24. The app header shows 'ODK Collect > E...'. The main screen displays 'Child questionnaire (1)' and a consent question: 'Consent given for conducting all measurements?'. Below this, there is a radio button for 'Yes'. A dialog box is open, asking 'Add One More Group?' with an information icon. The dialog contains the text 'Add another "Child questionnaire" group?' and two buttons: 'Do Not Add' and 'Add Group'. At the bottom of the screen, there are navigation arrows.

Example:

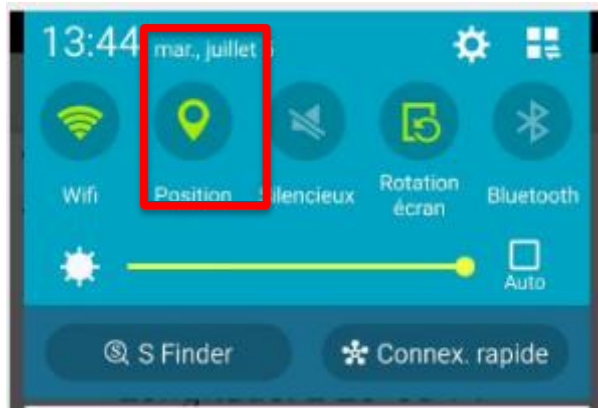
- ❶ A group corresponds to the possibility of repeating a number of questions different times (ie to a number of people)
- ❷ Add another group; if there are more than one woman or child in one household you can add them all one by one.

Delete a group

- ❶ If one adds a group, it is possible to remove it by pressing and holding the reply field and then choosing « Delete the group ».

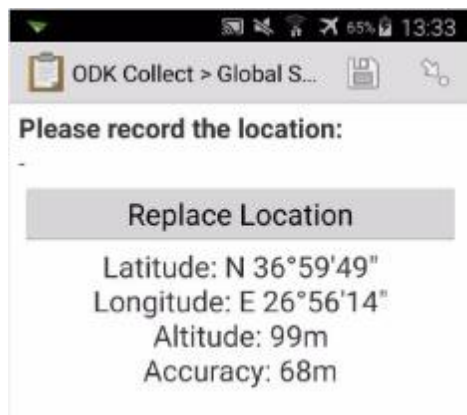
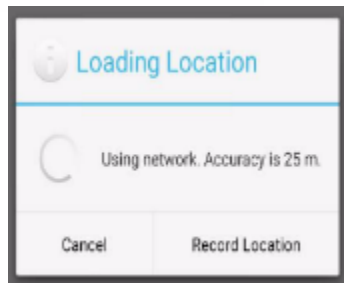
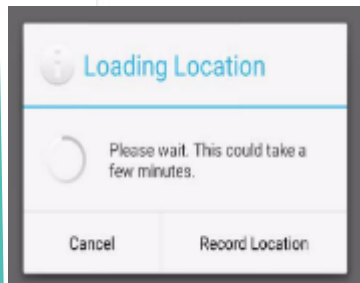
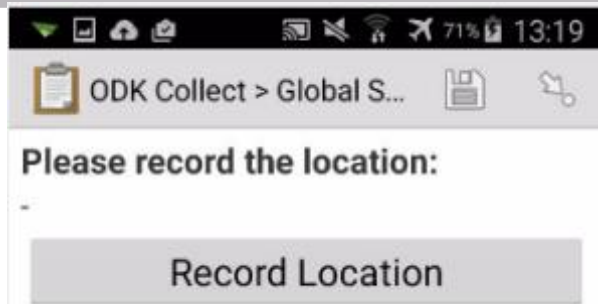


Record GPS coordinates (1)



- ☾ ⓘ Pull the top of the screen toward the bottom.
- ☾ ⓘ It will bring up a different menu – one of the ICON will be for the GPS.
- ☾ ⓘ Ensure that the GPS icon is ON (tap to turn on/off)
- ☾ ⓘ May look slightly different on your phone

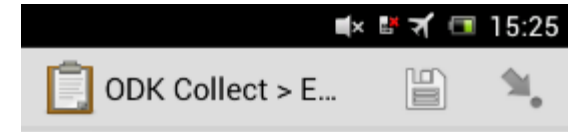
Record GPS coordinates (2)



- ⓘ Wait until a satisfactory accuracy achieved [**10m suggested – adapt to context**]
- ⓘ Take the recording outside, not indoor.
- ⓘ Start the GPS Test application once a day.
- ⓘ Turn off GPS when not needed!

ODK Save Questionnaire

- 👤 Tick "Mark form as finalized"
- 👤 Click on « Save Form and exit »
- 👤 The fact that it is ticked means that it is considered ready for send off to Kobo



You are at the end of East Sudan Infant and Child 0 - 59 months questionnaire V2.5.

Name this form

East Sudan Infant and Child C

☐ Mark form as finalized

Save Form and Exit

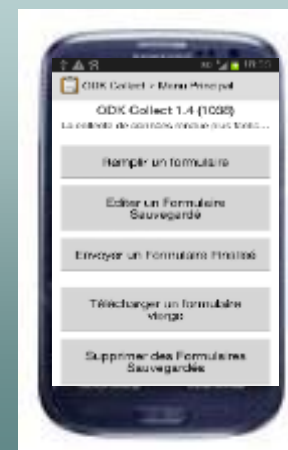


Send back the results to Kobo

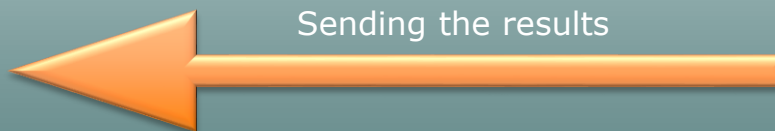
Kobo



ODK Collect



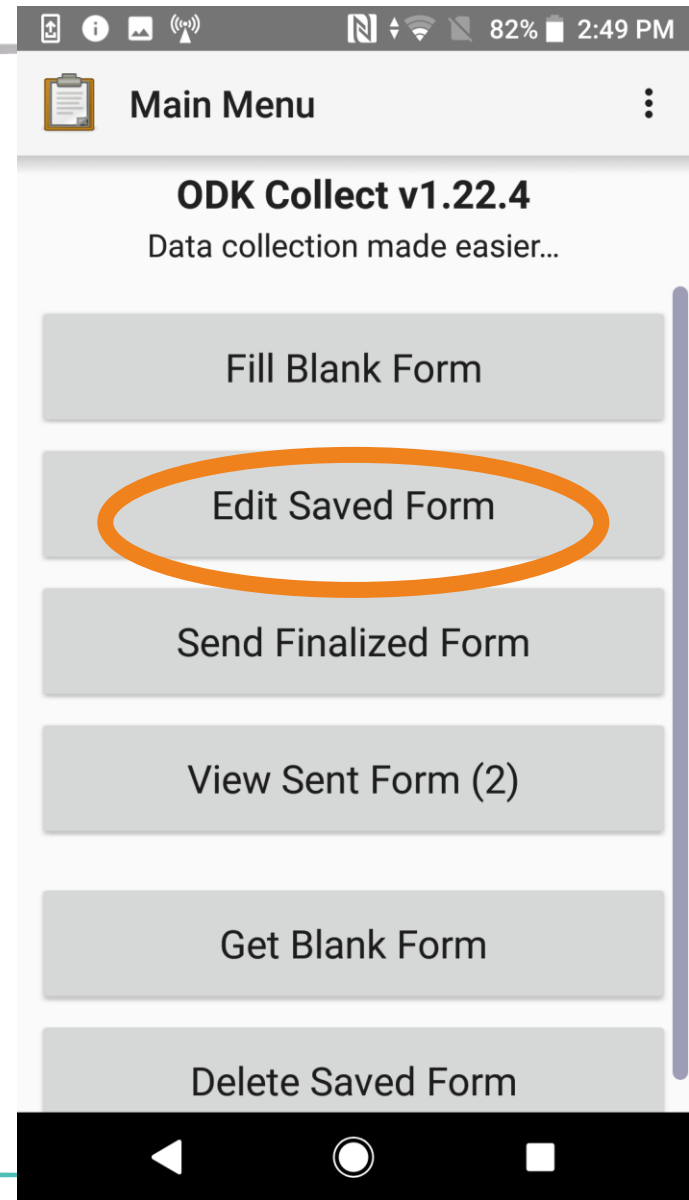
Sending the results




- ❶ Activate the wifi
- ❷ Make sure to have « Mark form as finalized » and to have saved it
- ❸ Go to « Send Finalized Form », select it and send it

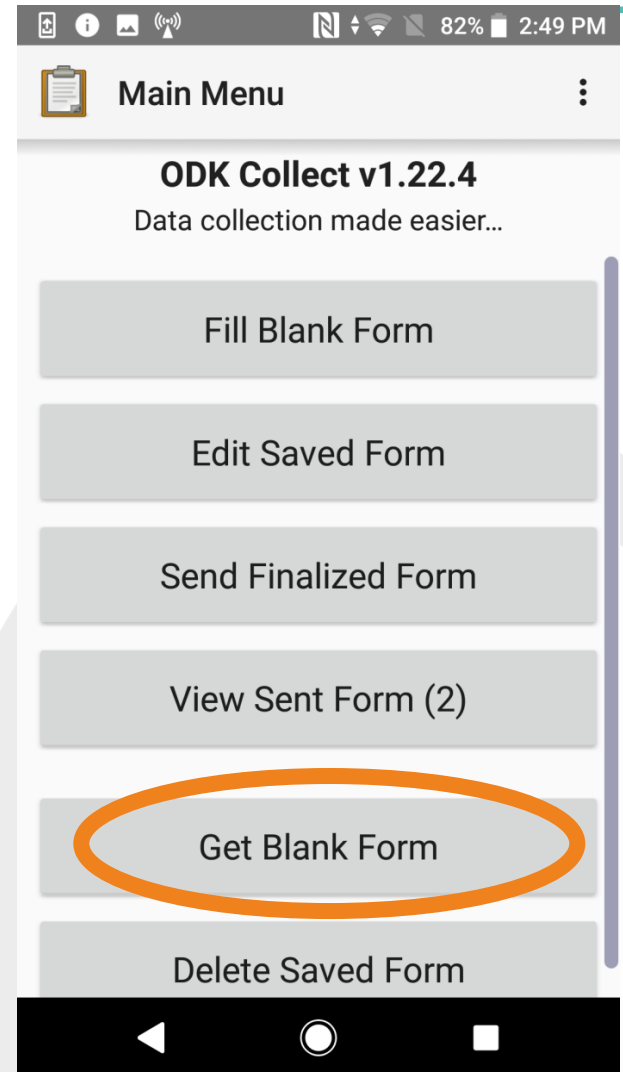
Review the data

- ❶ You can review the saved but not finalized form in "Edit saved forms"
- ❷ You can re-enter the form, modify what you need, finalise it by ticked the relevant box on the last screen to finalise it.



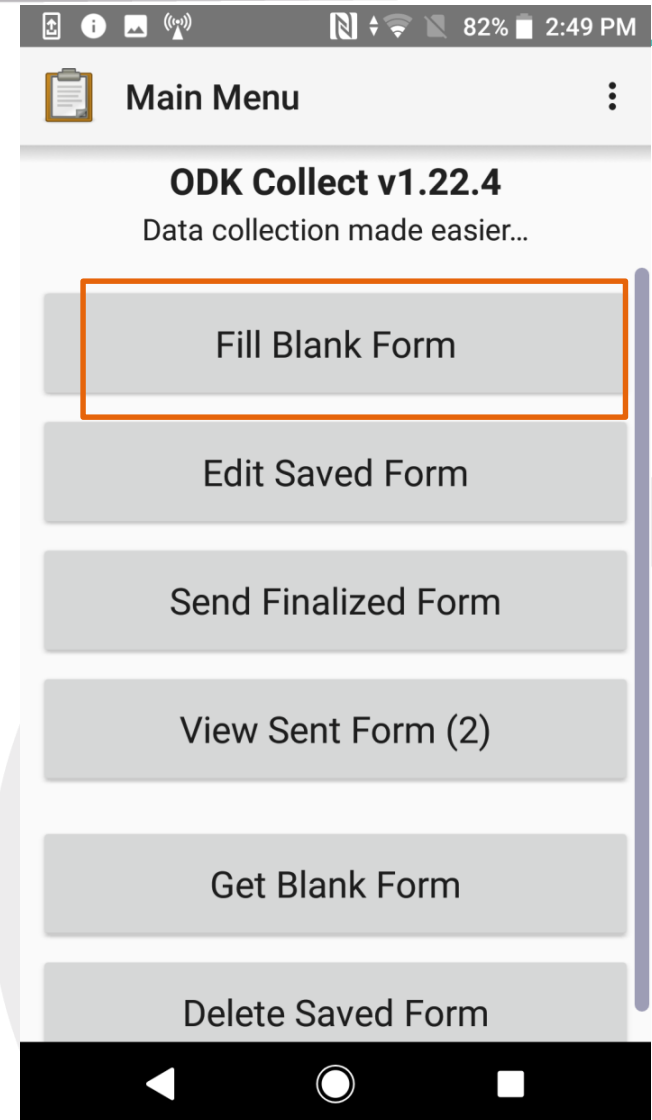
Download a new form

-  To download a blank form:
- Make sure you to have the wifi ON
 - Click on "Get blank form"
 - Select the form(s) which you are interested in and click on "download the selection"



ODK Main menu

- Enumerators will mainly use the 'Fill Blank Form' button where they can choose the relevant blank survey to fill.



Some tips

- 👤 If you accidentally closed ODK: restart the application, most of the time it will open again where you left it.
- 👤 If the application crashes: turn the phone off and back on again. Restart the application and check if the data from the form you were editing have been saved. You should find it back in the “Edit Saved Form” menu

The OpenDataKit ecosystem

- ❶ ODK is one of the most developed and widely used MDC solution
- ❷ Package of solutions, running on Android and based on OpenRosa
- ❸ Many applications based on it: free or paying, private sector or research, completely autonomous or sharing base tools
- ❹ Presented during this training: ODK Collect and Kobo
- ❺ To compare solutions:
<http://humanitarian-nomad.org/>



Introduction to OpenDataKit (ODK)



- ❶ Open source solution for Android:
 - Widely used
 - Basis for numerous systems
 - Powerful and flexible
 - Secure storage on your own servers possible
- ❷ Different deployment profiles possible (offline with USB, offline on local network, online, etc)

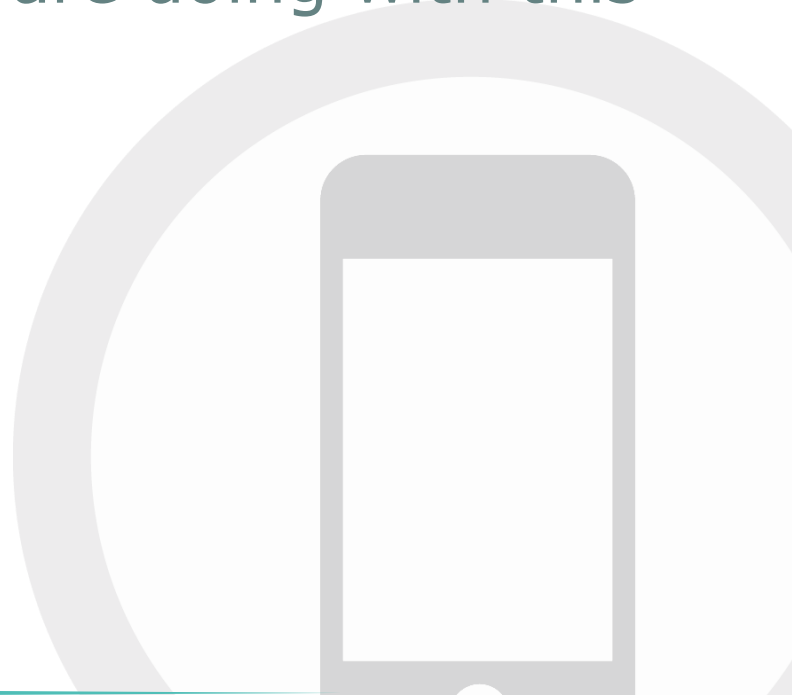


Features of the phone, your responsibilities

- 👤 These phones are the property of Terre des Hommes. When they are in the hand of the enumerator, they are under his personal responsibility
 - **Never** leave the phone unwatched
 - **Never** leave the phone the phone on a desk or bed, keep it in your pocket or handbag
 - Be careful!

Let the interviewed person know you will be using a phone...

-  Something to consider is that this new technology might be intimidating
-  It is a good idea to let the person you are interviewing know what you are doing with this piece of equipment.

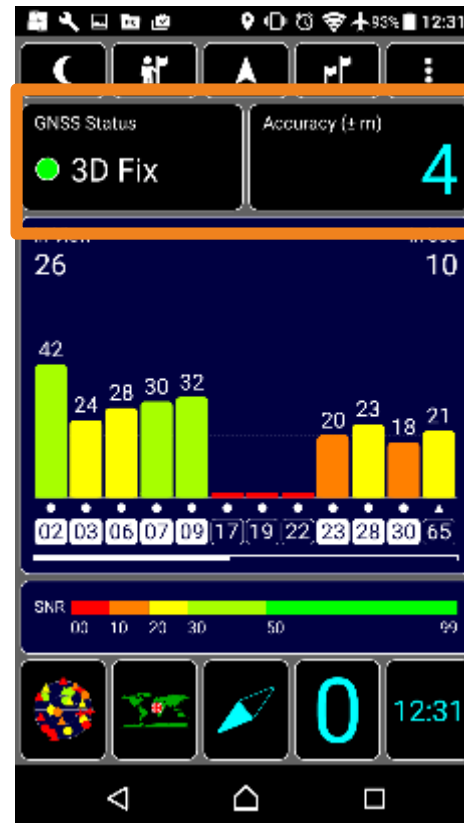
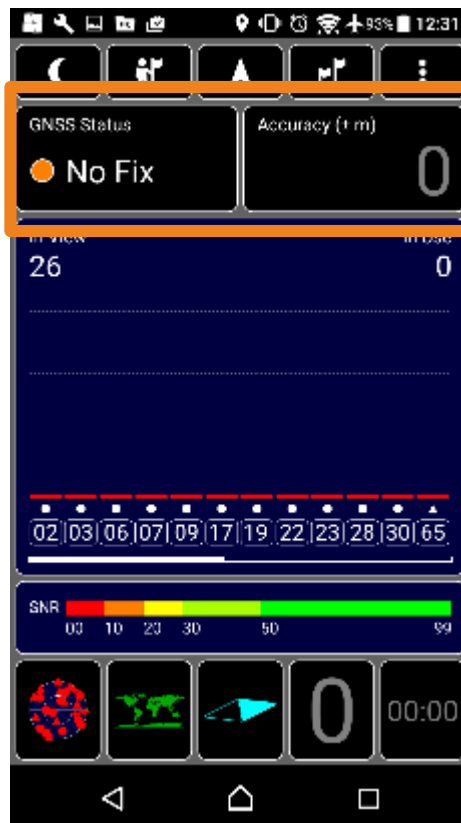
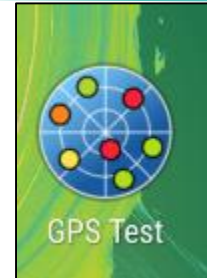


Other interesting apps

- 👤 You can also install the following apps depending on your needs
 - GPS test+ : if some of the phones take a long time to find the GPS position, this app, opened first thing every morning, will help ODK in finding the points faster
 - Barcode Scanner: if you set up a barcode scanning system
- 👤 All these can be installed through the Play Store (they are free) or else by USB stick


How to increase the speed of a GPS

- Some applications optimize the GPS functioning (ex. GPS Test)

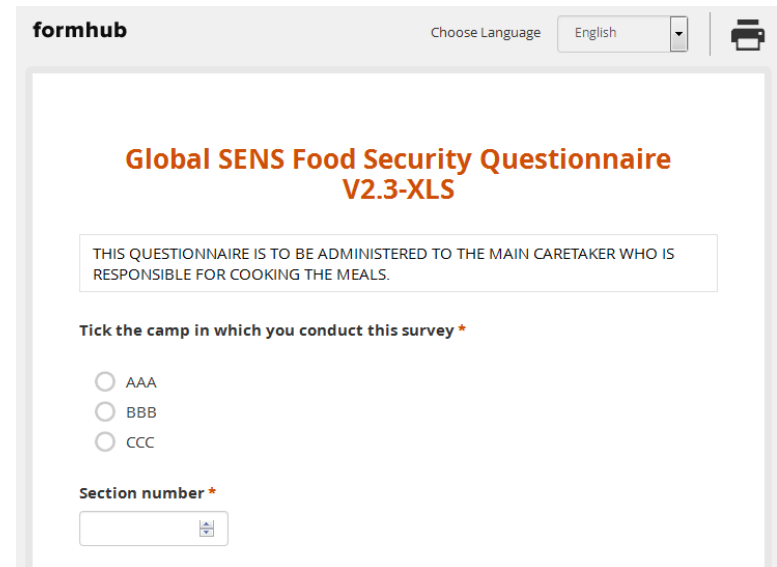


ALTERNATIVE METHOD: WEB BROWSER DATA COLLECTION

Filling on web browser

 Open the link of to the survey sent by your survey manager, it will look like this:
<https://ee.humanitarianresponse.info/x/#D4DhXnVZU>

 Fill the form and click on "Submit"



The screenshot shows a web browser window with the URL <https://ee.humanitarianresponse.info/x/#D4DhXnVZU>. The page title is "formhub". The main heading is "Global SENS Food Security Questionnaire V2.3-XLS". Below the heading, there is a note: "THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO THE MAIN CARETAKER WHO IS RESPONSIBLE FOR COOKING THE MEALS." The form contains a section titled "Tick the camp in which you conduct this survey *" with three radio button options: AAA, BBB, and CCC. Below this, there is a section titled "Section number *" with a text input field and a small icon.



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**Thank you for your
attention!**

Additional support:
mobile.data@tdh.ch

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