

KoboToolBox

Hands on training May 24, 2022

What is KoBoToolbox ?

- Kobo Toolbox is a free open-source suite of tools for field data collection.
- It allows user design complex forms, deploy and download submitted data.
- Interactively easy to build/design online form
- Compatible with pre-designed XLSForm

Main features

- Form builder
- Question library
- Android or browser-based data collection
- Data submission
- Data management
- Data download (xls, csv, json and Kml)

Get Started

- To upload or create survey form on Kobo Toolbox you will need to have a Kobo account.
- Two types of account can be created
 1. “Humanitarian Organization” account or
 2. “Researcher, Aid Worker, and Everyone Else” account

To create an account, go to

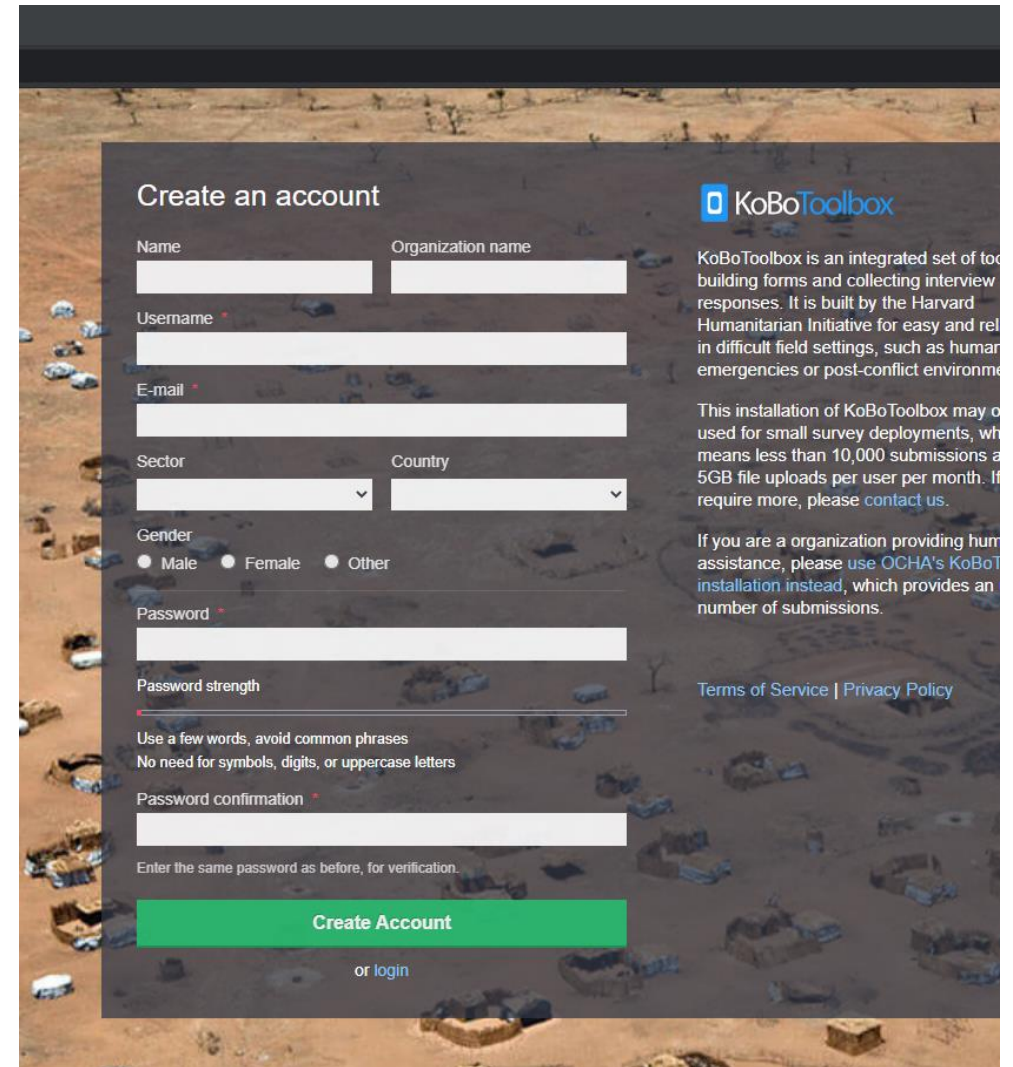
<https://kf.kobotoolbox.org/accounts/register/#/>

Click on create account, and then enter the necessary details to create the account.

If the account has been created successfully, the account creation page produces instructions on what to do next.

Click the activation link in the email sent to your email address.

Once the activation link is clicked, a new web page appears showing the kobo toolbox interface necessary to create new projects.



The image shows a screenshot of the KoBoToolbox account creation page. The page has a dark background with a light-colored form overlay. The form is titled "Create an account" and includes the following fields and options:

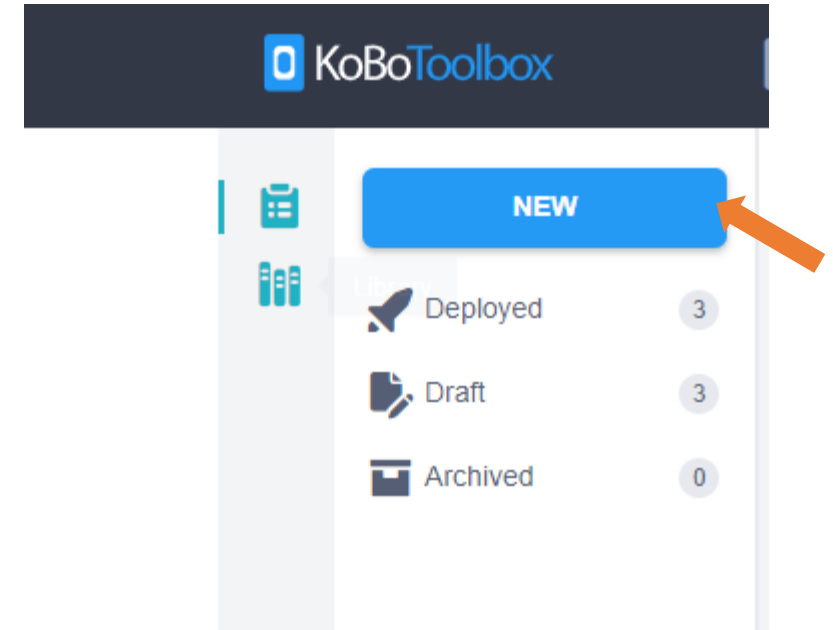
- Name** and **Organization name**: Text input fields.
- Username**: Text input field.
- E-mail**: Text input field.
- Sector** and **Country**: Dropdown menus.
- Gender**: Radio buttons for Male, Female, and Other.
- Password**: Text input field.
- Password strength**: A progress bar and text indicating strength requirements: "Use a few words, avoid common phrases" and "No need for symbols, digits, or uppercase letters".
- Password confirmation**: Text input field.
- Enter the same password as before, for verification.**: Text instruction.

At the bottom of the form is a green button labeled "Create Account" and a link "or login".

On the right side of the page, there is a KoBoToolbox logo and a paragraph of text: "KoBoToolbox is an integrated set of tools for building forms and collecting interview responses. It is built by the Harvard Humanitarian Initiative for easy and reliable use in difficult field settings, such as humanitarian emergencies or post-conflict environments." Below this is another paragraph: "This installation of KoBoToolbox may be used for small survey deployments, which means less than 10,000 submissions and 5GB file uploads per user per month. If you require more, please [contact us](#)." At the bottom right, there is a link for "Terms of Service | Privacy Policy".

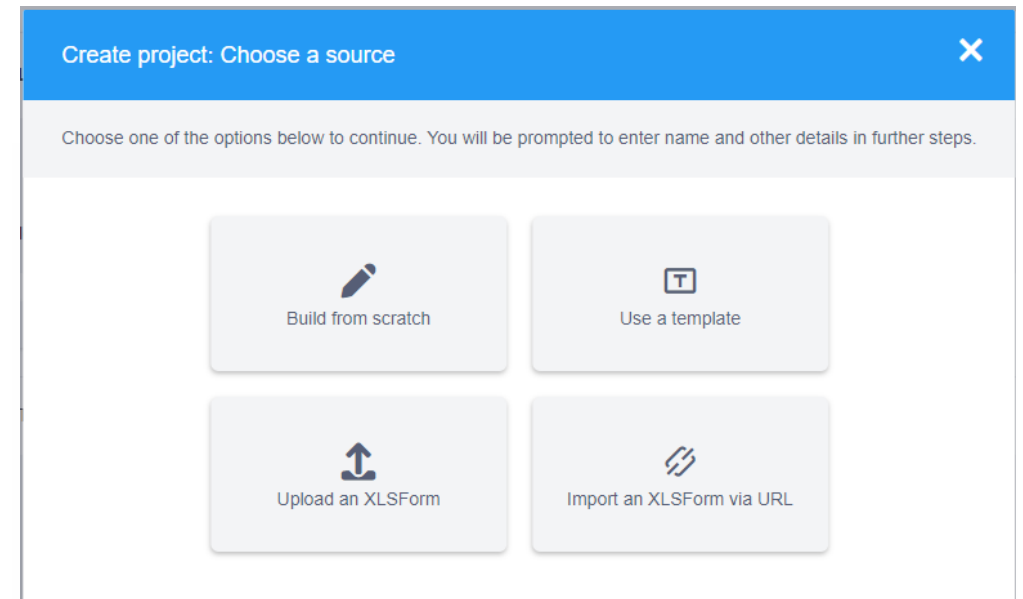
Form design

- KoBoToolbox has an intuitive form designer
- To create a new survey form, click on "New" at the top.



Four form options to create a project

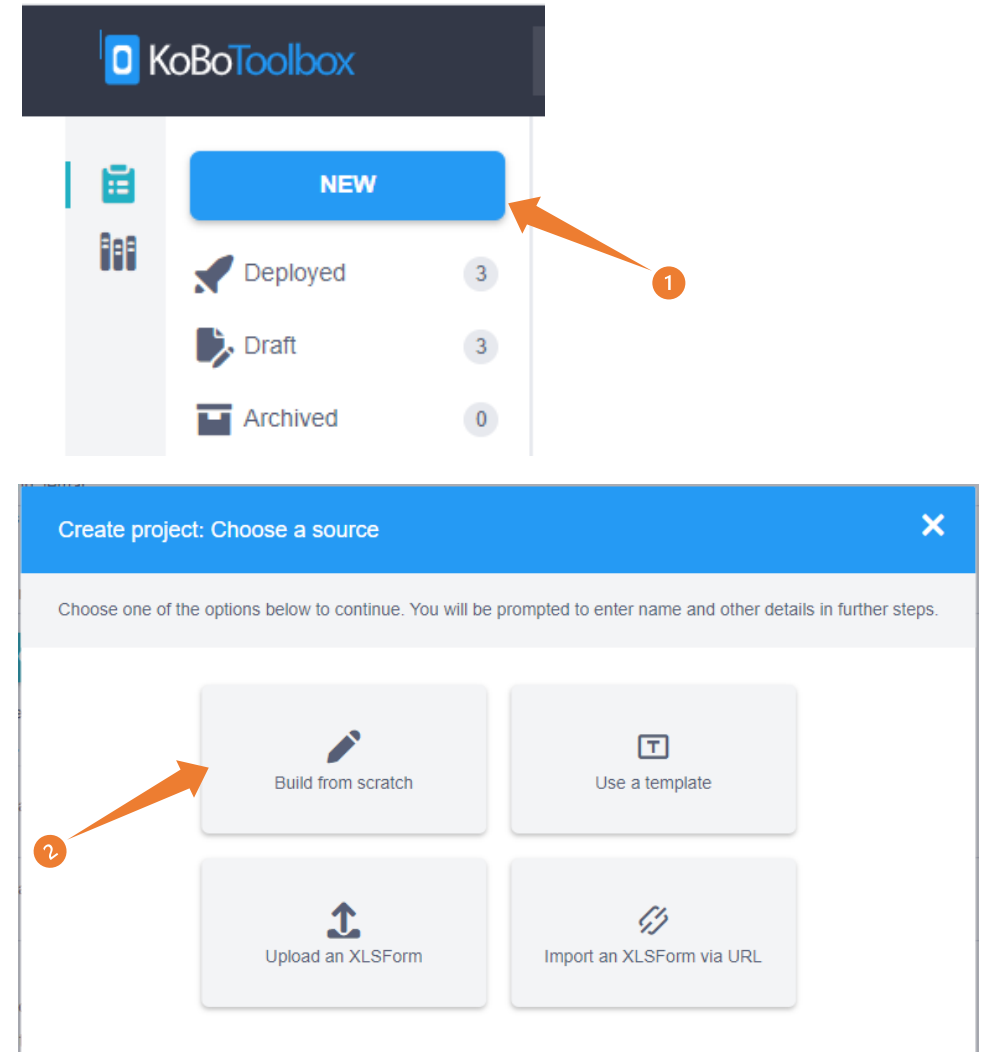
- "Build from Scratch"- this option lets you use the interactive designer;
- you can create your own survey from scratch.



This training mainly focuses on upload xlsForm option and briefly using interactive designer

Create a survey: “Build from scratch”

- Click on “New” (1) to open a ‘Create project’ dialog box from which select “Build from scratch” (2).



Write appropriate **project name** (1) and short **description** (2) of the project.

Specify the **sector** (3) and **country** (4) of the project.

1. Project Name: "Sample socio-economic survey questionnaire"
2. Description: "The purpose of this questionnaire is to collect fictitious socioeconomic data for training purposes."
3. Sector: select Economic/Social Development
4. Country: PNG
5. Check/Uncheck: In accordance with the data collection protocol and privacy policies.

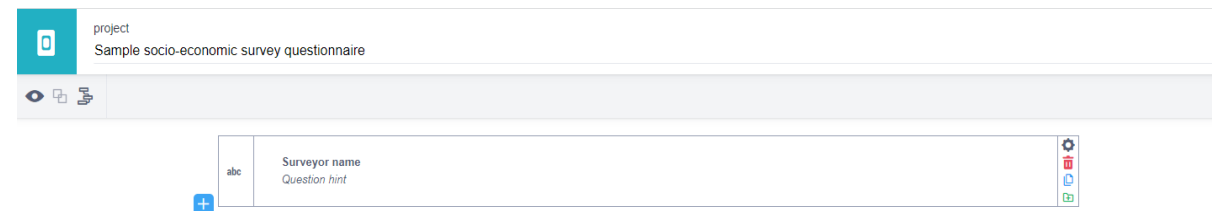
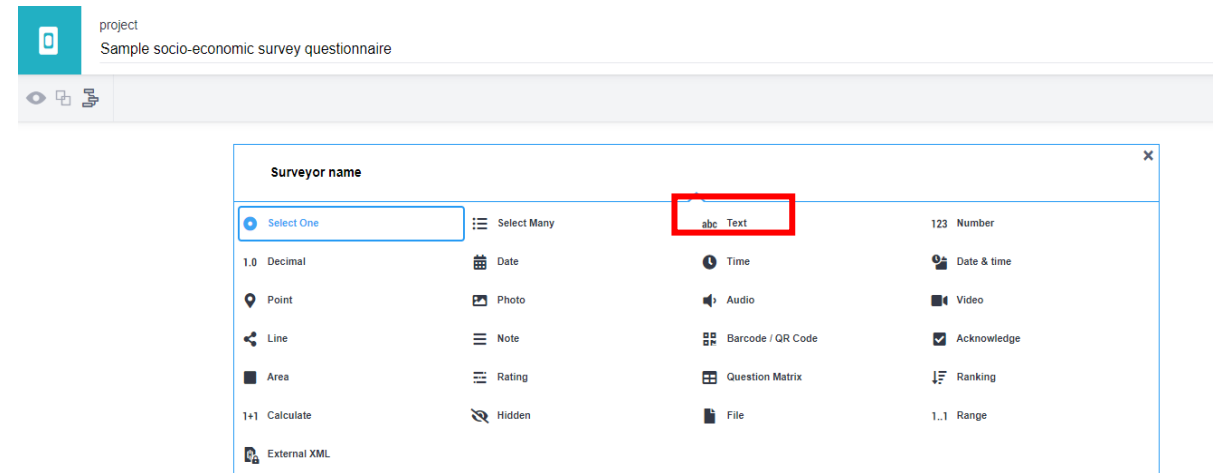
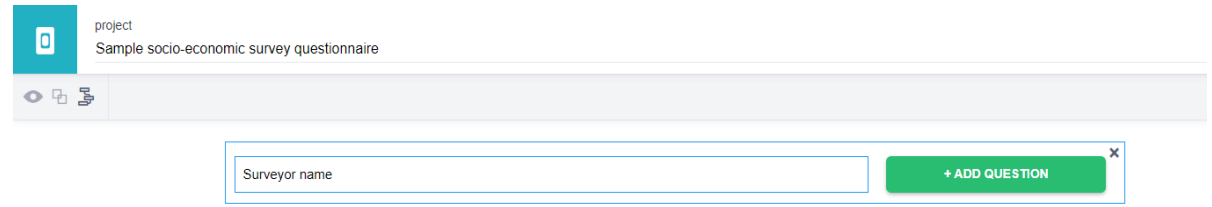
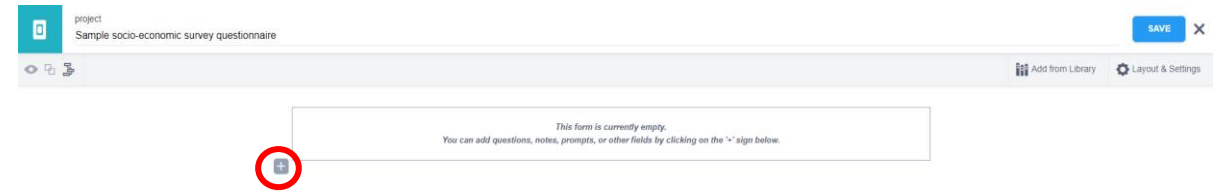
The screenshot shows the 'Create project: Project details' form. It has a blue header with a close button (X). The form contains the following fields and elements:

- Project Name:** A text input field with the placeholder 'Enter title of project here'. An orange arrow labeled '1' points to this field.
- Description:** A text input field with the placeholder 'Enter short description here'. An orange arrow labeled '2' points to this field.
- Country and Sector:** A section titled 'Please specify the country and the sector where this project will be deployed.' containing two dropdown menus. The 'Sector' dropdown is labeled '3' and the 'Country' dropdown is labeled '4'. Both are currently set to 'Select...'.
- Privacy Policy:** A checkbox labeled '5' next to the text: 'Help KoboToolbox improve this product by sharing the sector and country where this project will be deployed. All the information is submitted anonymously, and will not include the project name or description listed above.'
- Buttons:** A 'BACK' button and a blue 'CREATE PROJECT' button. An orange arrow labeled '6' points to the 'CREATE PROJECT' button.

This screenshot shows the same 'Create project: Project details' form, but with the fields filled out:




























- Project Name:** 'Sample socio-economic survey questionnaire'
- Description:** 'The purpose of this questionnaire is to collect fictitious socioeconomic data for training purposes.'
- Sector:** 'Economic/Social Development' (with an 'X' icon and a dropdown arrow)
- Country:** 'Papua New Guinea' (with an 'X' icon and a dropdown arrow)
- Privacy Policy:** The checkbox is unchecked.
- Buttons:** 'BACK' and 'CREATE PROJECT' buttons are visible at the bottom.

- Add your first question by clicking the + button.
- Write the first question as "Surveyor name"
- Then click Add Question and select appropriate data type to represent the response.
- In this case select Text as a response data type.



Question type	Icon	Answer input
integer	123	Integer (i.e., whole number) input.
decimal	1.0	Decimal input.
range	1..1	Range input (including rating).
text	abc	Free text response.
select_one [options]		Multiple choice question; only one answer can be selected.
select_multiple [options]		Multiple choice question; multiple answers can be selected.
select_one_from_file [file]		Multiple choice from file; only one answer can be selected.
select_multiple_from_file [file]		Multiple choice from file; multiple answers can be selected.
rank [options]	n/a	Rank question; order a list.
note		Display a note on the screen, takes no input. Shorthand for type=text with readonly=true.
geopoint		Collect a single GPS coordinate.
geotrace		Record a line of two or more GPS coordinates.
geoshape		Record a polygon of multiple GPS coordinates; the last point is the same as the first point.
date		Date input.
time		Time input.
dateTime		Accepts a date and a time input.
image		Take a picture or upload an image file.
audio		Take an audio recording or upload an audio file.
background-audio		Audio is recorded in the background while filling the form.
video		Take a video recording or upload a video file.
file		Generic file input (txt, pdf, xls, xlsx, doc, docx, rtf, zip)
barcode		Scan a barcode, requires the barcode scanner app to be installed.
calculate	1+1	Perform a calculation; see the Calculation section below.
acknowledge		Acknowledge prompt that sets value to "OK" if selected.
hidden		A field with no associated UI element which can be used to store a constant.
xml-external		Adds a reference to an external XML data file.

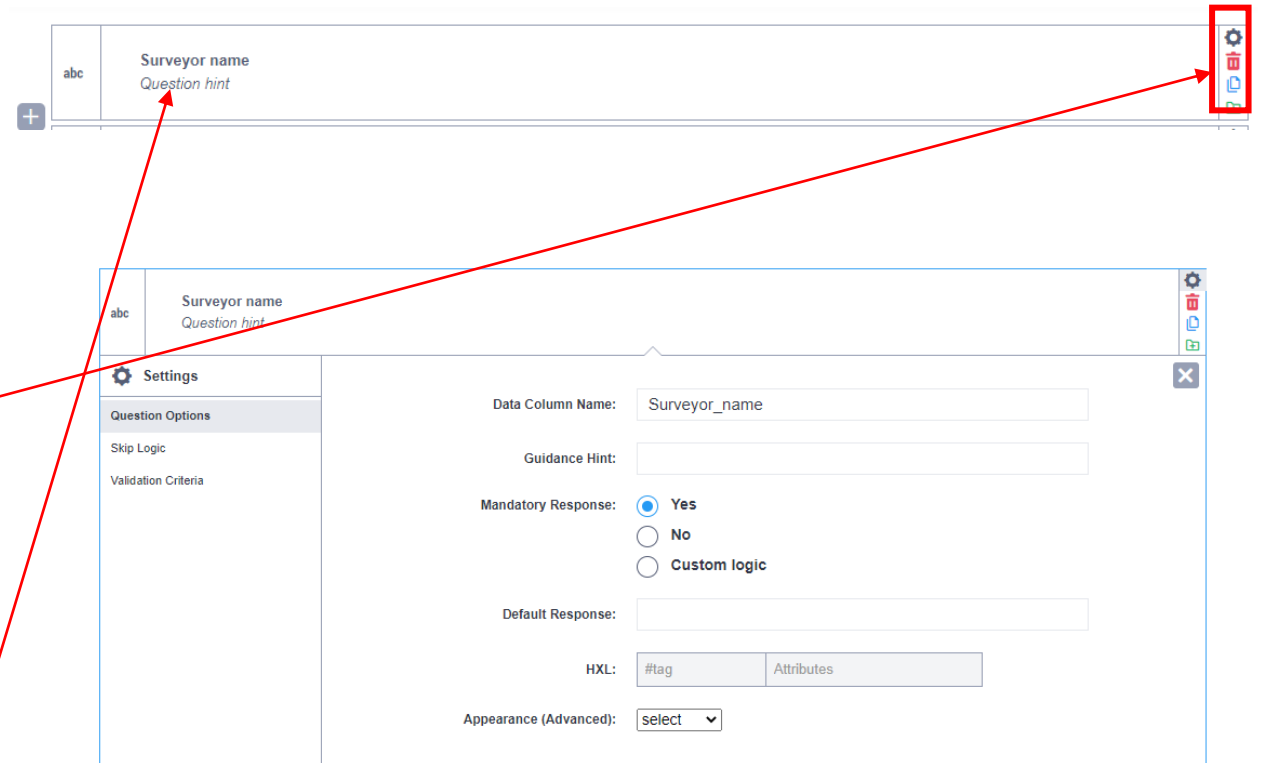
Add more questions

abc	Surveyor name <i>Question hint</i>	   
abc	Province <i>Question hint</i>	   
	Are you the household head? <i>Question hint</i>	   
	Yes	XML value: AUTOMATIC
	No	XML value: AUTOMATIC
	+ Click to add another response...	XML value: AUTOMATIC
123	Age <i>Question hint</i>	   
	Sources of household income <i>Question hint</i>	   
	Farming	XML value: AUTOMATIC
	Non-farming activity	XML value: AUTOMATIC
	Remittance	XML value: AUTOMATIC
	+ Click to add another response...	XML value: AUTOMATIC

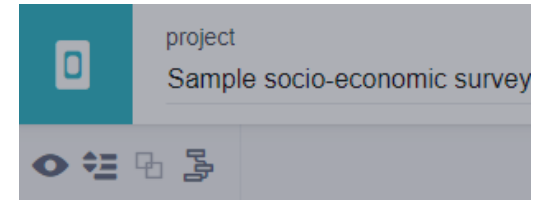
- Using the icons on the right side of the question, you can edit a question's settings

- delete,
- duplicate,
- put it into the library for later use

You can even add hint for the question



- To preview how your survey will look after entering your questions click the eye icon in the top left-hand corner.



- To check for errors, enter some information and click on the 'Validate' button.



Training sample1

Surveyor name

Province

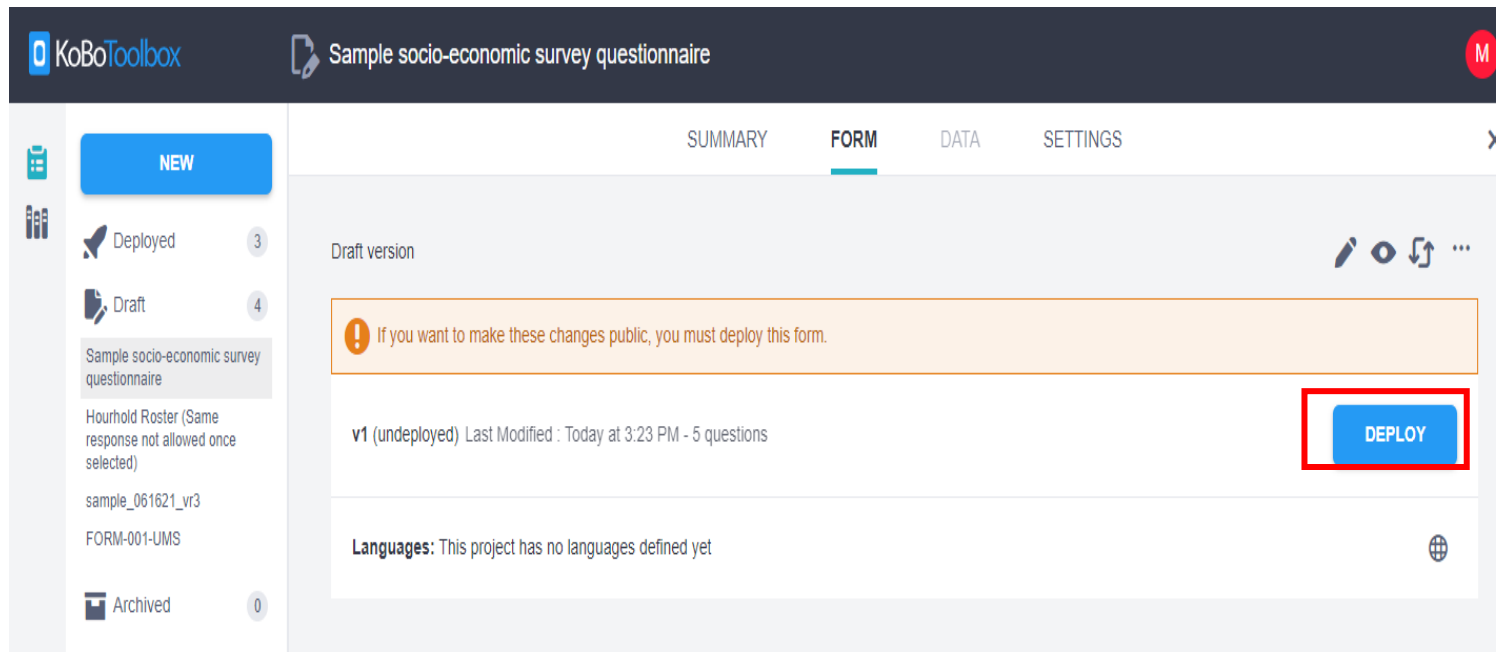
District

Gender

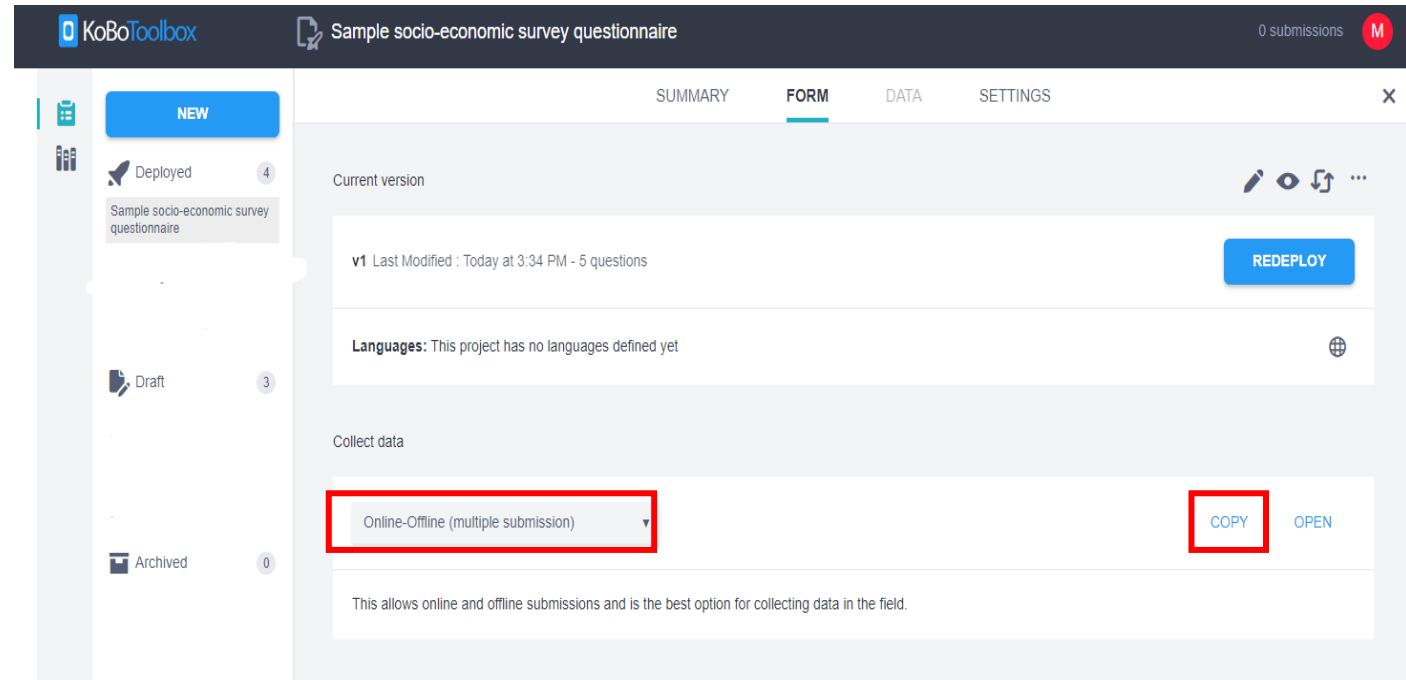
- Male
- Female

Sources of household income

- Now you are in the survey settings.
- To launch the survey, click 'Deploy'.

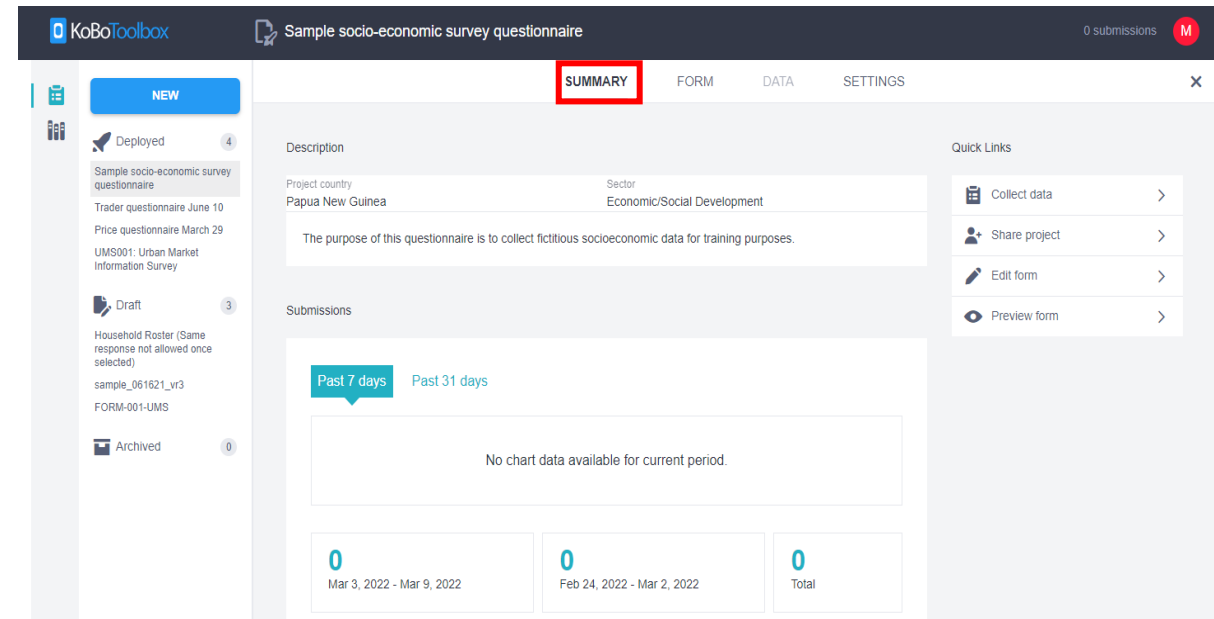


- After you deploy the form, you can select 'Online-Offline (Multiple submissions)' under collect data.



- You can copy the link by clicking the 'COPY' icon to share with your team or paste the http link into a search engine to open the questionnaire in a browser

- After data submission you can find a comprehensive overview of your survey on the Summary tab.



- The application will allow you to view the results of your survey, share the project with colleagues and edit the form.
- Whenever you make changes to the form, you have to do a re-deploy.

Getting started with XLSForm

What is an XLSForm?

- XLSForm is a form standard to help simplify the authoring of forms in Excel.

Create data collection form using Microsoft Excel

- Set up an XLSForm using Microsoft Excel.
- Upload and preview the XLSForm in KoboToolbox.
- Download a form created using the KoboToolbox form builder as an XLSForm.

Three mandatory sheets

- 1. Survey:** In this sheet write all the survey questions, along with the corresponding type, label, restriction, code, and other instructions.
- 2. Choices:** In this sheet list all choices for single or multiple selection questions
- 3. Settings:** This sheet is for form naming and to determine how the forms will be viewed on both mobile devices and the KoBo web page

31						
32						
33						
34						
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37						
38						
39						

Ready

Basic formats

- The **survey** worksheet has 3 mandatory columns:
type, **name**, and **label**.
 - The **type** column specifies the type of entry you are adding.
 - The **name** column specifies the unique variable name for that entry. No two entries can have the same name. Names have to start with a letter or an underscore. Names can only contain letters, digits, hyphens, underscores, and periods. Names are case-sensitive.
 - The **label** column contains the actual text you see in the form.

	A	B	C	D	E	F	G	
1	type	name	label::English (English)	required	apperance	parameters	relevant	calculation
2	today	today						
3	phonenumber	phonenumber						
4	deviceid	deviceid						
5	begin_group	Survey_Detail	Market and crop price	false				
6	select_one market	Market_Name	Market Name	true	minimal	randomize=false		
7	text	Market_other	Other (specify): _____				\$(Market_Name)=99	
8	calculate	Market_current						if(\$(Market_Name)!=99,jr:choice-name(\$(Market_Name), '\$(Market_Name)'),\$(Market_other))
9	time	Starting_Time	Starting_Time					
10	date	Date	Date	true				
11	select_one enumerator	Interviewer	Interviewer name	true				
12	text	Interviewer_other	Other (specify): _____				\$(Interviewer)=99	
13	select_multiple crop	crop_available	Please select all of the crops that were available to buy in \$(Market_current) today.					
14	calculate	numb_crop						count-selected(\$(crop_available))
15	note	note0	You have selected \$(numb_crop) available crops in \$(Market_current)					
16	end_group	Survey_Detail						
17	begin_group	Rice	Rice price at or near \$(Market_current) market [1 kg bag of Roots long grain, white rice]					
18	decimal	Rice_price	Please record the price (in KINA) of a 1kg bag of Roots rice (white, long grain) in or near \$(Market_current) market?					
19	end_group							
20	begin_repeat	crops_in_market_repeat	Crop price in \$(Market_current) market					
21	begin_group	crop_group	Please select the crop that you would like to report the price and weight at \$(Market_current) market					
22	select_one crop	crop_name	Please select a crop you want to record price for	true	minimal			
23	calculate	crop_current						jr:choice-name(\$(crop_name), '\$(crop_name)')
24	calculate	crop_category						if((\${crop_name}=1 or \${crop_name}=2 or \${crop_name}=3 or \${crop_name}=4 or \${crop_name}=5 or \${crop_name}=6 or
25	note	crop_type	Crop type: \${crop_category}					
26	begin_group	General_Assessment	General Assessment of \${crop_current} at \$(Market_current)	false	field-list			
27	calculate	Market						\$(Market_current)
28	select_one availability	Level_of_Availability	Level of \${crop_current} availability	false				
29	select_one quality	Quality_Status	Quality Status of \${crop_current}	false				
30	end_group	General_Assessment						
31	begin_group	sample_1	Sample 1: price for \${crop_current}	false	field-list			
32	decimal	sample1_price	S1. Price of one (bunch / heap / piece / etc.)	false				
33	decimal	sample1_piece	S1. No of Pieces per (bunch / heap / piece / etc.)	false				
34	decimal	sample1_weight_kg	S1. Weight (Kg) of one (bunch / heap / piece / etc.)	false				
35	select_one province_vl	Supply_Source_Province1	S1. Supply Source (Province)	false				
36	select_one district_vl	Supply_Source_District1	S1. Supply Source (District)	false				
37	end_group							