

# Mobile Data Collection (MDC) with OpenDataKit

2024

Survey Manager Training

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can be hidden if not necessary
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mandatory
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# Introduction

- **What is MDC (Mobile Data Collection) ?**
- MDC with UNHCR

# What is Mobile Data Collection ?

## Mobile Data Collection

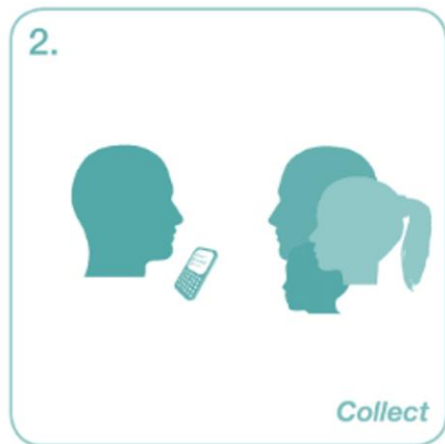
- MDC: use of new technologies to collect data (smartphones or tablets instead of paper forms).
- Used by CartONG since 2010 with many partners (UNHCR, Terre des Hommes, MSF, Solidarités International, REACH, Caritas, UNICEF, etc.)
- Possible use cases: surveys, assessments (potentially in emergency), tracking (distributions & such), monitoring and evaluation, etc.



# MDC

## Mobile Data Collection

- Mobile tech is a major improvement in information management (IM).
- It is now possible in real time or near real time to :



# Exercise 1

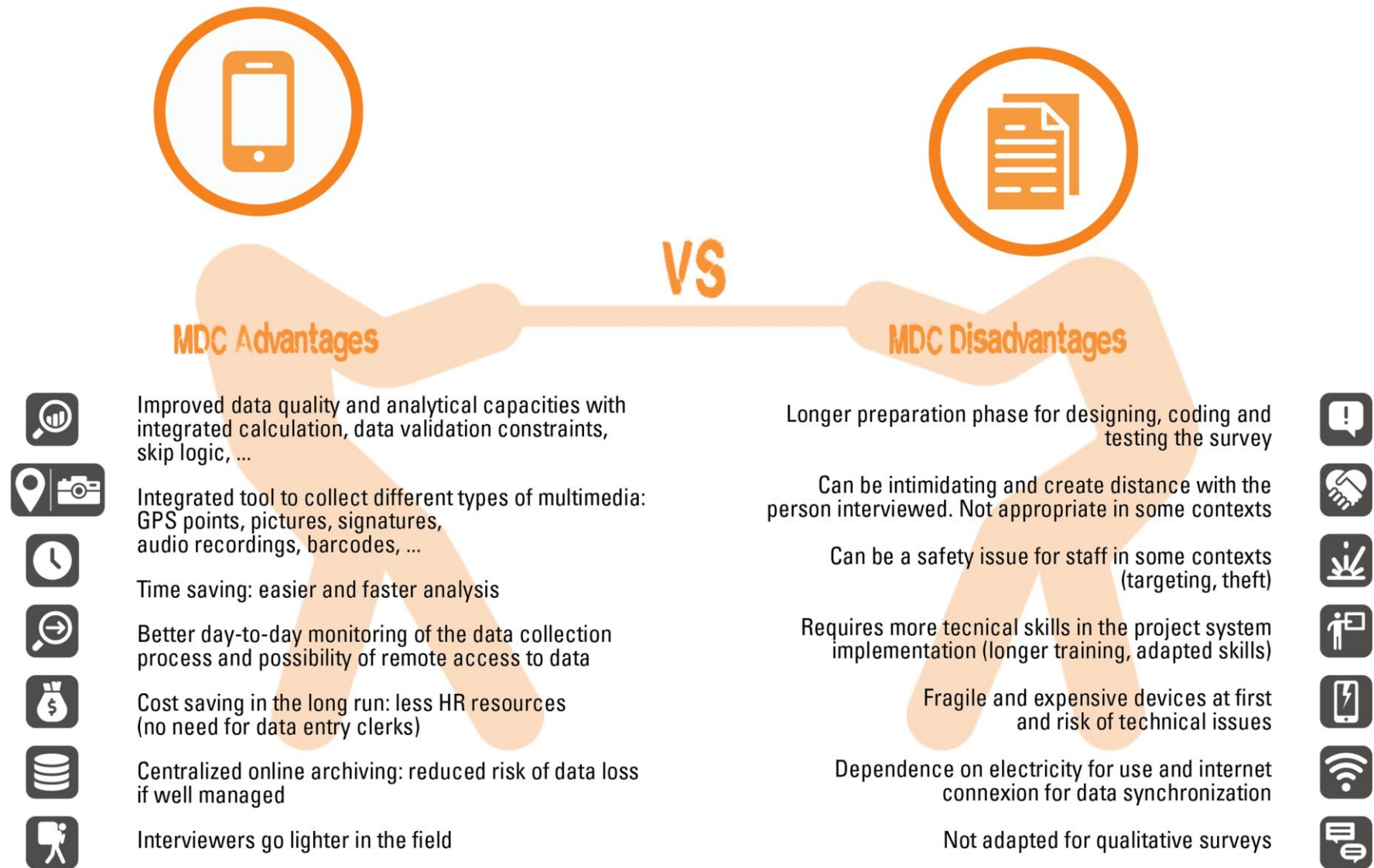
Mobile Data Collection

## MDC Advantages

## MDC Disadvantages

# Exercise 1

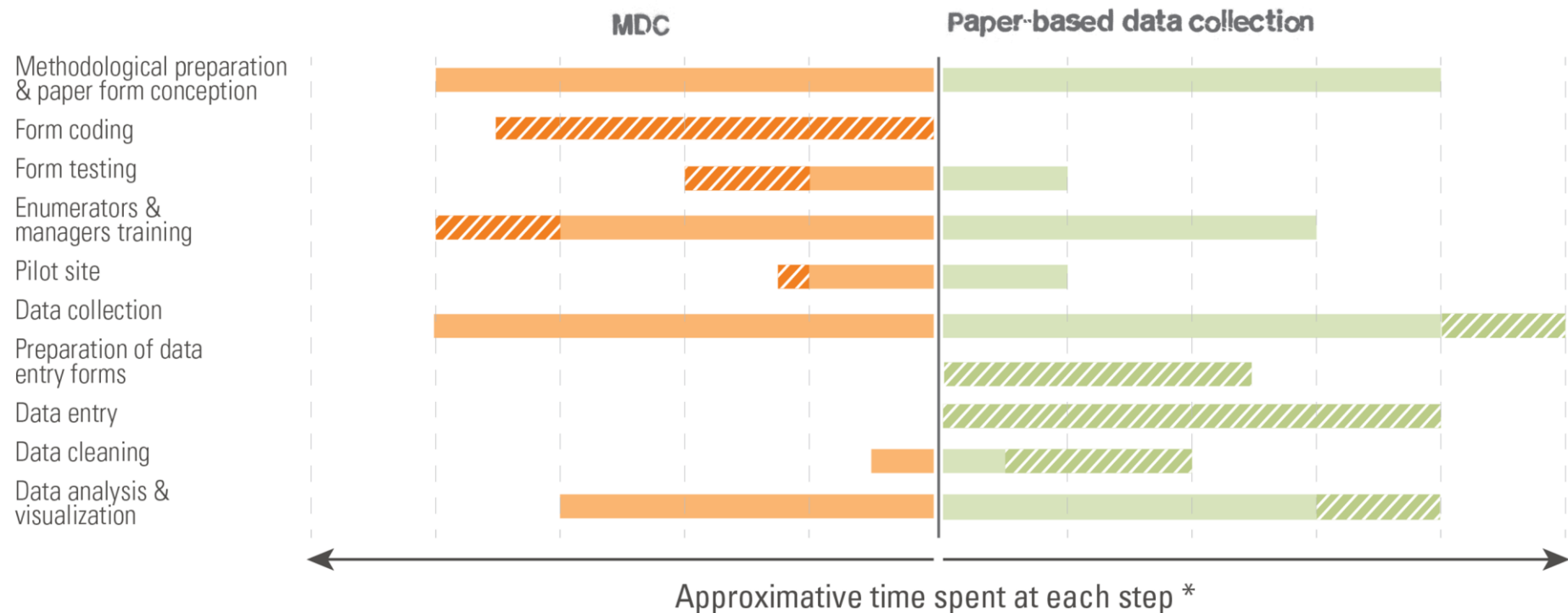
## Mobile Data Collection



# Data collection workflow (time spent)

## Mobile Data Collection

### MDC versus paper-based data collection workflow approximative time spent at each step



Additional time needed for MDC



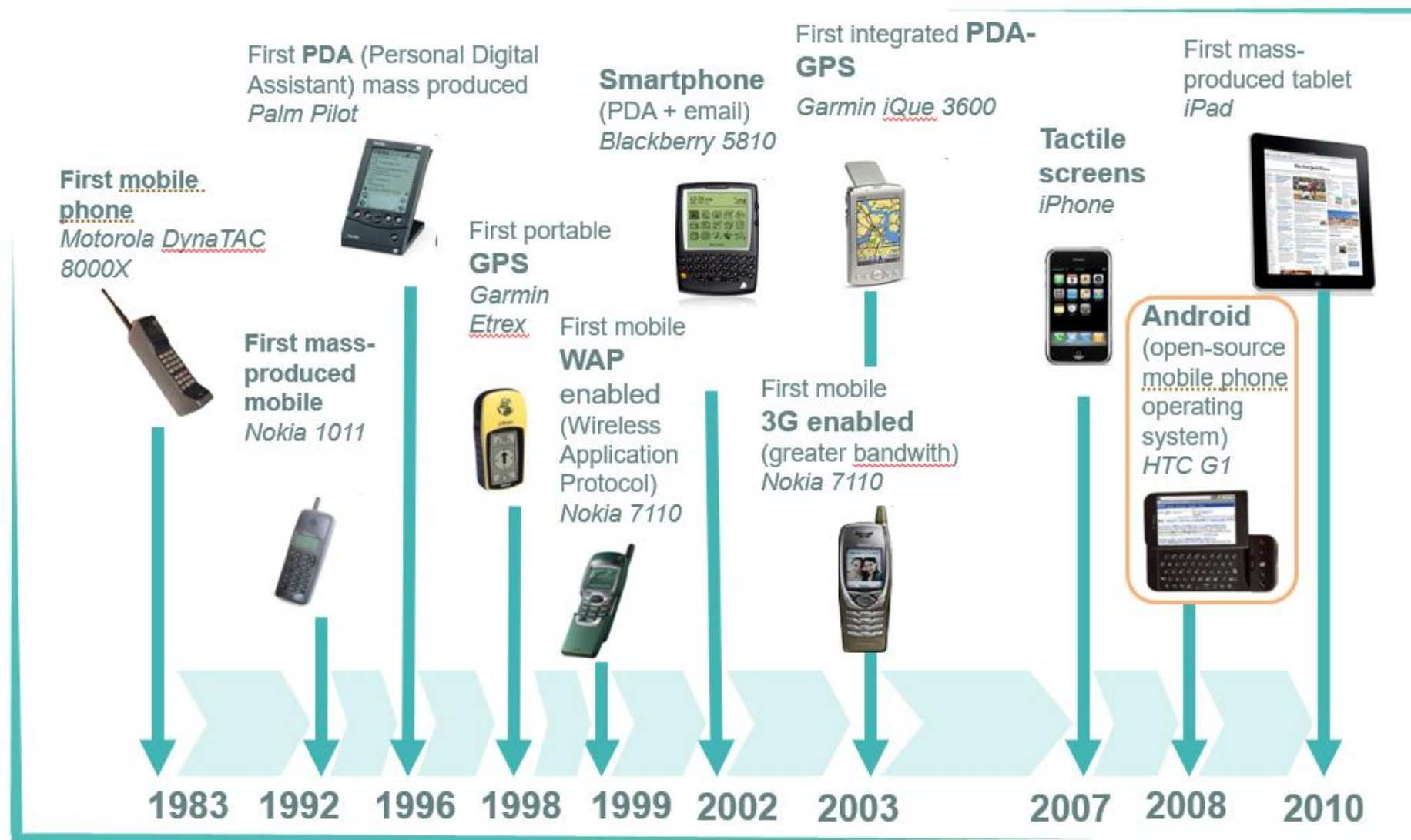
Additional time needed for paper-based data collection

\* This illustration is a simplified representation, the associated time can vary significantly from data collection to data collection



# Evolution of technology

## Mobile Data Collection

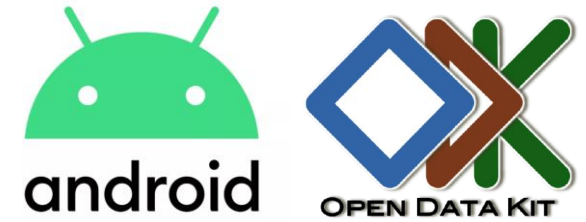


# Introduction

- What is MDC (Mobile Data Collection) ?
- **MDC with UNHCR**

# MDC for PHS (UNHCR)

Mobile Data Collection



- First deployment :
  - Kenya: Mosquito nets with ODK (Open Data Kit) 2010, UNHCR
  - Tools: ODK Collect & ODK Aggregate
- Since then, dozens of deployments!



From the field : Sara Hoibak, consultant UNHCR

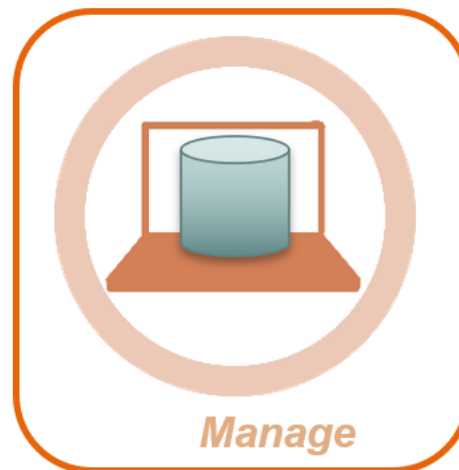
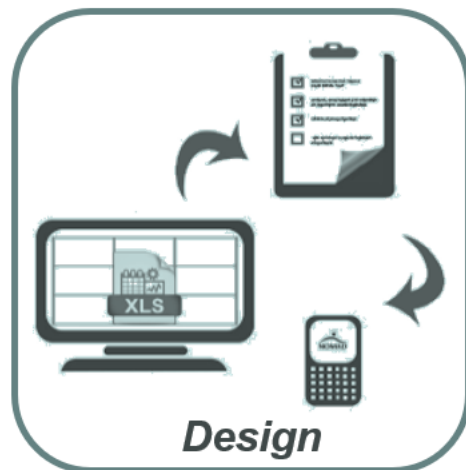
# Exercise 2

Mobile Data Collection

**What are the main phases of a mobile data collection campaign for you?**

# Phases of a Mobile Data Collection

# Phases of an MDC



# Phase 1 – How to adapt the SENS MDC questionnaires

- Adapt the SENS MDC questionnaires by using XLS Form Global Templates

## XLS Form Mobile Templates





# Introduction (1) – Design

XLS Form Mobile Templates

- Each SENS MDC questionnaire is designed to get the best balance of global standardization and localized adaptability.



- Key indicators are comparable from country to country and year to year.
- In order to analyze comparable data from different contexts, local adaptation are required.

# Introduction (2) – Adaptation

XLS Form Mobile Templates

- The following slides briefly introduce how to adapt the standardized global forms according to the local context.
- Information on what should be changed in the questionnaires is mentioned in the guidance of each module.
- The template form can be quite complex to understand without background, please reach out to the regional office or headquarter for assistance on the adaptation if needed.

# Introduction (3) – What are the Global Forms?

## XLS Form Mobile Templates

- These SENS Global Forms are set up in **XLS form**, a format compatible with many mobile data collection tools, in particular Kobo /ODK Collect.
- There is an **instructions** tab in each form on how to use them.

The screenshot shows a document titled "I. Understanding the format" with the following content:

A specific colour scheme has been set up in SENS Global Forms to make modification easier by partners:

- Variable names colored in green are OPTIONAL SENS variables.
- Variable names colored in red corresponds to standard SENS variables and should not be changed. They are MANDATORY.
- All variable names in blue can be adapted depending on local context.

Note that in some camps, the words "block" and "section" may not be used and other words may be used for these (e.g. area, quarter). Adapt the wording accordingly. You can change/remove the phrasing of all choices in blue, but NOT their values which are stored in the column "name".

- Variable names colored in orange are display notes for surveyors. They should not be deleted from the questionnaire and should not be read to the respondent during the interview.

**II. Adapting the questions to local context in XLS form**

You will find here all the explanations concerning what modifications can be made and how to make them whilst respecting the general format (as an error in the format can be extremely detrimental to your survey!).

Feel free to adapt question labels if you find that they are not sufficiently explicit in a given country (while avoiding changing the sense completely - if you want to change the sense completely, prefer hiding a question and adding a new one).

Make sure when you make modifications to always save the form with an updated version name to facilitate understanding (and also the updating of the versions on the phones). This should be done in the "settings" tab in the "form\_title", "form\_id" (be careful, there can be no spaces or special characters here, this is the real ID of the form) and "version".

**II.1. Language**

At the bottom of the page, there is a navigation bar with the following tabs: XLS\_Overview, Instructions, survey, choices, settings, and a plus icon.

# Exercise 3

## XLS Form Mobile Templates

- As a group, look at :
  - The paper form,
  - The mobile form.
- And come up with five different types of changes you would like to make to the mobile form (you can open the form on the mobile if it helps).

# What to modify (1)

XLS Form Mobile Templates

- The administrative information:
  - What are the **administrative variables** relevant in your context? Camps, blocks, sections, zones...
  - What **types of questions** are they? Numeric, text, list of options?
  - What are the **constraints** you want to put on the numeric ones (between 1 and 5...)?

# What to modify (2)

## XLS Form Mobile Templates

- Add/delete options (adjust according to the module guidance).
- Add/delete a language.
- Add/delete an optional question or module available.
- Change the text of the question or option.
- Change the notification or instruction for question shown on the phone.
- Add a question or option that is not at all available in the global form (such as photos as options of answers for tricky questions)?
- Anything else?

# How to Adapt (1) – Code in forms

## XLS Form Mobile Templates

- Open “**GLO\_Child\_EN\_FR\_AR\_SW-XLS.xls**”
- In the “name” column: **Red** indicates mandatory questions which should not be changed. **Green** questions are optional and **blue** questions are modifiable.
- The text in [bracket] is supposed to be added according to the context.
- More hints on adaptation for specific variable can be found in the last comments columns.

type	name	label:English	label:français	label:العربية
calculate	CHELIGMAX	Maximum number of months to be eligible:	Nombre maximum de mois pour être éligible:	الحد الأقصى لعدد الأشهر أن يكون قانوني.
calculate	CHELIG			
note	Xconfidential3	EXPLAIN TO THE RESPONDENT THAT THESE QUESTIONS WILL BE KEPT CONFIDENTIAL AND WILL NOT AFFECT THE ASSISTANCE THEY RECEIVE/ARE ENTITLED TO.	EXPLIQUER AU RÉPONDANT QUE LES RÉPONSES À CES QUESTIONS RESTERONT CONFIDENTIELLES ET QUE CELA N'AFECTERA PAS L'ASSISTANCE QU'ILS REÇOIVENT / À LAQUELLE ILS ONT DROIT.	وضح للمستجيب بأن هذه الأسئلة ستعامل بسرية وأن تأثير على المساعدة التي يتلقونها أو التي سوف يتلقونها.
select_one arrive	CHARRIVE	Did S{CHNAME} arrive to [camp name/country of asylum] before or after [INSERT THE EVENT RESPONSIBLE FOR THE INFLUX OF REFUGEES]? [red]	Est-ce que S{CHNAME} est arrivé à [nom du camp / pays d'asile] avant ou après [INSÉRER ÉVÈNEMENT RESPONSABLE DU NOUVEL AFFLUX DE RÉFUGIÉS] ? avant ou après [INSÉRER L'ÉVÈNEMENT DÉCLENCHEUR DU FLUX DE RÉFUGIÉS]? [red]	هل وصل {CHNAME} إلى [اسم المخيم / بلد اللجوء] قبل أو بعد [أدرج الحدث المسؤول عن تدفق اللاجئين]؟ [red]
select_one yesno	CHPRES	Is S{CHNAME} currently present in the household?	S{CHNAME}, est-il actuellement présent dans le ménage?	هل {CHNAME} موجود حالياً ضمن الأسرة؟
decimal	WEIGHT	S{CHNAME}'s weight in kilograms (±0.1kg):	Poids en kilogrammes (±0.1kg) de S{CHNAME}:	وزن {CHNAME} بالكيلوجرامات (± 0.1 كيلوجرام).

# How to Adapt (2) – Usual Changes

## XLS Form Mobile Templates

- Usual changes:
  - Admin levels: camp names etc.
  - Contextual texts in [bracket]
  - Localize names in “choices” tab
  - Limiting values for constraint
- If you use cluster sampling, remove 1=2 in column “relevant” in “survey” tab.
- Adapt & **Save**.

list name	name	label::English	label::Français	label::العربية
yesno	1	Yes	Oui	نعم
yesno	2	No	Non	لا
yesnoabs	1	Yes	Oui	نعم
yesnoabs	2	No	Non	لا
yesnoabs	3	Absent	Absent	غائب
yesnodk	1	Yes	Oui	نعم
yesnodk	2	No	Non	لا
yesnodk	8	Don't know	Ne sait pas	لا أعلم
camp	AAA	AAA	AAA	AAA
camp	BBB	BBB	BBB	BBB
camp	CCC	CCC	CCC	CCC
sex	m	Male	Masculin	ذكر
sex	f	Female	Féminin	أنثى
edema	y	Yes	Oui	نعم
edema	n	No	Non	لا
enrol	1	SFP	CNS	نعم، برنامج التغذية التكميلية
enrol	2	TFP	CNT	نعم، برنامج التغذية العلاجية
enrol	3	None	Aucun	لا
yesnocard	1	Yes, card	Oui, carte	نعم بطاقة
yesnocard	2	Yes, recall	Oui, de mémoire	نعم ذاكرة
yesnocard	3	No/Don't know	Non ou ne sait pas	لا أو لا أعلم
initbf	1	Less than 1 hr	Moins d'une heure	أقل من ساعة واحدة
initbf	2	Between 1 hr and 23 hrs	Entre 1 et 23 heures	بين ساعة و ٢٣ ساعة
initbf	3	24 hrs and more	Plus de 24 heures	أكثر من ٢٤ ساعة
initbf	8	Don't know	Ne sait pas	لا أعلم

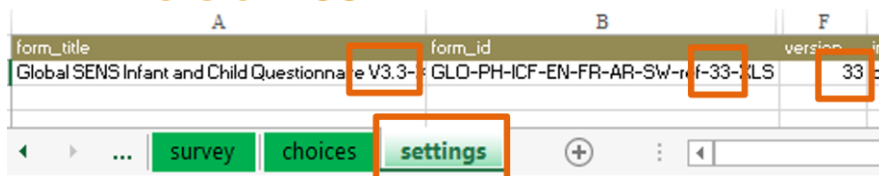
type	name	label::English	relevant
integer	CLUSTER	Cluster number	1=2



# How to adapt (3)

## XLS Form Mobile Templates

- Change the version number – VERY important!
- “Settings” tab. For example:
  - Form\_title: (...) V3.3
  - Form\_id: (...) -ref-33-XLS
  - Version: 33



- Rename the XLS form as well so that the version number (33 or 3.3) is obvious without having to open the file.

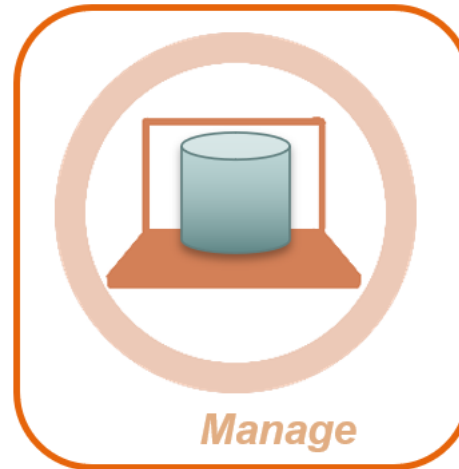
Name	Date modified	Type	Size
SENS form updates - June 2016.docx	05/07/2016 9:08 AM	Microsoft Word D...	334 KB
GLO_PH_Women_EN_FR_AR_SW_V29-XLS_draft.xlsx	01/07/2016 2:27 PM	Microsoft Excel W...	26 KB
GLO_PH_WASH_EN_FR_AR_SW_V29-XLS_draft.xlsx	05/07/2016 10:46 ...	Microsoft Excel W...	30 KB
GLO_PH_Mosquito_EN_FR_AR_SW_V30-XLS_Based_Niger_Version.x...	01/07/2016 2:27 PM	Microsoft Excel W...	30 KB
GLO_PH_FS_EN_FR_AR_SW_V27-XLS_draft.xlsx	05/07/2016 10:46 ...	Microsoft Excel W...	31 KB
GLO_PH_Child_EN_FR_AR_SW_V33-XLS_draft.xlsx	05/07/2016 6:15 PM	Microsoft Excel W...	596 KB
~SGLO_PH_Child_EN_FR_AR_SW_V33-XLS_draft.xlsx	12/07/2016 4:41 PM	Microsoft Excel W...	1 KB
XLM	05/07/2016 10:48 ...	File folder	

# Phase 2 – Collect : Getting to know ODK Collect

- **Initiate smartphone's settings**
- Initiate ODK with advanced settings
- ODK data entry, review and edit

# Phases of a MDC

ODK Collect



# Smartphones (1) - Model

ODK Collect

Sony Xperia :



Xiaomi :



Samsung :



Please make sure that you have the latest android enabled phone.

# Smartphone (2) - Control

ODK Collect

- Varies from models to models (layout, buttons physical VS virtual etc.)
- Core components are similar between models :



# Smartphones (3) - Homescreen

ODK Collect

- Example : Samsung Galaxy

**1** **Status bar** : WIFI / Network / Flight Mode /USB / Battery.

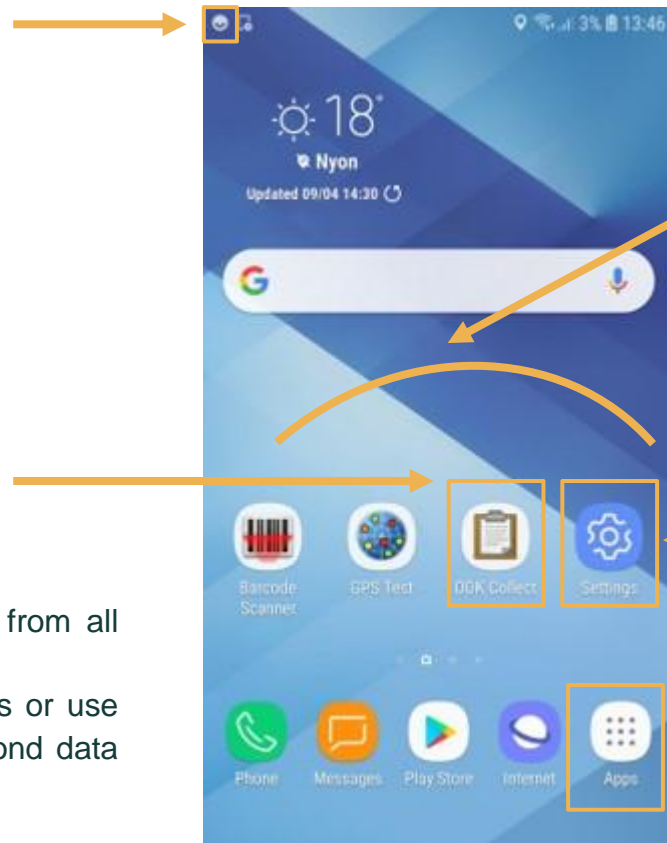
**2** **Homescreen** : Bring all necessary applications to your homescreen and delete all apps which will not be used in survey.

**3** **ODK Collect** : The application used for data collection on the phone.

**4** **Settings** : Change various phone settings.




**5** **Applications** : Access all applications installed on the phone.

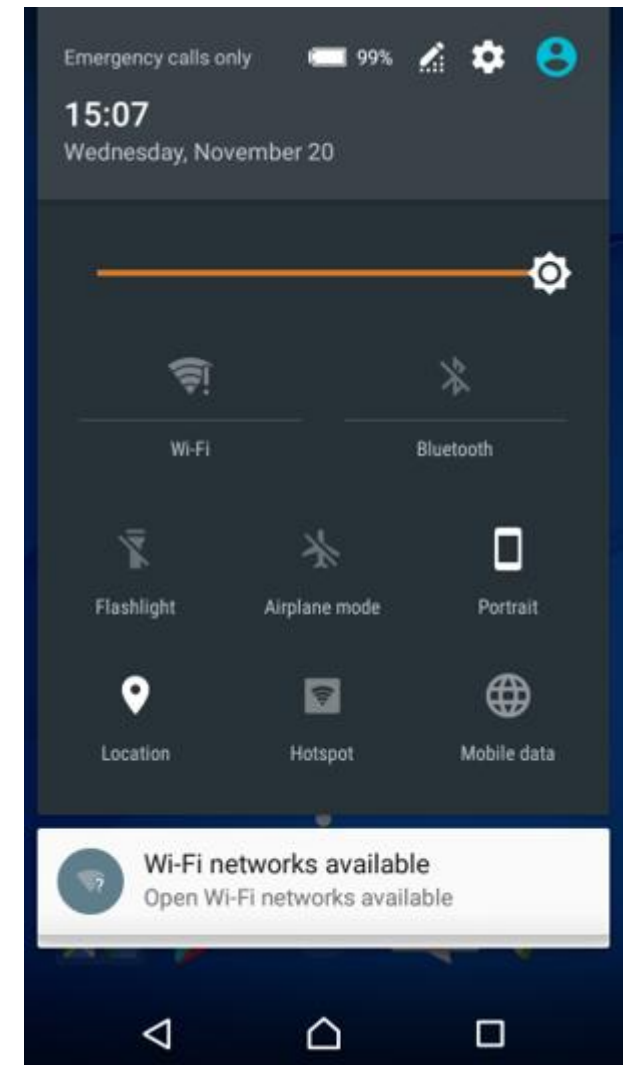
- Shortcuts at the bottom are accessible from all screens.
- Please don't download unnecessary apps or use the survey phone for other purpose beyond data collection.



# Smartphones (4) – Energy Saving

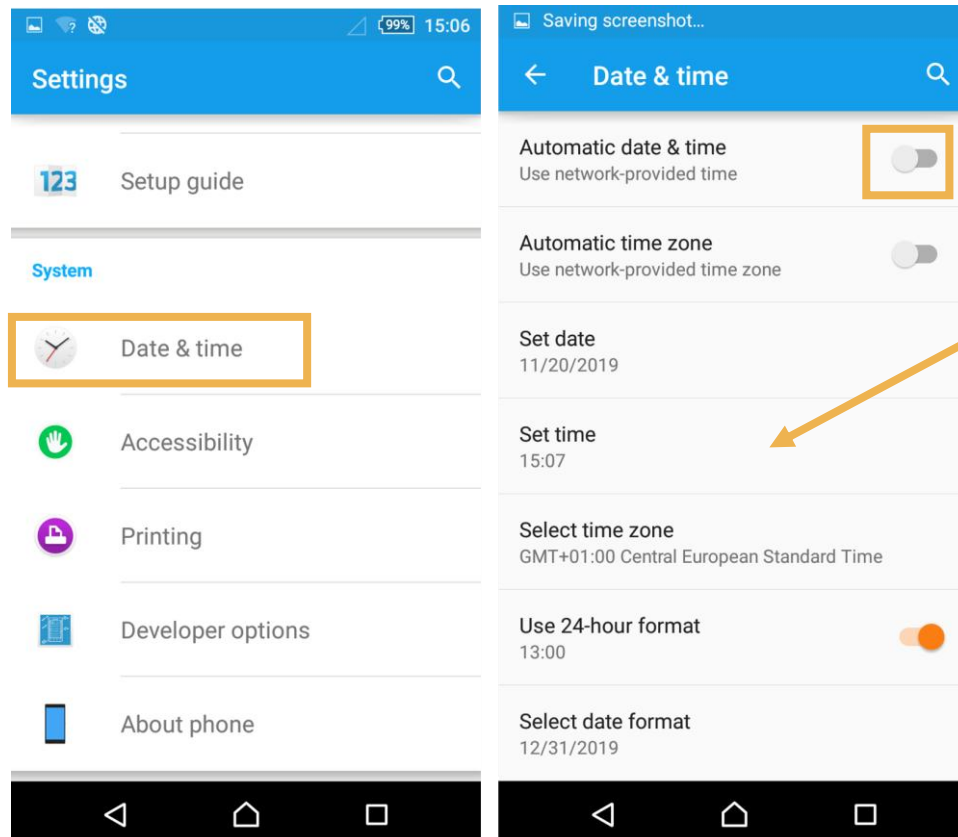
ODK Collect

- To save energy:
  - Plane mode 
  - WIFI OFF 
  - Lower luminosity of the display;
  - Set display turn off;
  - Charge up battery daily if possible;
  - Turn off GPS when not in use 
  - Use dark themes on ODK Collect (change settings in ODK Collect);
  - Use Power Bars / USB Chargers for remote place.



# Smartphones (5) – Date & Time

ODK Collect



If auto parameters are not correct, uncheck « Automatic » & adjust date/time manually.

- Set the time zone first, then date/time. These parameters must be correct.



# Apps (1) – OpenDataKit (ODK) Collect

ODK Collect

- Most well-known MDC solution in the humanitarian sector.
- Open-source solution for Android :
  - Widely used
  - Basis for numerous systems
  - Powerful and flexible
  - Secure storage on your own servers possible
- Different deployment profiles possible (offline with USB, offline on local network, online, etc.)



# Apps (2) – Why Use ODK Collect

## ODK Collect

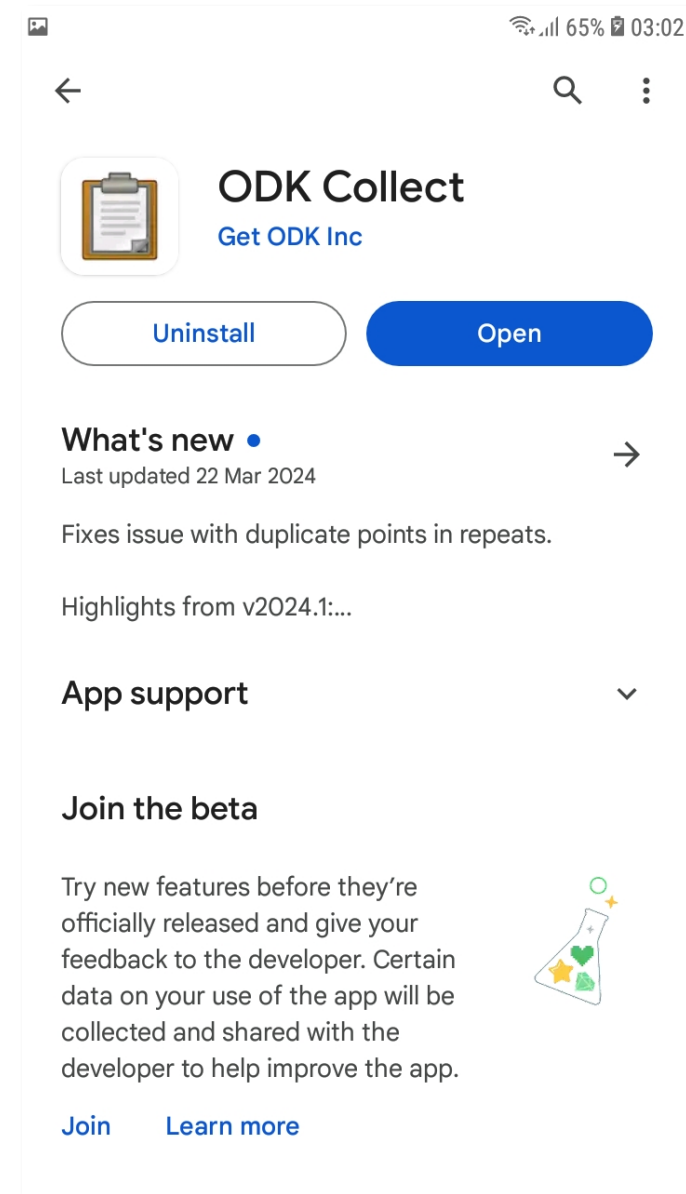
- ODK Collect and Kobo Collect are similar apps. They could both be used for data collection for SENS.
- **HOWEVER:**
  - ODK Collect is updated and thus debugged on a more regular basis than Kobo Collect.
  - ODK Collect has more advanced features.
- **THUS, use ODK Collect for SENS data collection.**
  - Make sure you do not have both ODK Collect and Kobo Collect apps on your phone: as those 2 use the same directory on your phone, they can interact and bug each other if on the same phone.



# Apps (3) – ODK Installing Online

ODK Collect

- NB : ODK Collect is only available on Android phones!
- Go to the **Google Playstore**.
- Download « ODK Collect ».
- This is the most recommended path, if you can't use PlayStore, follow the instructions from the [ODK repository](#).



# Apps (4) – Other applications

ODK Collect

- Install the following as well if needed:
  - **GPS Test** : faster/more accurate acquisition of location for GPS readings
  - <https://play.google.com/store/apps/details?id=com.chartcross.gptest&hl=en>
- A file manager such as **AndExplorer** may be useful – available for free on the Play Store/Google Play. Many newer phones have a file manager already pre-installed.
  - <https://play.google.com/store/apps/details?id=lysesoft.andexplorer&hl=en>

# Exercise 4

ODK Collect

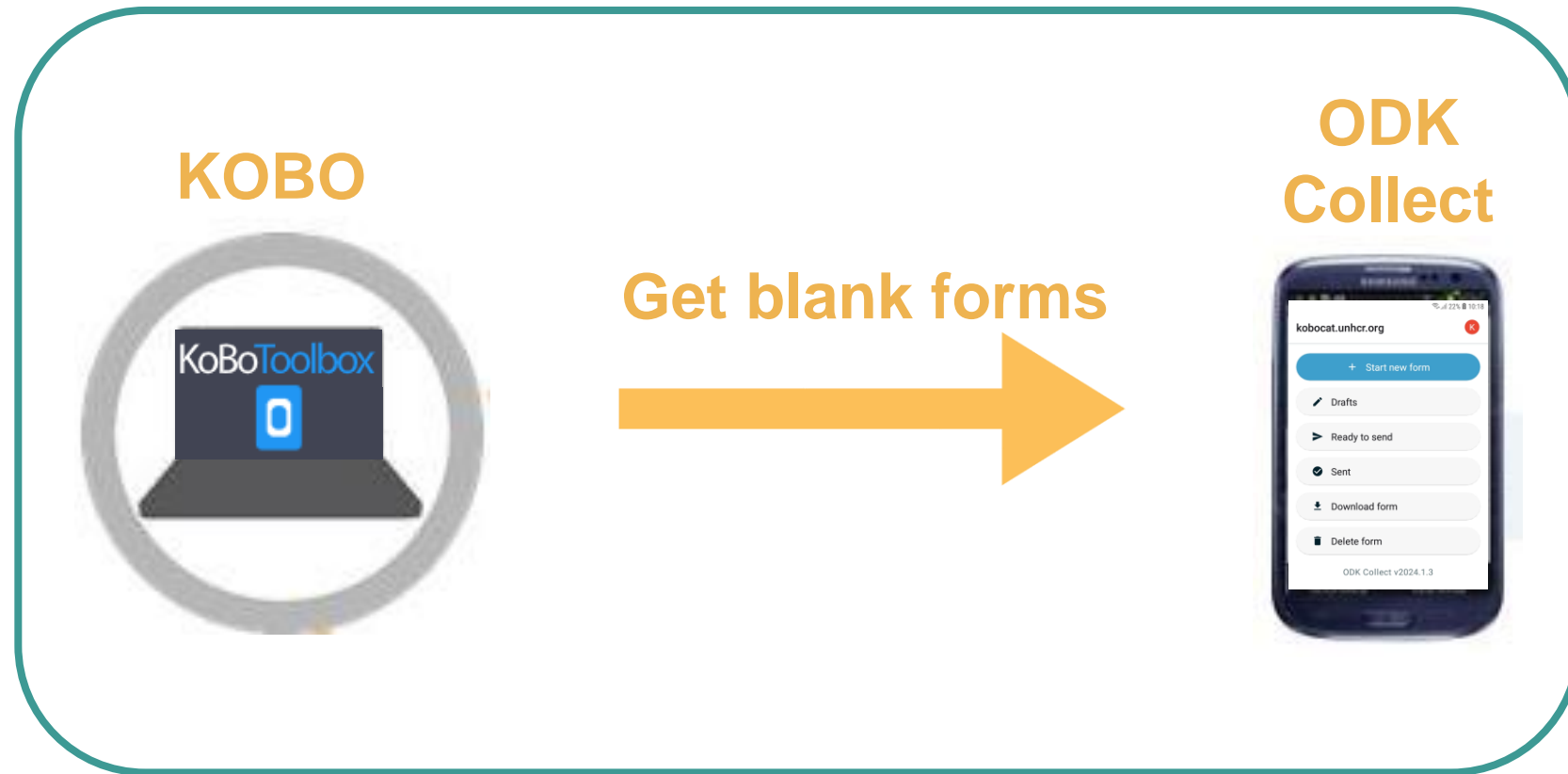
- Set parameters on the phone
  - Set the date to today's date and the current time.
  - Ensure that the phone is in flight mode, that the WIFI is off and display brightness is set to low.
- Discussion:
  - How do these settings impact the survey?
  - What happens if you accidentally remove the ODK Collect shortcut from the home screen?

# Phase 2 – Collect : Getting to know ODK Collect

- Initiate smartphone's settings
- **Initiate ODK with advanced settings**
- ODK data entry, review and edit

# Get the form (1) – Kobo Toolbox

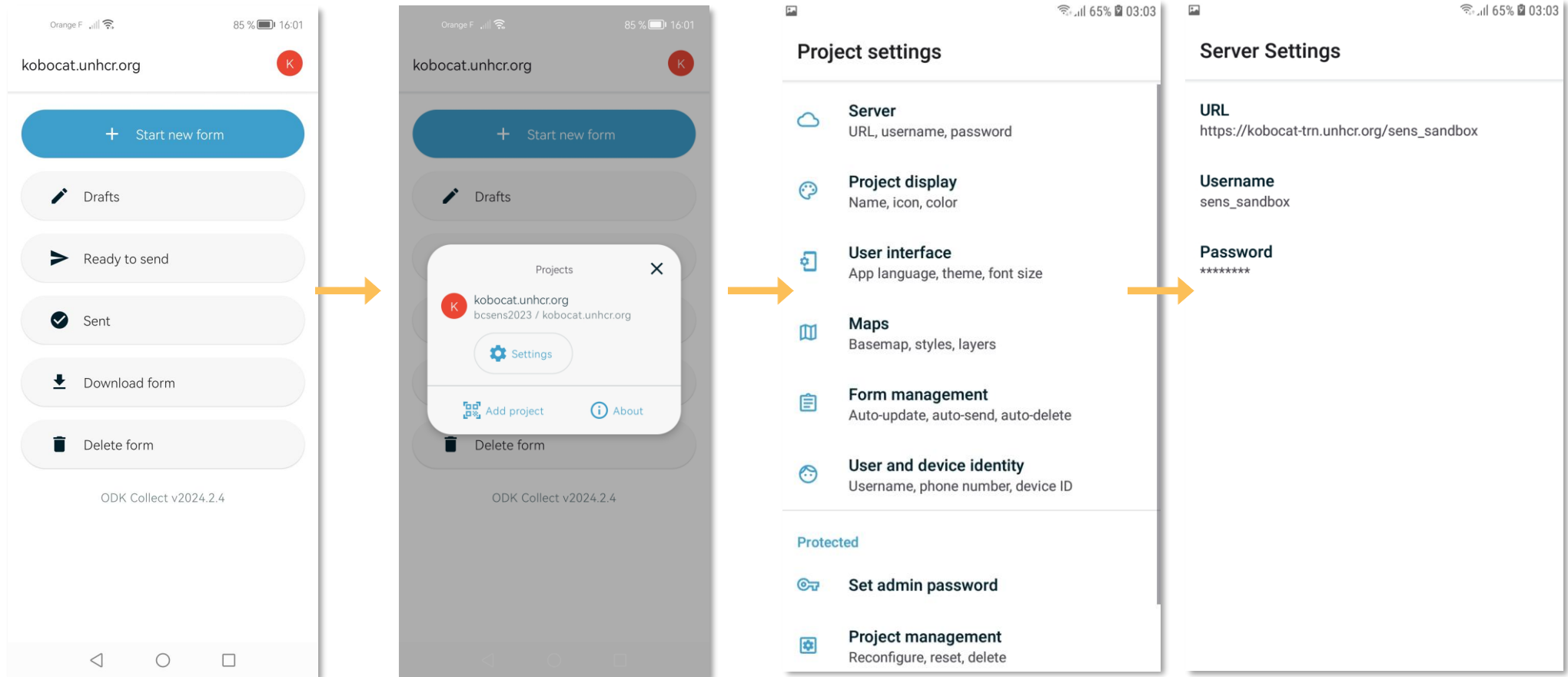
Kobo Toolbox



# Get the form (2) – Connect to Kobo Toolbox

ODK Collect

- Click on “General Settings”, “Server” and enter your account’s credentials on Kobo Toolbox (**URL, username and password**).



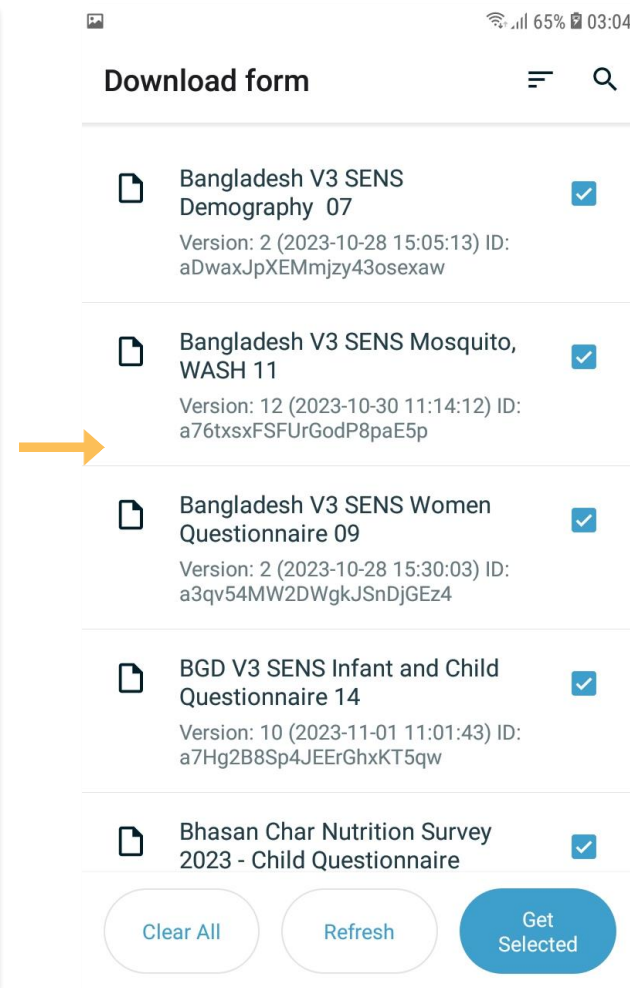
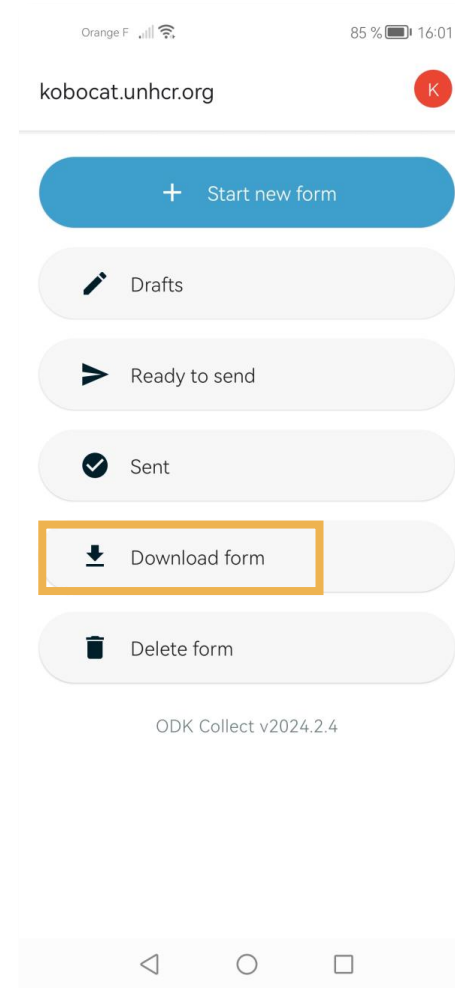
**Structure of the URL:** the URL from the UNHCR Kobo Toolbox server will always have the following structure: “[https://kobocat.unhcr.org/\[username\]](https://kobocat.unhcr.org/[username])”



# Get the form (3) – Get Blank Form

ODK Collect

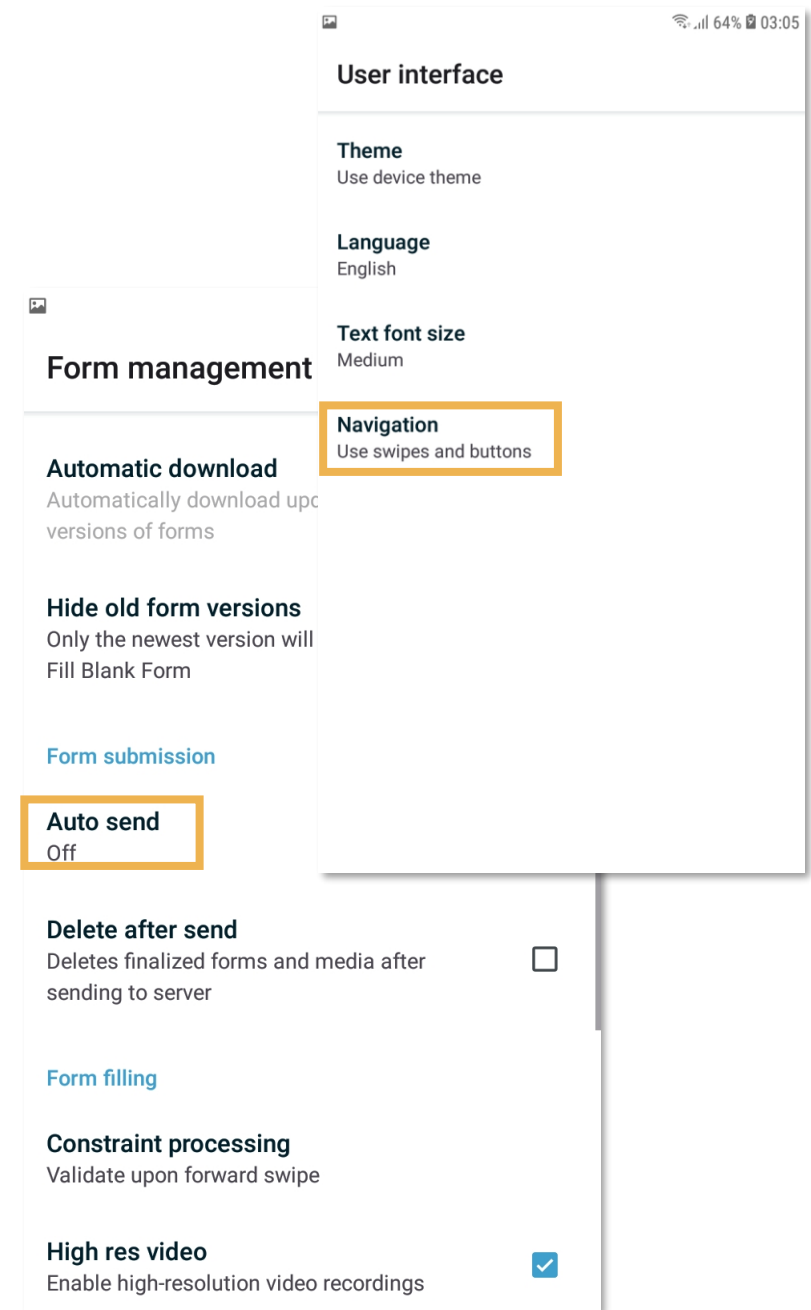
- To get a blank form:
  - Connect on your local WIFI network.
  - Click “Download form ” on the phone.
  - Select the blank form(s) of interest.
  - Repeat on all survey phones.



# ODK Collect parameters

ODK Collect

- In project settings, under **Form management** :
  - “**Auto send with WIFI**” → uncheck so that you can manually send data to the server after review.
- In settings, under **User Interface**:
  - “**Navigation**” → you can set it to have only swipes, arrows or both – we recommend providing both on larger screens.
- Under “**Admin settings**” you can set other parameters and hide some features from enumerators (deleting forms etc.).



# Phase 2 – Collect : Getting to know ODK Collect

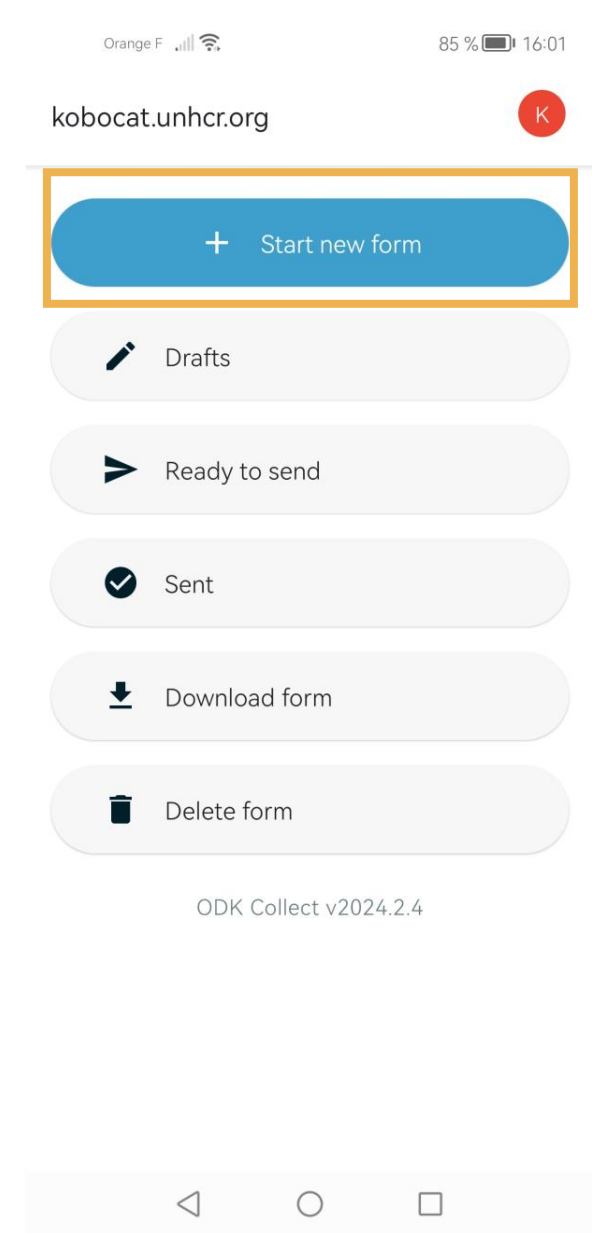
- Initiate smartphone's settings
- Initiate ODK with advanced settings
- **ODK data entry, review and edit**

# Fill the Form (1) – Start new form

ODK Collect

- The most commonly used feature is « + Start new form ».

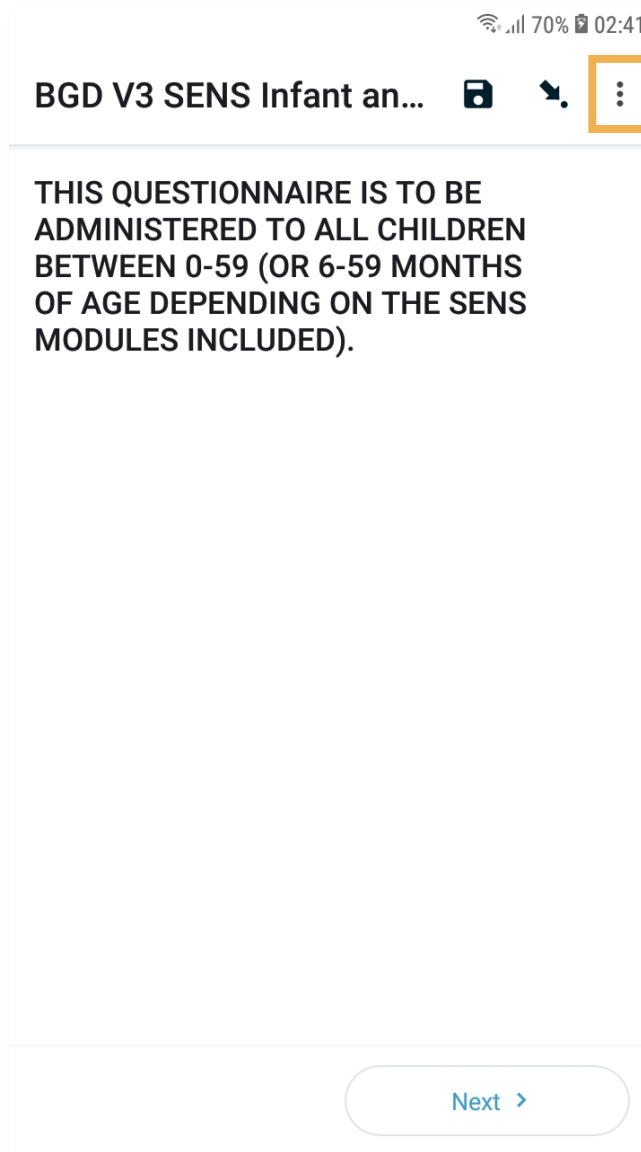
→ Used to enter a new data entry.



# Fill the form (2) – Change Language

ODK Collect

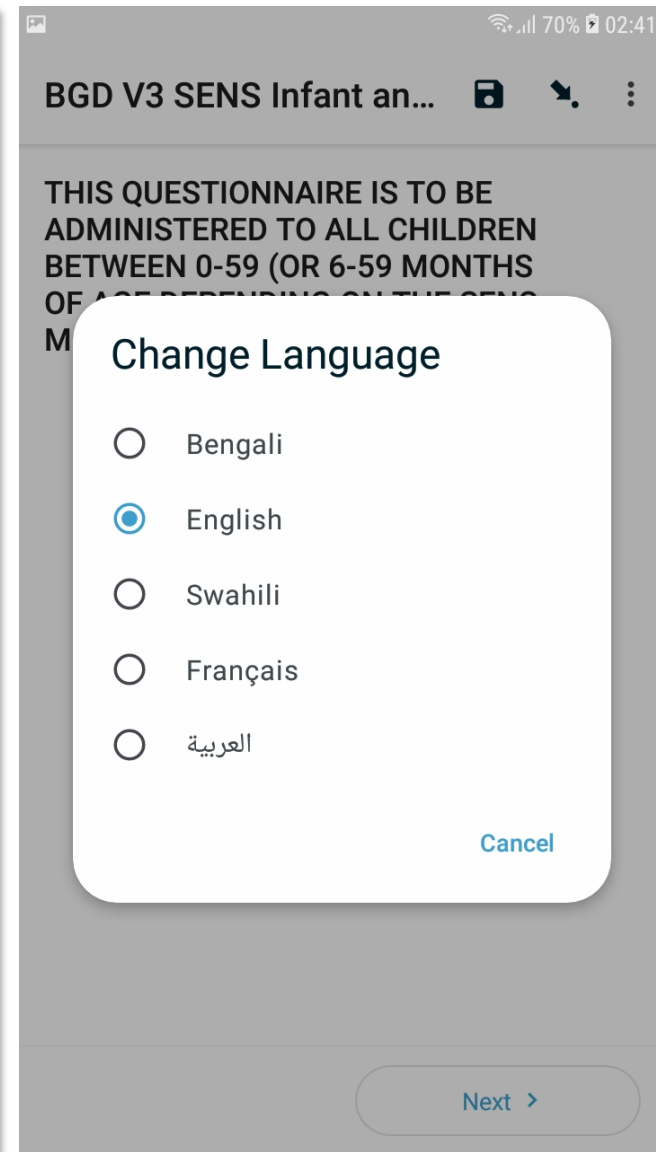
- To change the survey language, open a blank form or an already saved form.
- Then tap the « Menu » button top right and tap « Change Language ».



BGD V3 SENS Infant an... 70% 02:41

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO ALL CHILDREN BETWEEN 0-59 (OR 6-59 MONTHS OF AGE DEPENDING ON THE SENS MODULES INCLUDED).

Next >



BGD V3 SENS Infant an... 70% 02:41

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO ALL CHILDREN BETWEEN 0-59 (OR 6-59 MONTHS OF AGE DEPENDING ON THE SENS MODULES INCLUDED).

**Change Language**

☐ Bengali

☒ English

☐ Swahili

☐ Français

☐ العربية

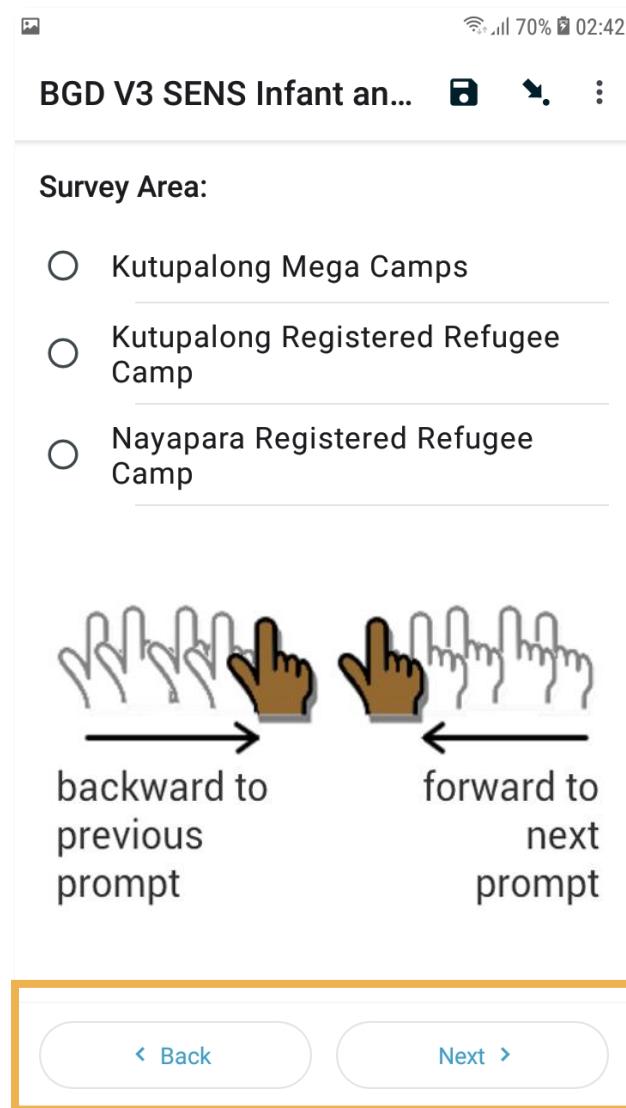
Cancel

Next >

# Fill the form (3) – Navigation in form

ODK Collect

- You can slide your finger to the left or the right to move forward or backward in the form, much like reading a book.
- The 3 following navigation options can be found in the “User interface”



BGD V3 SENS Infant an...

Survey Area:

☐ Kutupalong Mega Camps

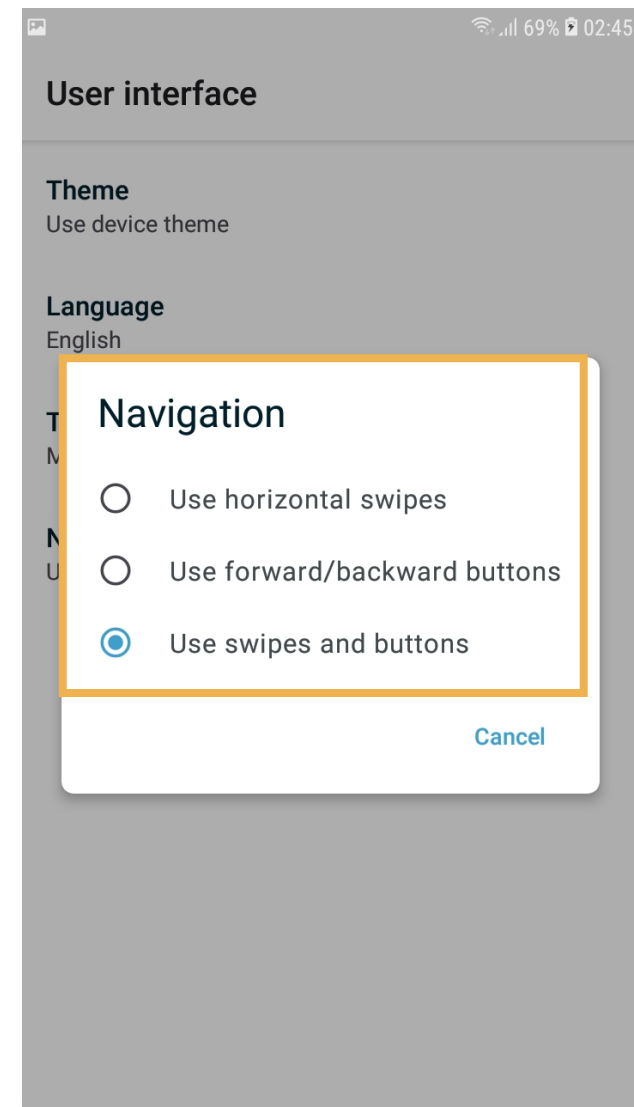
☐ Kutupalong Registered Refugee Camp

☐ Nayapara Registered Refugee Camp

backward to previous prompt

forward to next prompt

< Back      Next >



User interface

Theme  
Use device theme

Language  
English

Navigation

☐ Use horizontal swipes

☐ Use forward/backward buttons

☒ Use swipes and buttons

Cancel

# Fill the form (4) – Select an option

ODK Collect

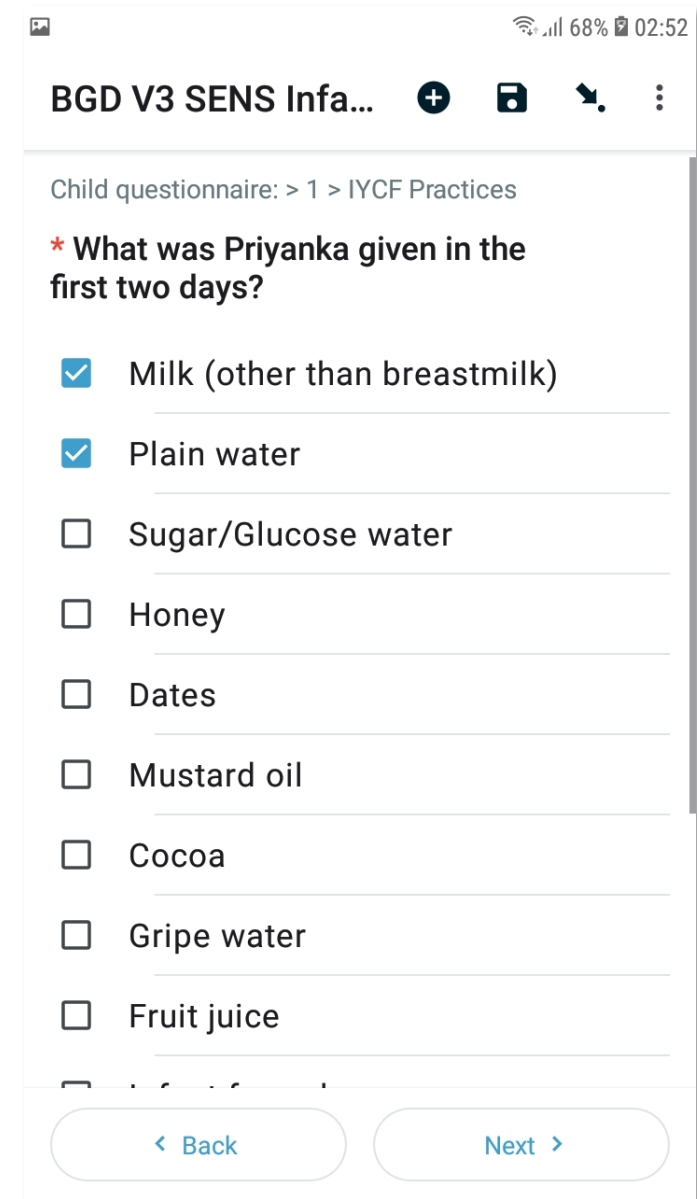
- In this example one of the answers can be selected.
- When the icon is a circle (radio button), only ONE answer can be selected.

The screenshot shows a mobile application interface for ODK Collect. At the top, the status bar displays signal strength, 69% battery, and the time 02:46. The form title is 'BGD V3 SENS Infant an...'. Below the title, there are icons for saving, deleting, and a menu. The main section is titled 'Survey Area:' and contains three radio button options: 'Kutupalong Mega Camps' (which is selected), 'Kutupalong Registered Refugee Camp', and 'Nayapara Registered Refugee Camp'. At the bottom of the form, there are two buttons: '< Back' and 'Next >'.

# Fill the form (5) – Select multiple options

ODK Collect

- When the icon is a square, **SEVERAL** answers can be selected.
- The questions asked to the respondents are in bold.
- The capitalized sentences are the instruction to you, please don't read the instruction to the respondents, and operate following the instruction.



The screenshot shows a mobile application interface for ODK Collect. At the top, the status bar displays signal strength, 68% battery, and the time 02:52. The app title bar reads "BGD V3 SENS Infa..." with icons for adding, saving, and navigating. Below the title bar, the breadcrumb trail is "Child questionnaire: > 1 > IYCF Practices". The question is marked with a red asterisk and reads: "What was Priyanka given in the first two days?". Below the question is a list of options, each with a square checkbox icon: "Milk (other than breastmilk)", "Plain water", "Sugar/Glucose water", "Honey", "Dates", "Mustard oil", "Cocoa", "Gripe water", and "Fruit juice". The first two options are selected, indicated by blue checkmarks inside the checkboxes. At the bottom of the form are two buttons: "< Back" and "Next >".



# Fill the form (6) – Enter text / number

ODK Collect

- Example :
  - Some questions require text entries.
  - For some fields, only **letters** can be used, while for others both **integers/letters** are accepted. Constraints may also be used to control input.

BGD V3 SENS Infa... + [icons]

Child questionnaire: > 1

\* Name of the child:  
ONLY WRITE FIRST NAME.

Priyanka

< Back Next >

[Keyboard icons]

1 2 3 4 5 6 7 8 9 0  
q w e r t y u i o p  
a s d f g h j k l  
↑ z x c v b n m [X]  
!#1 , < English (US) > . [Return]

BGD V3 SENS Infa... + [icons]

Child questionnaire: > 1 > First measure

Priyanka's weight in kilograms (±0.1kg):  
DON'T FORGET THE DECIMAL.

4

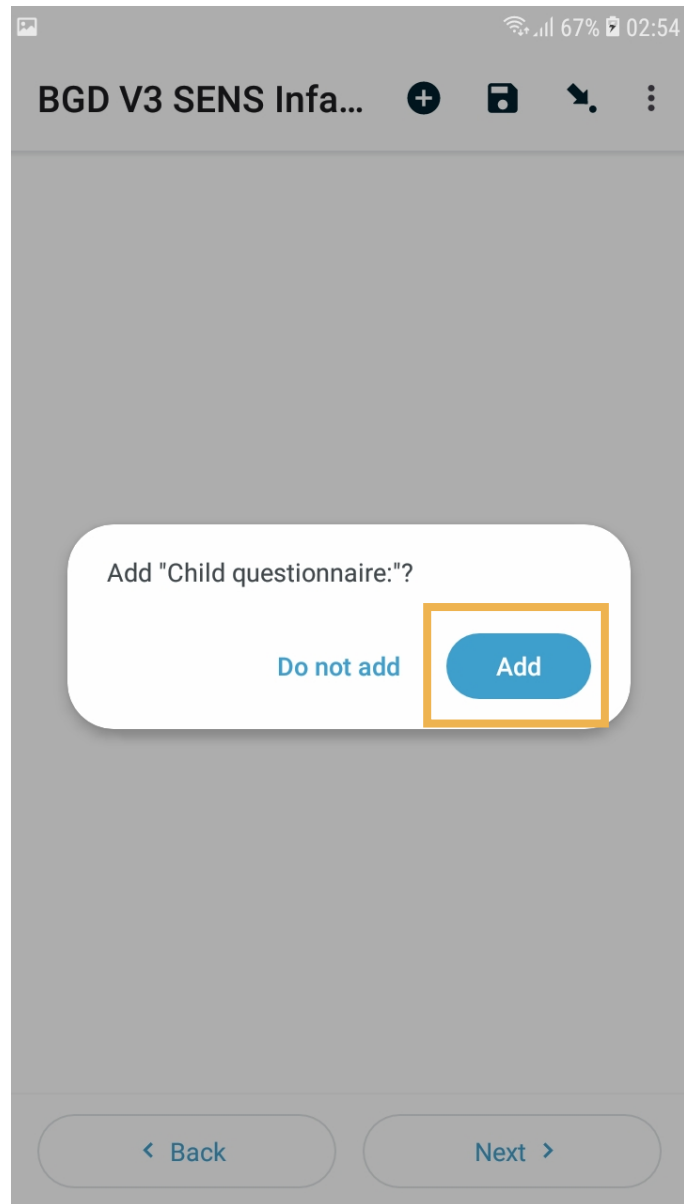
< Back Next >

[Keyboard icons]

1 2 3 [X]  
4 5 6 Done  
7 8 9 .-  
0 [ ] [ ]

# Fill the form (7) – Add a group

ODK Collect

A screenshot of the ODK Collect mobile application interface. At the top, the status bar shows signal strength, 67% battery, and the time 02:54. The app's title bar reads "BGD V3 SENS Infa..." with standard Android navigation icons. The main screen area is mostly grey. A white dialog box is centered, asking "Add 'Child questionnaire:'?". It contains two buttons: "Do not add" in blue text and "Add" in white text on a blue button. The "Add" button is highlighted with an orange rectangular border. At the bottom of the screen, there are two rounded buttons: "< Back" and "Next >".

- Example:

- Adding a group for the « Child » form
- Each child in the HH will be a group member

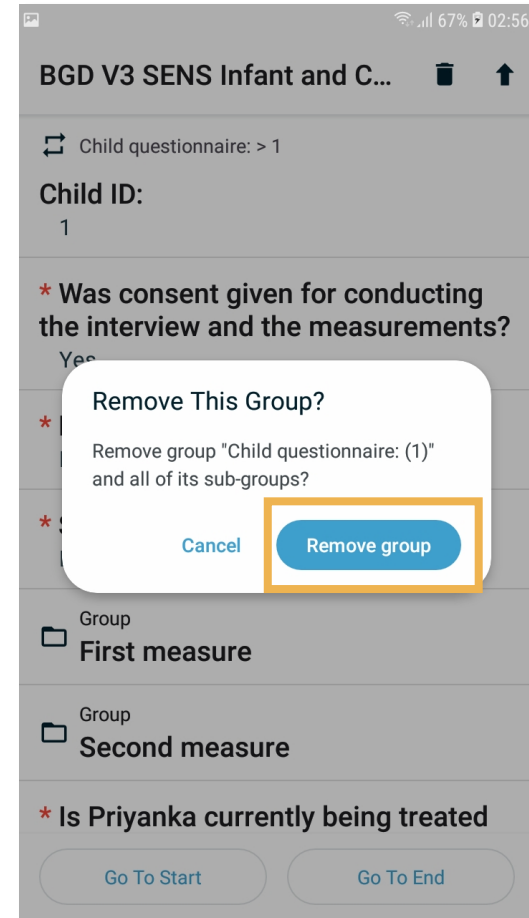
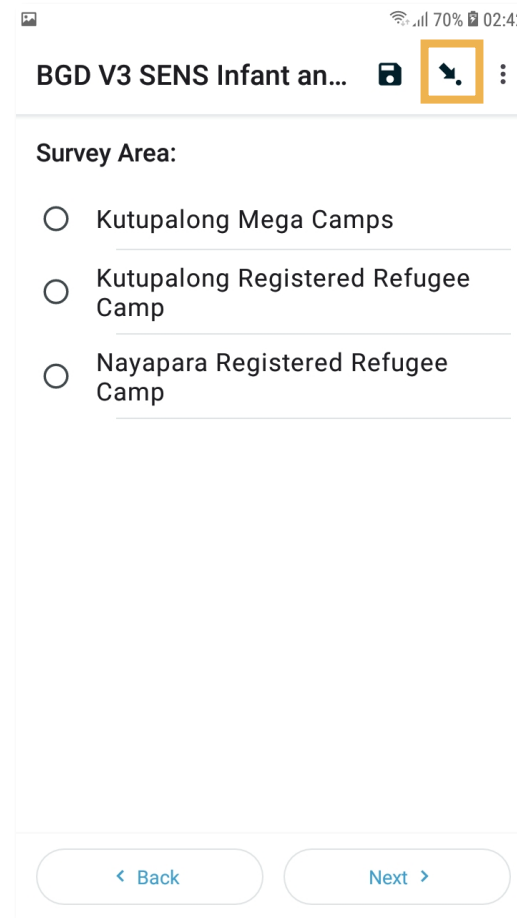
If the filled group number doesn't match the total number of the member in the household, a notification will be given before it can be finalized. Please review the number of group and add/delete the missing/repeated member accordingly.

How to remove a group if too many have been added ?

# Fill the Form (8) – Delete a group

ODK Collect

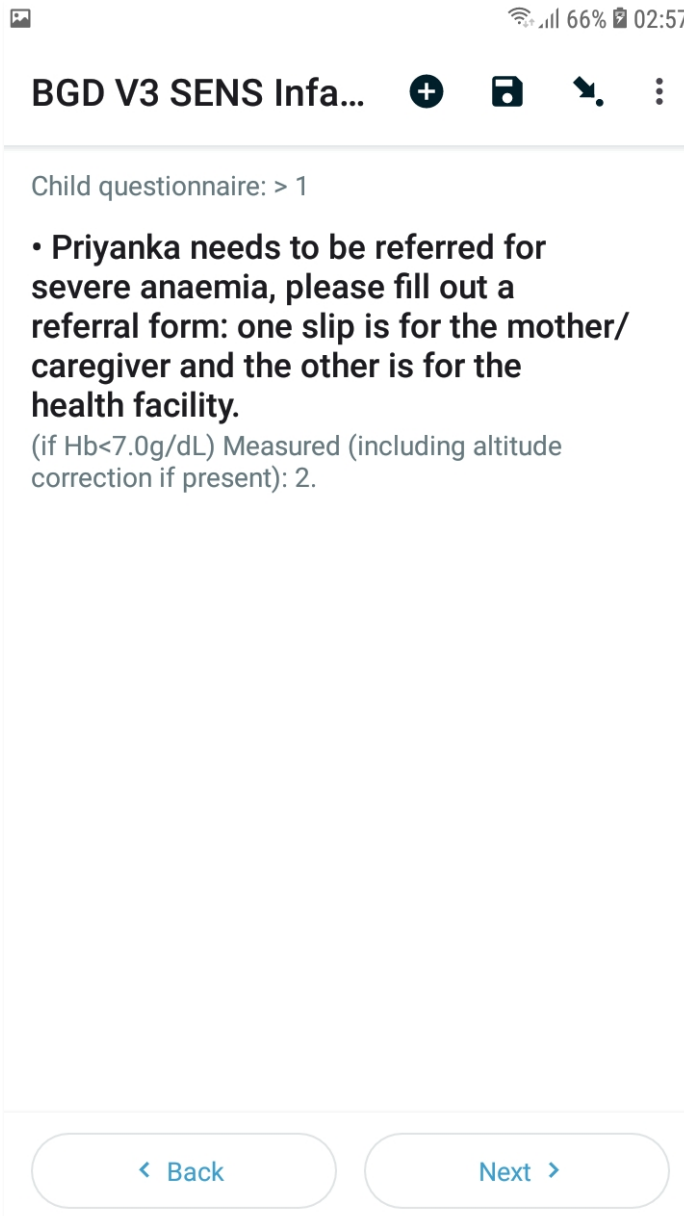
- In forms where groups are used, if a group has been erroneously added, it can be removed.
- To do so, press and hold on the response field.
- Then select « Remove group ».



# Fill the Form (9) – Automatic Referral

ODK Collect

- If the child is either malnourished or has severe anaemia, and is not involved in the treating program, an automatic referral information will be shown on the screen.
- Please fill the referral slips accordingly.

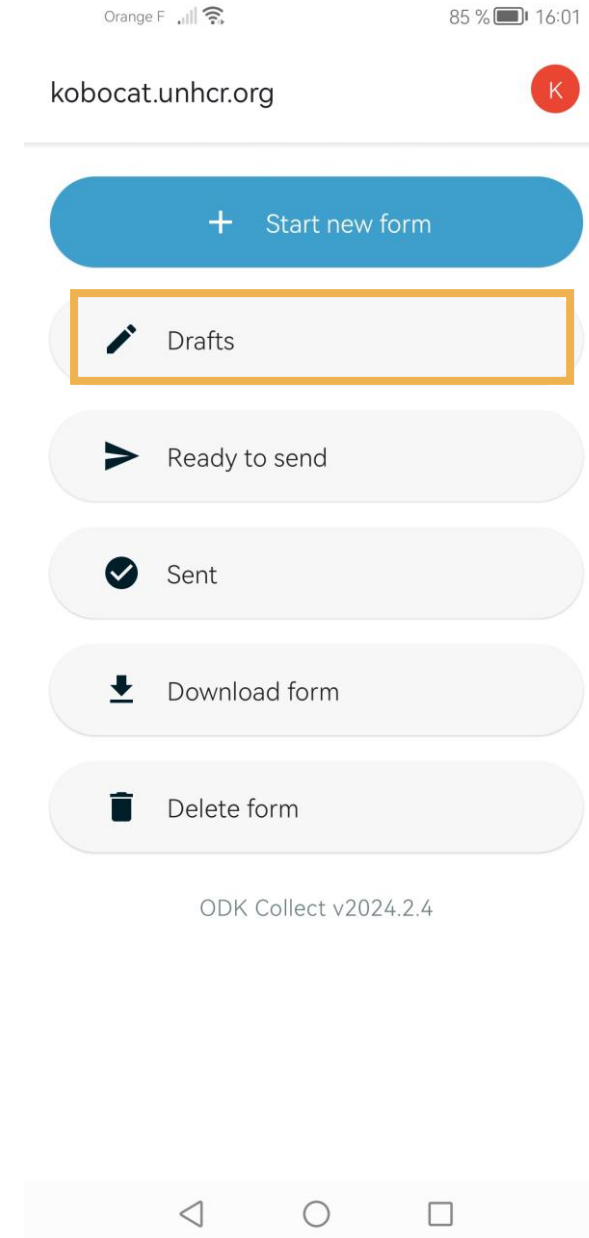


The screenshot shows a mobile application interface for ODK Collect. At the top, the status bar displays signal strength, 66% battery, and the time 02:57. The app title bar reads 'BGD V3 SENS Infa...' with standard Android navigation icons. The main content area displays the text 'Child questionnaire: > 1' followed by a bold instruction: '• Priyanka needs to be referred for severe anaemia, please fill out a referral form: one slip is for the mother/caregiver and the other is for the health facility.' Below this, in smaller text, it says '(if Hb<7.0g/dL) Measured (including altitude correction if present): 2.' At the bottom, there are two buttons: '< Back' and 'Next >'.

# Review and Edit Data (1)

ODK Collect

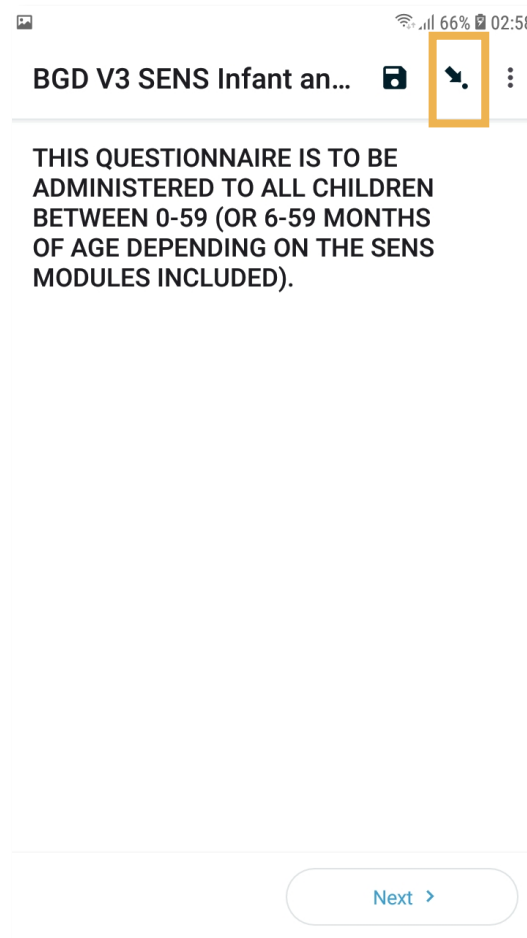
- If a form has been saved (done automatically as it is filled), it is possible to edit the answers with: “Drafts”.



# Review and Edit Data (2)

ODK Collect

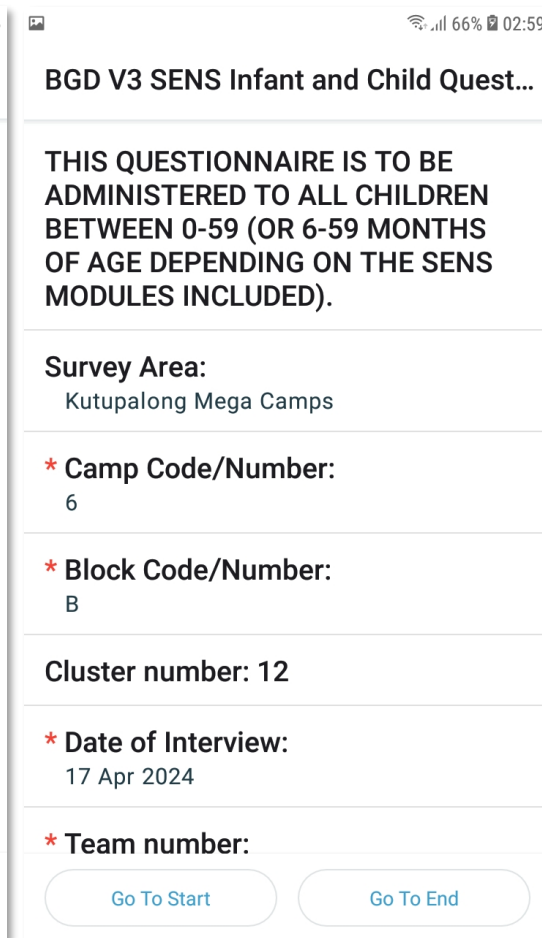
- Once the form is selected, click on the arrow in the top right of the screen for “prompt mode”.
- This allows all the responses to be reviewed more conveniently as shown in second screenshot.



BGD V3 SENS Infant an...

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO ALL CHILDREN BETWEEN 0-59 (OR 6-59 MONTHS OF AGE DEPENDING ON THE SENS MODULES INCLUDED).

Next >



BGD V3 SENS Infant and Child Quest...

THIS QUESTIONNAIRE IS TO BE ADMINISTERED TO ALL CHILDREN BETWEEN 0-59 (OR 6-59 MONTHS OF AGE DEPENDING ON THE SENS MODULES INCLUDED).

**Survey Area:**  
Kutupalong Mega Camps

\* **Camp Code/Number:**  
6

\* **Block Code/Number:**  
B

**Cluster number:** 12

\* **Date of Interview:**  
17 Apr 2024

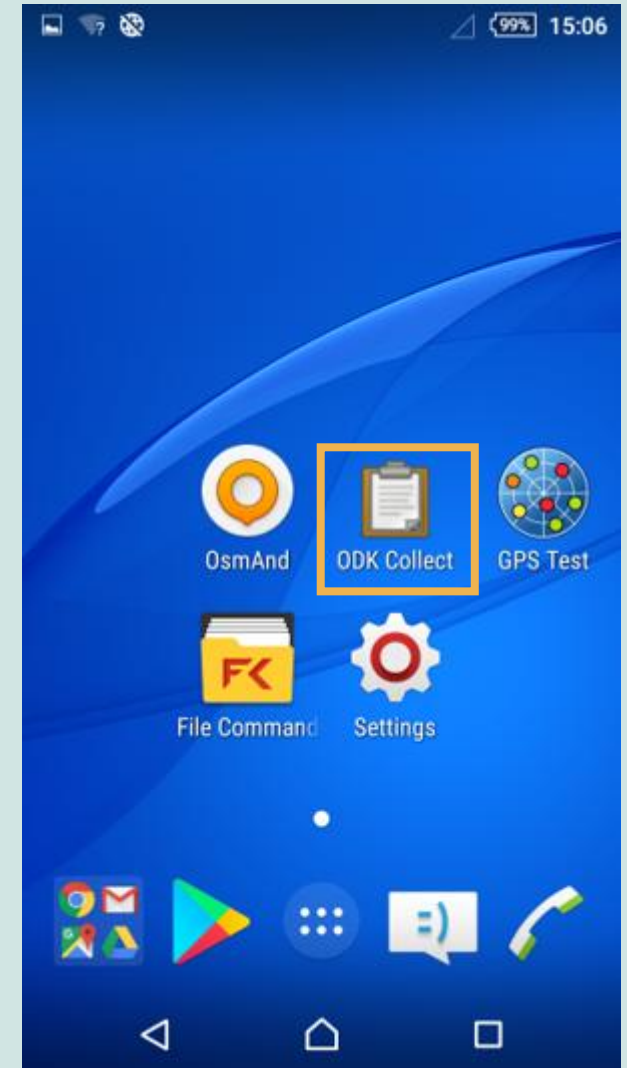
\* **Team number:**

Go To Start Go To End

# Exercise 5

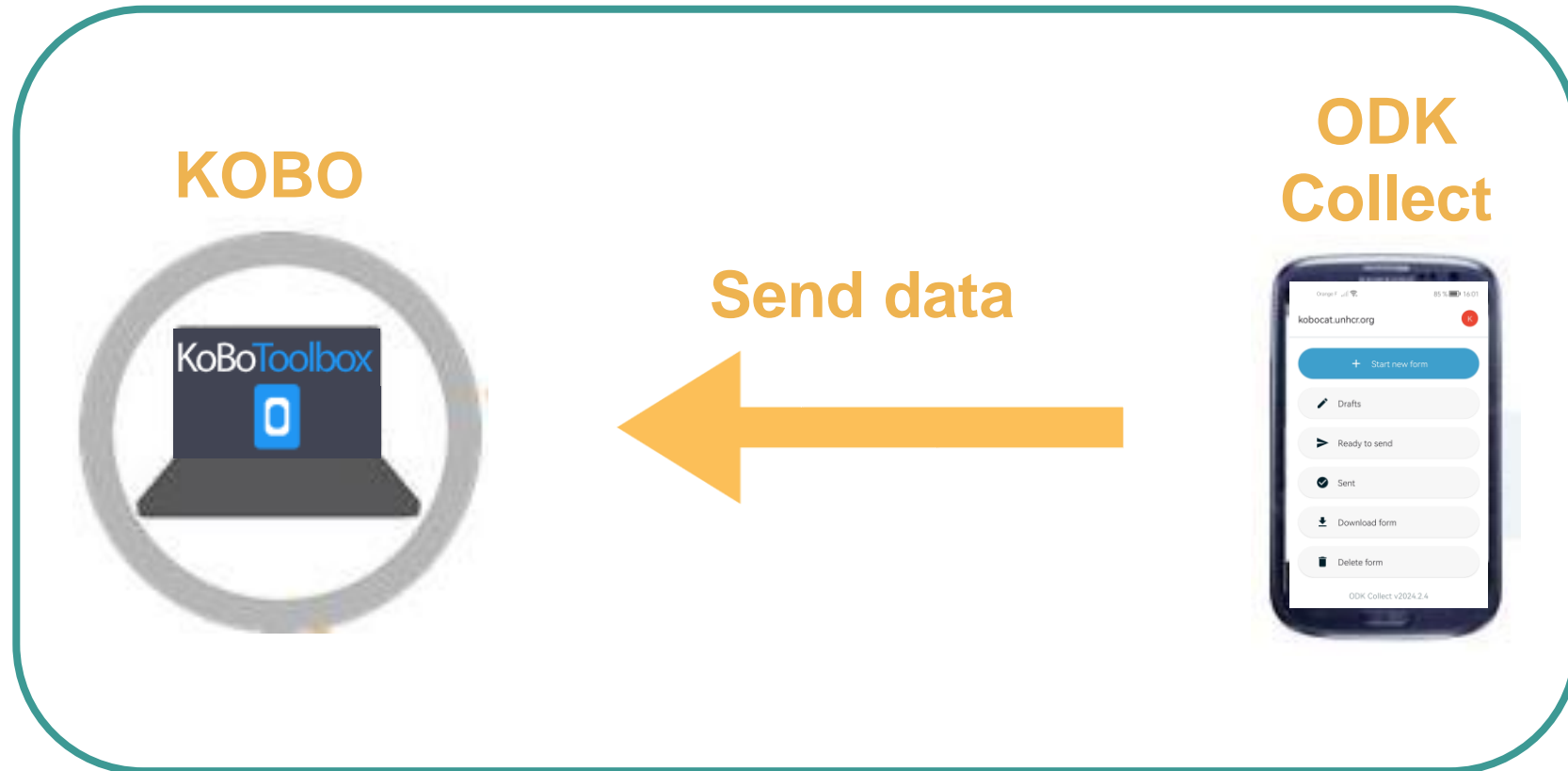
ODK Collect

- Tap the « ODK Collect » icon.
- Select « + Start New Form ».
- Fill out the « Global V3 SENS Women Questionnaire » form and keep it saved on your form.

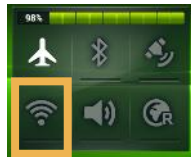


# Sending Data (1) – Kobo Toolbox

Kobo Toolbox



- Turn the Wi-Fi on.



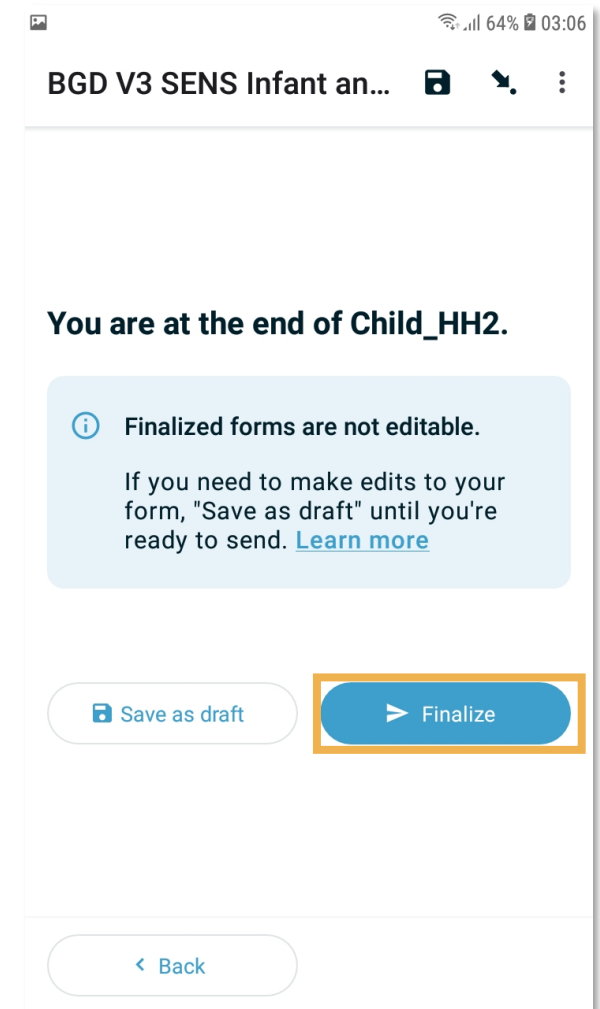
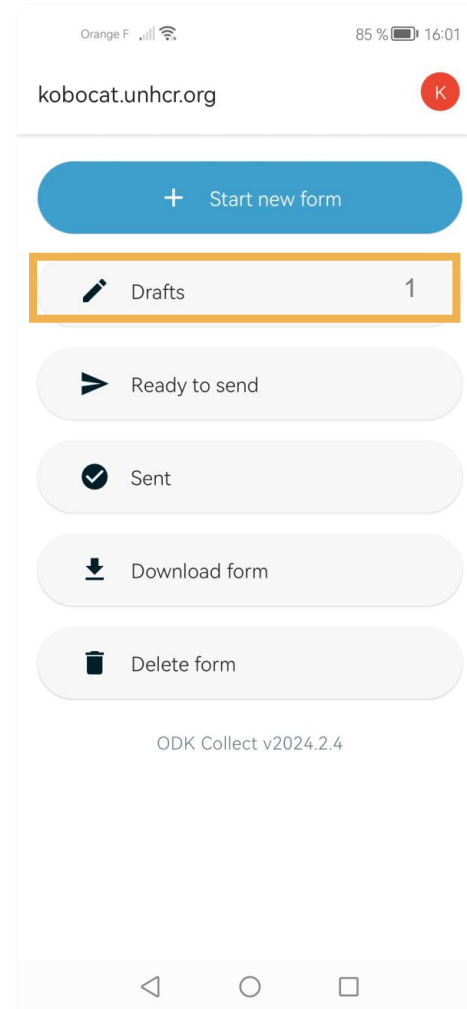
- If you wish to review and edit your data before sending, please tick “Save as draft” instead of ticking “Finalize” since once you finalize, data can’t be edited anymore. Otherwise tick “Finalize”.
- Go to « Ready to send», select the forms to send .



# Sending Data (2) – Finalize Form

ODK Collect

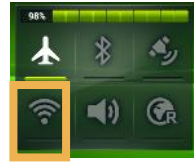
- In order to be able to send your data entry saved in “Drafts” to the server, you will first have to finalize it.
- You can finalize the data entries by clicking on “**Drafts**”, enter each one of the data entries and tick “**Finalize**” on the last screen of the data entry.



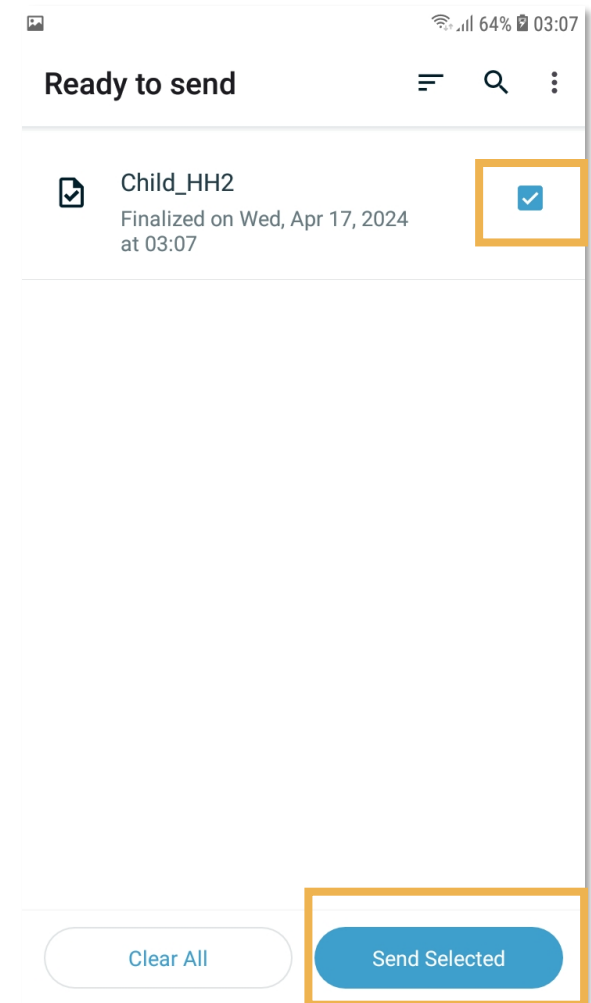
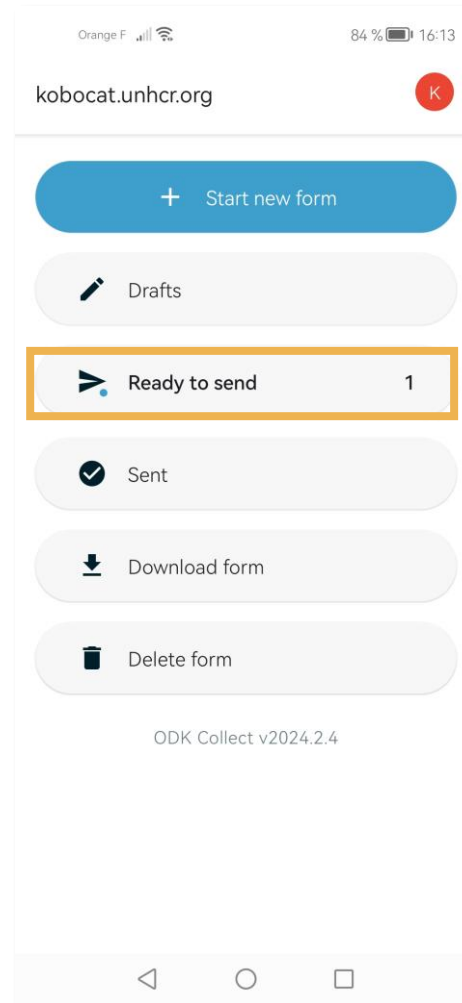
# Sending Data (2) – Send Finalized Form

ODK Collect

- Turn the Wi-Fi on,



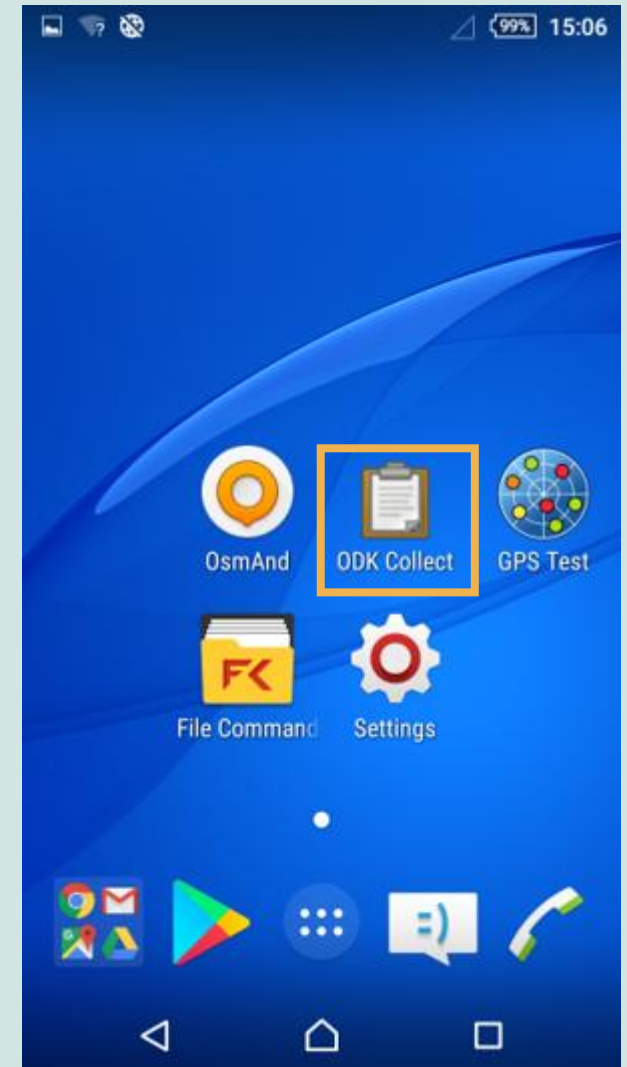
- You can then click on “Ready to send”, select the data entry/ies to be sent to the server and click on “Send Selected”.



# Exercise 6

ODK Collect

- Go back to your saved data entry from the « Global V3 SENS Women Questionnaire » form, finalize it and send it to the server.

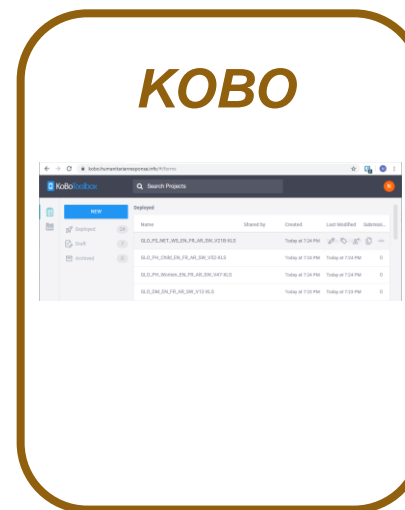
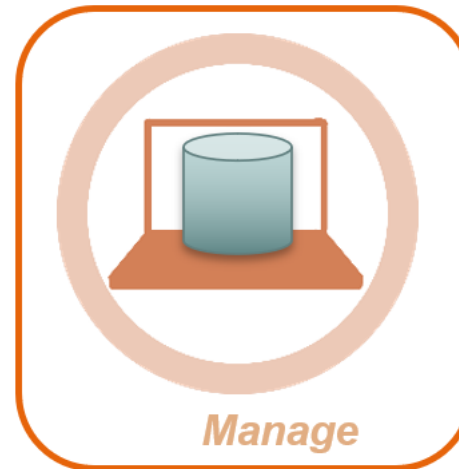
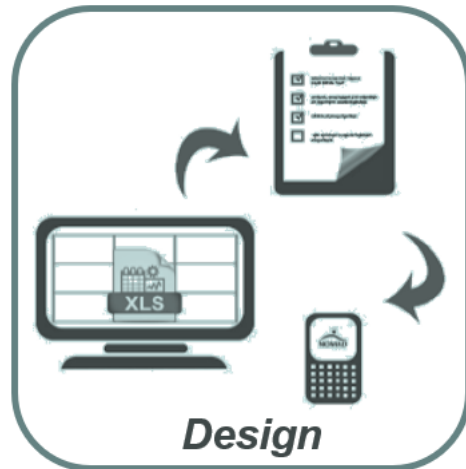


# Phase 3 – Manage : Using Kobo Toolbox server

- **Initiate Kobo Toolbox – before data collection**
- Deploy forms in Kobo Toolbox – before data collection
- Exports data from Kobo Toolbox to Excel for analysis – after data collection

# Phases of MDC

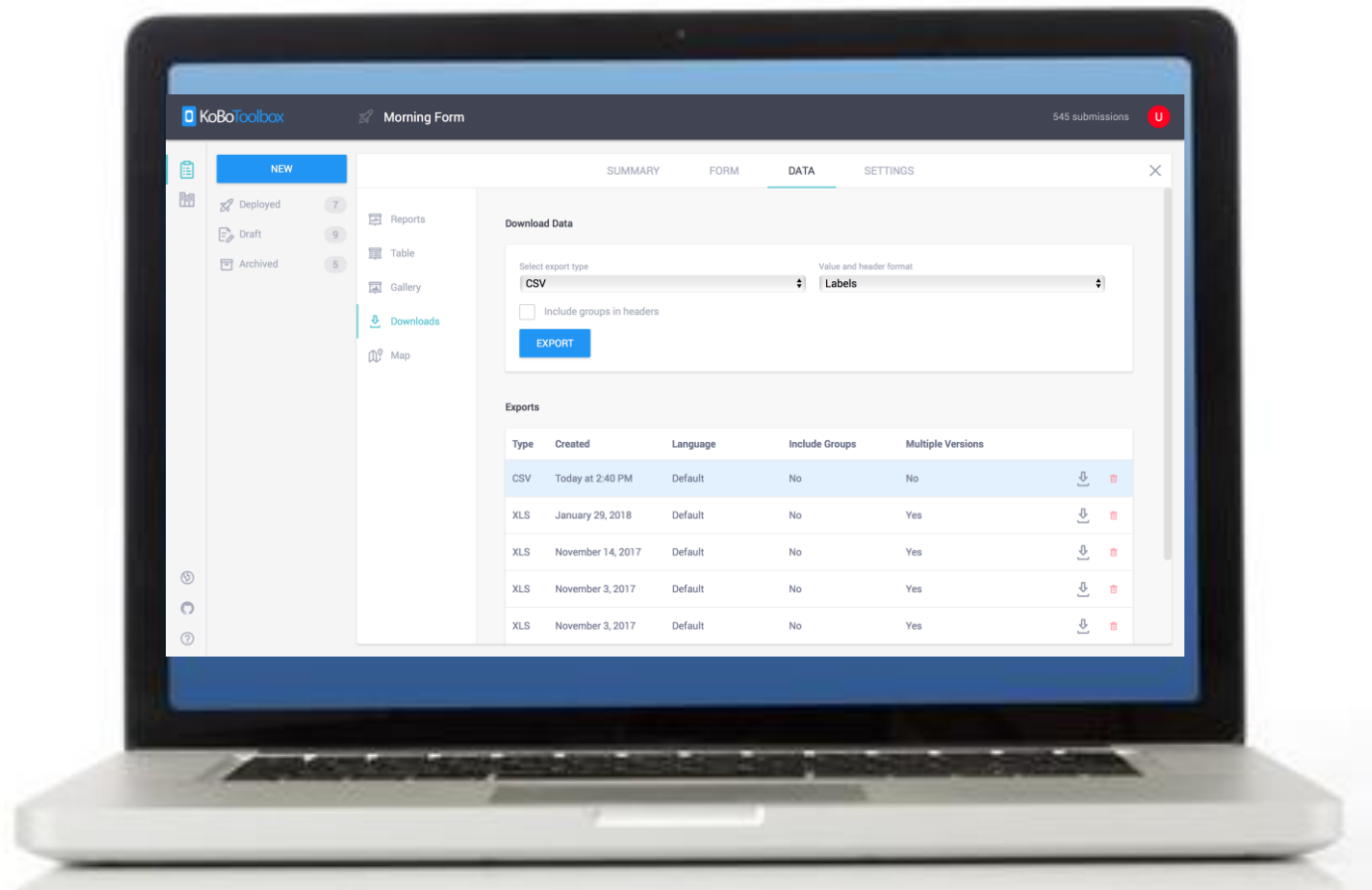
Kobo Toolbox



# What is Kobo Toolbox?

Kobo Toolbox

- KoBo: online server developed by Harvard Humanitarian Initiative with support from UN OCHA.

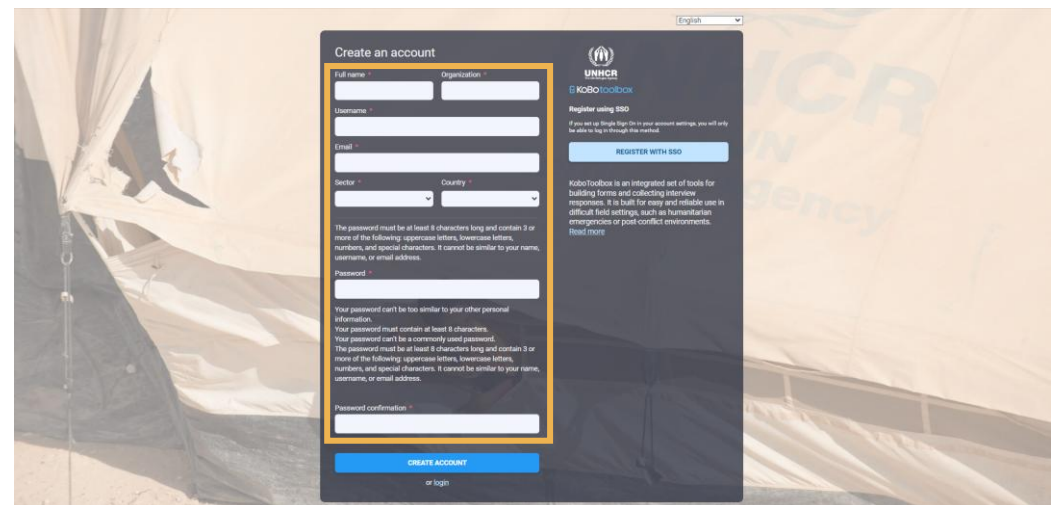
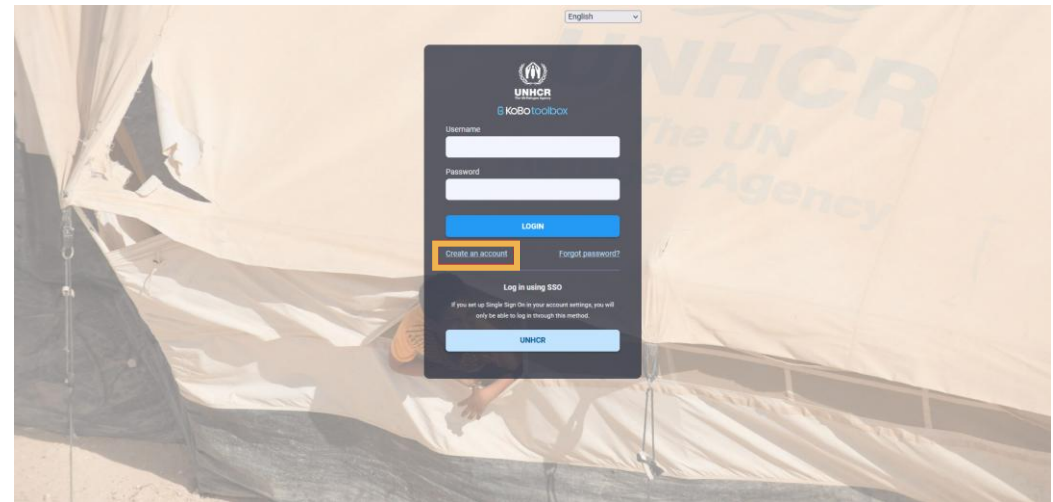


# Create an account

Kobo Toolbox

- Fill in the necessary information :
  - Make sure the username has no capitals, no spaces and no special characters.
- Check your emails for validation email :
  - It can take a few minutes;
  - Be careful not to click on the link twice by mistake;
  - Check your spam if you cannot see the email.
- Then log in to the online platform.
- Please note that there are 2 servers :
  - The production server : <https://kobo.unhcr.org>
  - For training purposes, the training server : <https://kobo-trn.unhcr.org>

<https://kobo.unhcr.org>



# Phase 3 – Manage : Using Kobo Toolbox server

- Initiate Kobo Toolbox – before data collection
- **Deploy forms in Kobo Toolbox – before data collection**
- Exports data from Kobo Toolbox to Excel for analysis – after data collection



# Deploy forms in Kobo (1)

Kobo Toolbox

- Click on **“New”**, **“Upload an XLSForm”** and the upload the SENS XLS format Form.
- Name your project in Kobo Toolbox and click on **“Create Project”**.

The screenshot displays the Kobo Toolbox interface. On the left, a sidebar shows the 'NEW' button highlighted. The main area shows a table of deployed projects. A modal dialog titled 'Create project: Choose a source' is open, with the 'Upload an XLSForm' option highlighted. Below this, another modal titled 'Create project: Project details' is shown, containing fields for Project Name, Description, Sector, and Country, with the 'CREATE PROJECT' button highlighted.

Name	Shared by	Created	Last Modified
tutorial_encrypted		Today at 3:27 PM	Today
bugspantag		Yesterday at 3:01 PM	Yesterday
WASH_KAP_mobile_template_v9_11_2		Last Wednesday at 10:22 AM	Last Wednesday

Create project: Choose a source

Choose one of the options below to continue. You will be prompted to enter name and other details in further steps.

- Build from scratch
- Use a template
- Upload an XLSForm
- Import an XLSForm via URL

Create project: Project details

Project Name (required)  
Global V3 SENS Food security, Mosquito, WASH 04

Description  
Enter short description here

Sector (required)  
Select...

Country (required)  
Select...

CREATE PROJECT

# Deploy forms in Kobo (2)

Kobo Toolbox

- For your SENS form to be accessible from ODK Collect on the Smartphones/Tablets, you will need to deploy the form by clicking on **“Deploy”**.
- You can also visualise it online (through an Enketo link) by clicking on the **“Preview”** button.
- Warning : Testing the form on Enketo will not work with all parameters as some calculations do not work the same on Enketo and on ODK and the forms were set up to work on ODK.

Global V3 SENS Women Questionnaire 03

SUMMARY **FORM** DATA SETTINGS

NEW

Deployed 3

Draft 1

Archived 0

Draft version

If you want to make these changes public, you must deploy this form.

v1 (undeployed) Last Modified : Today at 4:27 PM - 39 questions

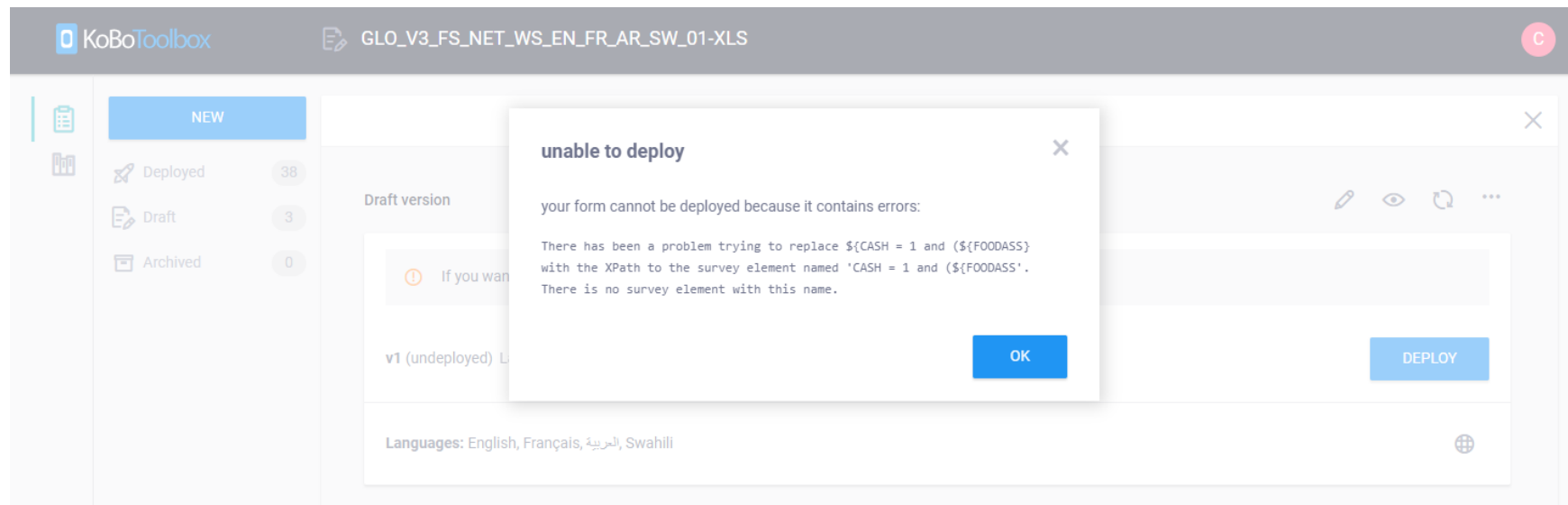
DEPLOY

Languages: English, Français, العربية, Swahili

# Deploy forms in Kobo (3)

## Kobo Toolbox

- If there is an error in your XLS Form, Kobo Toolbox will inform you when you will attempt to deploy it.
  - It pinpoints to you where the error is and one at a time.
  - Once this (and all potential other) error(s) corrected, you will be able to deploy your form.
  - In the example below, a bracket is missing at the relevancy  $\${CASH} = 1$
  - Please consult the IM officer or HQ if the bug cannot be fixed.



# Sharing your project

Kobo Toolbox

- You can easily share your project with another Kobo user (on same server) :

Global V3 SENS Infant and Child Questionnaire 03

0 submissions S

SUMMARY FORM DATA **SETTINGS**

General Media **Sharing** Connect Projects REST Services

Global V3 SENS Infant and Child Questionnaire 03

Who has access

S sens\_sandbox

Add user

Allow submissions to this form without a username

Share publicly by link

Anyone can view this form

Anyone can view submissions made to this form

Copy team from another project

Transfer project ownership

Transfer ownership of this project to another user owner. [Learn more](#)

Qui a accès

S sens\_sandbox est propriétaire

nom d'utilisateur

Affichage du formulaire

Éditer le formulaire

Afficher les soumissions

Afficher uniquement les soumissions d'utilisateurs spécifiques

Afficher les soumissions en fonction des conditions

Ajouter des soumissions

Modifier les soumissions

Modifier uniquement les soumissions d'utilisateurs spécifiques

Modifier les soumissions en fonction d'une condition

Valider les soumissions

Valider uniquement les soumissions d'utilisateurs spécifiques

Valider les soumissions en fonction d'une condition

Supprimer les soumissions

Supprimer uniquement les soumissions d'utilisateurs spécifiques

Supprimer les soumissions en fonction d'une condition

Gérer le projet

Accorder des autorisations

Autoriser les soumissions sans nom d'utilisateur ni mot de passe pour ce formulaire

# Phase 3 – Manage : Using Kobo Toolbox server

- Initiate Kobo Toolbox – before data collection
- Deploy forms in Kobo Toolbox – before data collection
- **Exports data from Kobo Toolbox to Excel for analysis – after data collection**

# Exporting dataset from Kobo Toolbox

Kobo Toolbox

- You can access and download the dataset by selecting on “**Data**” tab and then click on “**Downloads**”. Always choose “**XML values and headers**.”
- The SENS Mapper analysis tool requires data in “**CSV**” / “**XML values and headers**” format type export.

SUMMARY FORM **DATA** SETTINGS

Table Reports Gallery **Downloads** Map

### Downloads

Select export type: CSV

Value and header format: XML values and headers

[Advanced options](#)

Apply saved export settings: Latest unsaved settings

**EXPORT**

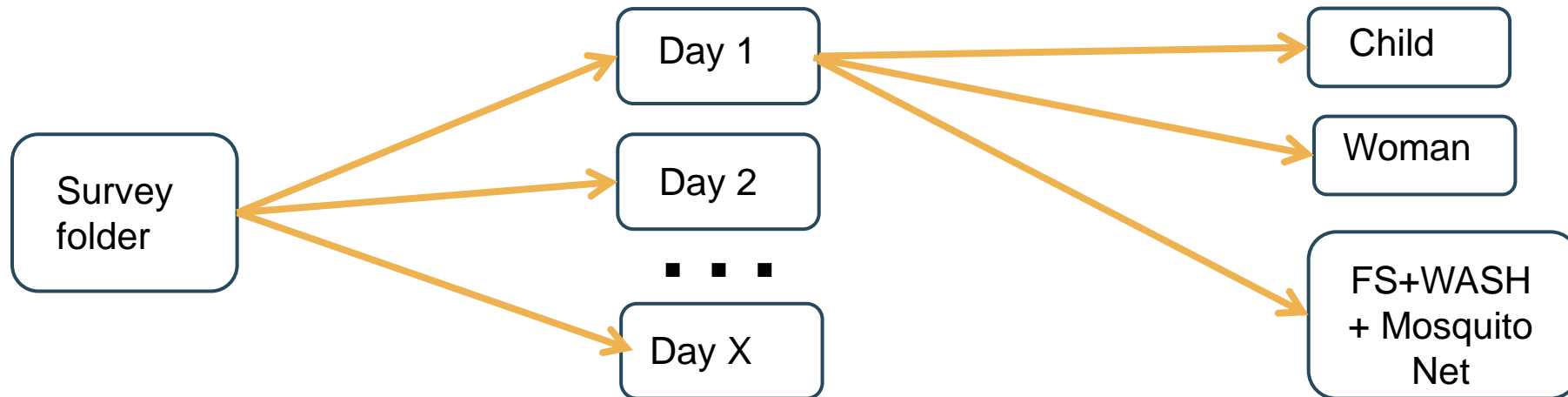
### Exports

Type	Created	Language	Include Groups	Multiple Versions	
CSV	Today at 2:26 AM	XML values and headers	No	Yes	<a href="#">Download</a>

# Organizing data

Kobo Toolbox

- How can you efficiently organize your data?



- Export data each day (prevent data losses, help to keep things organized).
- At the end of the survey, only the last day's export needs to be used for analysis as it contains the whole dataset.
- See “MDC Tool 01&02” for how to export the data.*

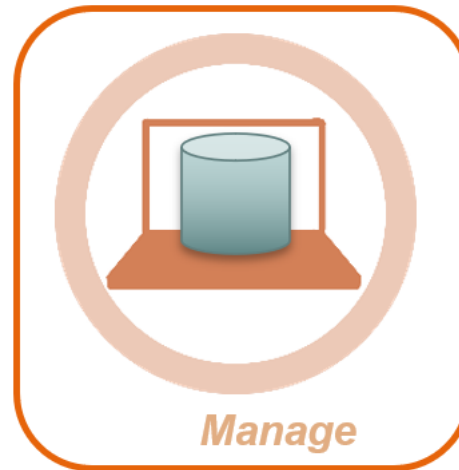
# Phase 4 - Analyze

- **Exporting Data for Analysis**
- SENS Mapper



# Phases of MDC

Kobo Toolbox



# UNHCR Kobo Toolbox : export data

## Kobo Toolbox

- Access Kobo Toolbox at <https://kobo.unhcr.org> and log in with your username and password.
- Click on the name of the form you wish to analyse, choose “**Data**”, “**Downloads**” and download the data in “**CSV**” format with “**XML values and headers**”.
- Refer to “Tutorial 1 – Exporting Data for Analysis”.

The screenshot displays the Kobo Toolbox interface for exporting data. The 'Downloads' tab is active, showing options to select the export type (CSV) and the value and header format (XML values and headers). The 'EXPORT' button is visible. Below the export settings, an 'Exports' table lists the export details.

Type	Created	Language	Include Groups	Multiple Versions	
CSV	Today at 2:26 AM	XML values and headers	No	Yes	<a href="#">Download</a>

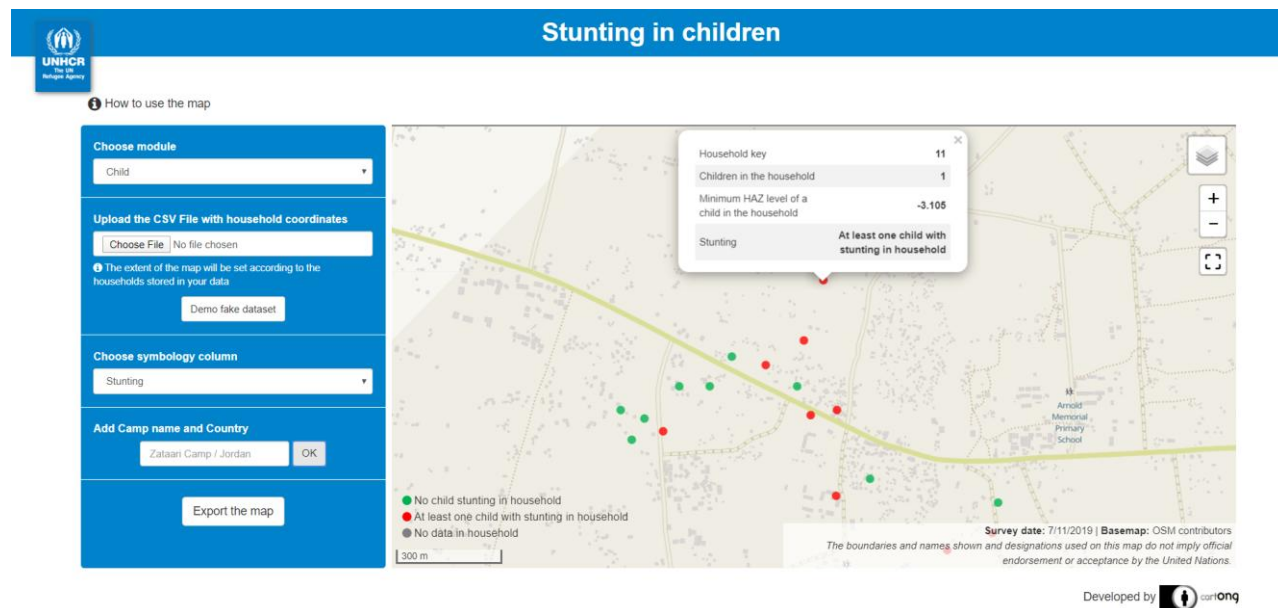
# Phase 4 - Analyze

- Exporting Data for Analysis
- **SENS Mapper**

# Analysis Tools – SENS Mapper

## SENS Mapper

- Surveys that have been set up to collect GPS coordinates of households can be visualized and extracted for reporting on [the SENS Mapper](#).
- For more information in which type of setting and how to use GPS coordinates, refer to MDC Tool 08.



# Standard operating procedures (SOPs)

- **Pre-deployment: SOP of survey manager**
- In-deployment: SOP of survey manager, supervisors & enumerators

# Planning the survey and its logistics

## SOPs

- Which modules do you need?
- How many teams to deploy? How many phones needed?
- Specific needs in terms of phones? Safety of enumerators?
- Which tools?
- How many supervisors to check data quality?
- Which languages needed for translation?
- Online/offline?
- Power supply?
- How many hours in the field each day, number of days needed?
- What backup for data?
- What adaptations needed to the survey (with respect to context etc.)
- What sampling?

# Do you need help?

SOPs

- Option 1: In-country support
  - *When the survey manager has no MDC experience, little help available in-country.*
- Option 2: Remote support
  - *Some MDC experience, previous ODK training, tech savvy survey manager.*
- Option 3: No support
  - *When everything, including coding XLS forms, is already known.*

# Prepare your material

## SOPs

- A few weeks before the survey :
  - Phones :
    - Likely 2 phones per team, a few spares as well.
    - Clean older phones – no old surveys/data left on the phone.
  - Install or update needed applications :
    - ODK Collect
    - GPS Test
  - Update any screenshots for your training.





# Week before deployment

## SOPs

- Test any forms modified to ensure they behave as expected.
- Deploy finalized forms on the server.
- Deploy forms on the phones.
- Print training material.
- See SENS Page for various MDC tools:  
<http://sens.unhcr.org/mobile-technology/tools/>

# Standard operating procedures (SOPs)

- Pre-deployment: SOP of survey manager
- **In-deployment: SOP of survey manager, supervisors & enumerators**

# Roles

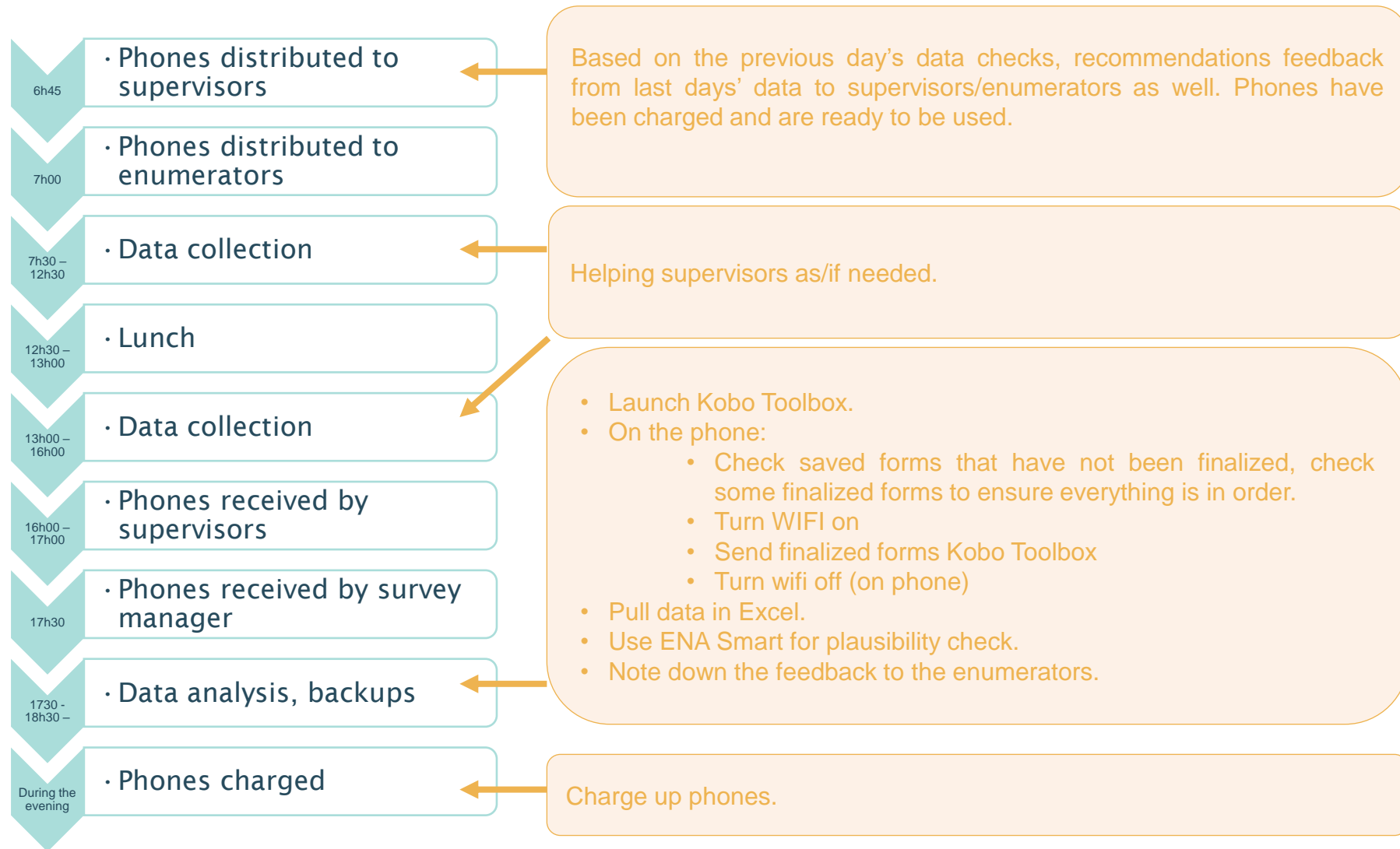
SOPs

- Survey manager
- Supervisor(s)
- Enumerators



# Typical day : Survey Manager

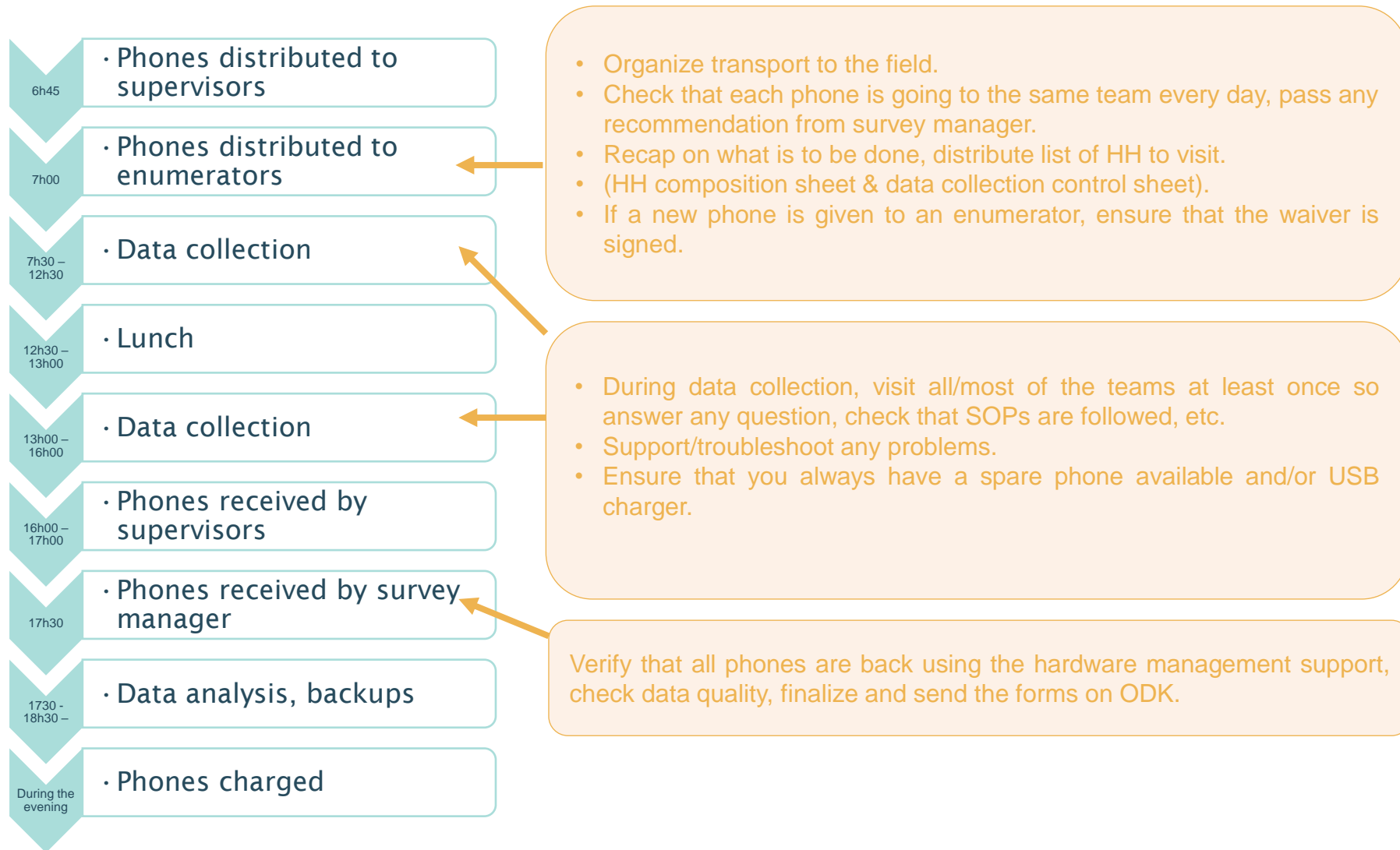
SOPs



*To be adapted to your context.*

# Typical day : Supervisor

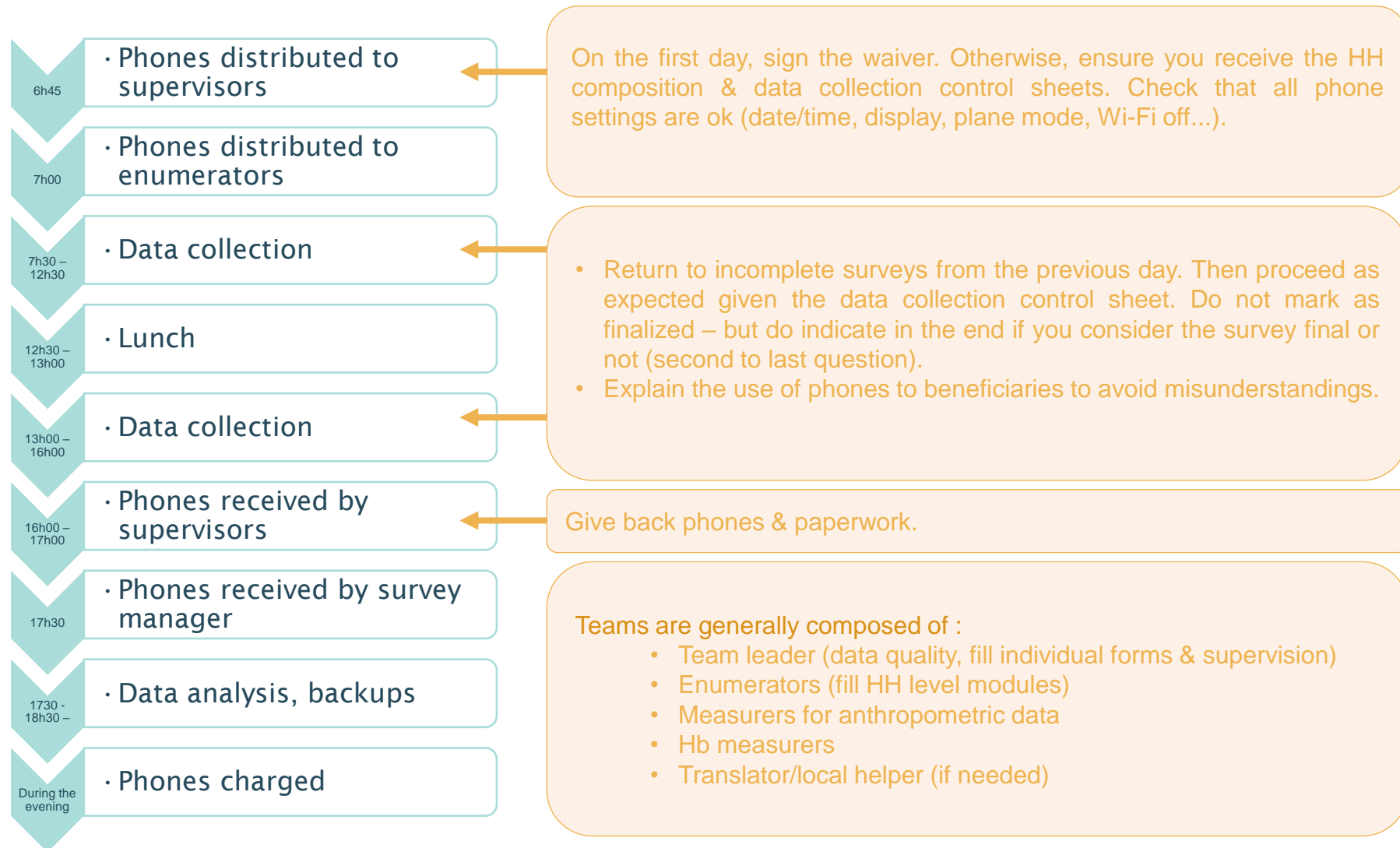
## SOPs



*To be adapted to your context.*

# Typical day : Enumerator

## SOPs



*To be adapted to your context.*

# Lifecycle of a form

SOPs

Ongoing (not finalized, absent, etc.)

Considered finished by enumerator

Considered finished by supervisor

Marked as finalized by supervisor

The sequence of screenshots illustrates the lifecycle of a form in the OpenDataKit Survey Manager:

- First Screenshot:** Shows the form completion screen. The interviewer confirms completion. The 'Yes' radio button is selected and highlighted with an orange box. Below, the supervisor confirms completion, and the 'No' radio button is selected and highlighted with an orange box.
- Second Screenshot:** Shows the form completion screen. The interviewer confirms completion. The 'Yes' radio button is selected and highlighted with an orange box.
- Third Screenshot:** Shows the supervisor confirmation screen. The supervisor confirms completion. The 'Yes' radio button is selected and highlighted with an orange box.
- Fourth Screenshot:** Shows the finalization screen. The message 'You are at the end of Child\_HH2.' is displayed. A blue box contains the message: 'Finalized forms are not editable. If you need to make edits to your form, "Save as draft" until you're ready to send. [Learn more](#)'. At the bottom, the 'Finalize' button is highlighted with an orange box.

# Support documentation

## SOPs

- Data collection control:
  - Overview of all HH to be visited;
  - One per block/cluster.

Date of sampling: dd / mm / yyyy				Section No.:			Block No.:			Cluster No. (if applicable):			Team No.:		
HH No.	Anthropometry and health Children 6-59 mo.			Anaemia Children 6-59 mo.			Anaemia Women 15-49 y			IYCF Children 0-23 mo.		WASH	Food Security	Mosquito Net	
	No. in HH	No. surveyed	No. referred	No. in HH	No. surveyed	No. referred	No. in HH	No. surveyed	No. referred	No. in HH	No. surveyed	1=completed 2=absent 3=refused	1=completed 2=absent 3=refused	1=completed 2=absent 3=refused	
01															
02															
03															
04															
05															
06															
07															

- HH composition sheet:
  - Overview of the composition of each HH;
  - One per HH.


Date _/_/___	Camp _____	Zone _____	Block _____	HH Number _____	Cluster no. _____	Team number _____
Please complete using the following order: HH head, adult males, adult females, children, infants, other relatives						
Identification and age			Anthropometry and health			Anaemia
HH #	Name	M/F • If age ≥5 y: unit is years • If age <5 y: unit is months	Weight Kg Children 6-59	Height cm Children 6-59	MUAC cm / mm Children 6-59	Referred? Y/N • Children 6-59 • Non-pregnant women

*Only useful when it is actually being used!*



# Phone ownership and responsibilities

SOPs

  
**UNHCR**  
The UN  
Refugee Agency

---

**ANDROID PHONE HANDOVER**

---

**General Statement**

- The android phone issued is property of UNHCR and should be handled with utmost care against loss or damages of any kind.
- You are liable to ensure that the phone is returned in a good working condition
- This letter serves as a confirmation that you accept responsibility for the phone provided by UNHCR with the description attached:

PHONE IMEI:

I have received the above items in good working condition. I have also read and agree to the statement explained above and assume full responsibility

Name of receiver.....  
Signature.....  
Date.....

Name of issuer.....  
Signature.....  
Date.....

Date of final Return:  
Signature of Responsible person:

Signed once before the start of the survey when the phones are distributed.

# Daily phone management

SOPs

## Burkina Faso Food Security Survey List of phones by team and by day

DATE:

<u>PreTest</u>	Xperia Barcode/IMEI	G1 Barcode/IMEI	Team leader	Signature	Team colour
Team 1	351676030088209	12468001490007			red
Team 2	351677030034813	12468001495048			yellow
Team 3	351677030073092	12468001496087			pink
Team 4	351677030072961	12468001493050			orange
Team 5	351676030030847	12468001494843			blue
Team 6	351676030122990	12468001495998			green

Must be signed once by the enumerator in the morning, when they receive the material. The supervisor signs at the end of the day when the phones are returned.

# Support documentation available

SOPs

## MDC Tools

Here, we provide you with standardised tools for implementing a SENS using mobile phone technology. The tools describe the various steps from setting up the system to data extraction and the daily use of mobile phones. They also include standard forms to assist in data collection, as well as tips and tricks for the various survey staff.

If you wish to implement a SENS using mobile technology, please contact: [HQP@unhcr.org](mailto:HQP@unhcr.org).



### Downloads

**All MDC Tools** – Combined Download **MDC Tools 1 – 9**



#### 1. SETTING UP MDC TOOLS:

1. **MDC Tool 1** – Tutorial – How to set up the phone for SENS surveys
2. **MDC Tool 2** – Using GPS Coordinates in SENS surveys
3. **MDC Tool 3** – Tutorial – Setup and Use of Kobo Server Training Documents



#### 2. TRAINING DOCUMENTS:

1. **MDC Tool 4** – MDC Training for Survey Managers
2. **MDC Tool 5** – MDC Training for Enumerators



#### 3. DOCUMENTS TO SUPPORT LOGISTICS:

1. **MDC Tool 6** – To Print – Phone Handover
2. **MDC Tool 7** – To Print – Phone Daily Inventory
3. **MDC Tool 8** – Daily Use and Logistics



#### 4. ADDITIONAL TUTORIALS:

1. **MDC Tool 9** – Tutorial – How to add Images to questions in your SENS survey

