



Food and Agriculture Organization
of the United Nations

Use of CAPI for agricultural surveys

Intermediate Designer 2:
Rosters, Nested Rosters, html tags and
piping

Overview

- Basic Rosters
- Nested Rosters
- Formatting Text with HTML tags
- Piping

Learning Objectives

- Know how to build a roster
- Know about nesting rosters
- Know about html tags
- Know about piping

Building, using, and nesting ROSTERS

What is a roster?

- Rosters are defined by two parameters:
 - a number of rows (i.e. unique elements)
 - elements about which questions are asked (i.e. variables)
- **Source questions** dictate those parameters
 - At least one parameter: size
 - Often another parameter as well: content

KEY CONCEPT AHEAD!

Sources

Source QUESTION

ROSTER



- Fixed set of items
- Number
- List
- Multi-select

Types of sources

SECTION M: HOUSEHOLD ASSETS

CODE		1. How many [ITEMS] does your household own? IF NONE, WRITE '0' (▶ NEXT ITEM)	2. What is the age of this [ITEM]? IF MORE THAN ONE ITEM, WRITE THE AVERAGE AGE	3. At what price did you buy [ITEM]? IF MORE THAN ONE, WRITE THE AVERAGE PRICE	4. If you wanted to sell one of this [ITEM] today, how much would you receive? IF MORE THAN ONE, WRITE THE AVERAGE VALUE
		NUMBER	YEARS	TSH	TSH
401	Radio and Radio Cassette				
402	Telephone(landline)				
403	Telephone(mobile)				
404	Refridgerator or freezer				
405	Sewing Machine				
406	Television				
407	Video / DVD				
408	Chairs				
409	Sofas				
410	Tables				
411	Watches				
412	Beds				
413	Cupboards, chest-of-drawers, boxes, wardrobes,bookcases				
414	Lanterns				
415	Computer				
416	Cooking pots, Cups, other kitchen utensils				
417	Mosquito net				
418	Iron (Charcoal or electric)				
419	Electric/gas stove				
420	Other stove				
421	Water-heater				
422	Record/cassette player, tape recorder				
423	Complete music system				
424	Books (not school books)				
425	Motor Vehicles				
426	Motorcycle				
427	Bicycle				

- Fixed set of items
- Number
- List
- Multi-select

Types of sources

SECTION 5: No AGRICULTURAL ENTERPRISES

PART B : CHARACTERISTICS OF THE NON-AGRICULTURAL ENTERPRISES

(5.00) Write the number of enterprises owned by the household :

ID CODE OF ENTERPRISE	(5.11) Indicate the principal good and/or service produced by this enterprise.	(5.12) Activity Code	(5.13) What is the ID CODE of the principal respondent for this enterprise?	(5.14) What is the ID CODE of the owner(s) of this enterprise? (Maximum of 2)		(5.15) What is the ID CODE of the person(s) who manage(s) this enterprise? (Maximum of 2)	
	Product/Service	ACTIVITY CODE	ID CODE	Owner 1	Owner 2	Mgr 1	Mgr 2
				ID CODE	ID CODE	ID CODE	ID CODE
1							
2							
3							
4							
5							
6							


- Fixed set of items
- **Number**
- **List**
- Multi-select









What are the sources in the examples below


Crop	Crop present (Y/N)	Retail Price	Whole Sale Price	Quantity present (in kgs)
Cucumbers				
Onion				
Tomato				
Lettuce				

	for Harvest	Trade / Marketing	Quantity of fertilizer used
Number of bags			
Amount in USD / Bag			
Type of Bag			
Number of employees used			
Number of working days			
Daily Costs for the activity			

How to create a roster

Skip Patterns 

-  Do you speak any foreign languages? language
-  Which foreign languages do you speak? foreign_languages
-  Photo graph product photo
-  Select the respondent's gender gender
-  What is the respondent's age? age
-  Is the respondent currently pregnant? pregnancy
-  Select all of the following crops that are cultivated on the parcel crops
-  Specify other crop crops_other

ADD QUESTION  **PASTE**

- ADD SUB SECTION
- ADD ROSTER**
- ADD STATIC TEXT
- ADD VARIABLE

Title

Skip Patterns

SAVE **CANCEL** **DELETE**

How to create a roster

FORM 1: CHARACTERISTICS OF AGRICULTURAL HOUSEHOLD /

Roster source

Roster variable name (?)

Fixed set of items

Fixed set of items

List question

Multi-select question

Numeric question

0 Title

ADD ITEM

Enabling condition (?)

- Choose roster type

Source type: list

Form 1: Characteristics of agricultural household

Question type: **List** Variable name(?): hh_members

Variable Label(?): Household member names

Question text: Household Member names

Maximum number of list elements: 20

ADD INTERVIEWER INSTRUCTION

Enabling condition (?)

Validation condition (?)

Error message (?)

ADD QUESTION ADD SUB-SECTION ADD ROSTER ADD STATIC TEXT

Household Member names

Relationship to HH

What is the sex of the hh member?

Age of HH member

Marital status of HH member

Literacy for persons more than 12 years old

What is the level of education for persons more than 6 years old

Principal activity (persons more 6 years)

Secondary activity (persons more 6 years)

What sector does the person work in?

Form 1: Characteristics of agricultural household

Roster source: **List question** Roster variable name: household_characteristics

Roster name: Household member roster

Source question (answer determines both the number and the name of roster rows): FORM 1: CHARACTERISTICS OF AGRICULTURAL HOUSEHOLD Household Member names

Enabling condition (?)

Relationship to HH

What is the sex of the hh member?

Age of HH member

Source type: Number

The image shows a form editor interface for a form titled "Form 1: Characteristics of agricultural household". On the left, a list of questions is displayed, including "Address of HH", "Geo tag", "Name of agricultural farmer", "Age of farmer", "Household Member names", and a roster named "HOUSEHOLD MEMBER ROSTER" containing questions about relationships, sex, age, marital status, literacy, education, and activities. The question "How many crops are grown in this field?" is circled in red. On the right, the configuration panel for the selected question is shown, with "Roster source" set to "Numeric question" and "Roster variable name" set to "crop_roster". The "Roster name" is "CROPS". The "Source question for number of rows" is also "How many crops are grown in this field?". A red arrow points from the "SOURCE" label to the source question in the configuration panel, and another red arrow points from the "SOURCE" label to the circled question in the list.

Form 1: Characteristics of agricultural household

FORM 1: CHARACTERISTICS OF AGRICULTURAL HOUSEHOLD /

Roster source: Numeric question (dropdown) | Roster variable name (?): crop_roster

Roster name: CROPS

Source question for number of rows: Select question (dropdown)

FORM 1: CHARACTERISTICS OF AGRICULTURAL HOUSEHOLD

12 Age of farmer

12 How many crops are grown in this field?

Enabling condition (?):

12 How many crops are grown in this field? | number_crops

ADD QUESTION | ADD SUB-SECTION | ADD ROSTER | ADD STATIC TEXT

SAVE | CANCEL | DELETE | CLONE | MOVE TO ▾

Source type: Multi-select

The image shows a survey creation interface with a sidebar on the left and a main configuration panel on the right. The sidebar contains a question preview: "Which crops are grown in this field?" with a variable name "crops". Below the preview are buttons for "ADD QUESTION", "ADD SUB-SECTION", "ADD ROSTER", and "ADD STATIC TEXT". A red arrow points from the word "SOURCE" to the "ADD SUB-SECTION" button. The main configuration panel is titled "NEW CHAPTER /" and includes the following fields:

- Question type: Categorical: Multi-select
- Variable name(?): crops
- Variable label(?): Crops grown in field
- Question text: Which crops are grown in this field?
- Options table:

103	Maize	×
104	Rice	×
105	Sorghum	×
106	Cassava	×
107	Onion	×

Below the table are controls for "ADD OPTION", "SHOW STRINGS", "Is linked", "Record answer order", and "Max number of answers". At the bottom, there are fields for "Enabling condition (?)" and "Validation condition (?)", and buttons for "SAVE", "CANCEL", "DELETE", "CLONE", and "MOVE TO".

Source type: Multi-select

The screenshot displays the 'New Chapter' configuration interface. On the left, a preview pane shows the question 'Which crops are grown in this field?' with a 'crops' tag and a 'Roster: CROPS' label. The main configuration area on the right includes:

- Roster source:** Multi-select question
- Roster variable name (?):** crop_roster
- Roster name:** CROPS
- Source question (answer determines both the number and the name of roster rows):** Select question

The selected question in the 'Source question' dropdown is 'NEW CHAPTER E Which crops are grown in this field?'. A red arrow labeled 'SOURCE' points to this question, which is also circled in red. At the bottom, there are buttons for 'SAVE', 'CANCEL', 'DELETE', 'CLONE', and 'MOVE TO'.

Nesting rosters

- Essentially, a nested roster is a roster inside a roster.
- You create a nested roster the same way you create a roster. The difference is that the trigger will come from the roster one level up.
- Example:
 - First level: **Blocks** owned by Farmer
 - Second level: **Plots** inside a **block**
 - Third level: **Crops** in **plot**

Nesting rosters

Roster: IDENTIFICATION AND CHARACTERISTICS *info_agriculturalblocks*

AB	Province of block	block_province
AB	N EA/ZD	block_eazd
☑	Date of survey	block_date
AB	District of farm	block_district
AB	Name of agricultural farmer	block_name_of_farmer
AB	Name of Enumerator	block_name_of_enumerator
AB	Farm Sector	block_sector
AB	What is the location and number of block?	block_locationandnumber
12	Block size in square meters	block_size
12	Access time from housing in minutes	block_accesstime_fromhh
⚙	Acquisition mode	block_acquisition_mode
⚙	Crop typology	block_crop_typology
⚙	Cultivation method	block_crop_cultivation_method
⚙	Main method of erosion control	block_method_erosion_control
12	How many fields are there in this block?	block_fields_trigger

Roster: FIELD ROSTER FOR FIELD-LEVEL *individual_field_roster*

AB	Province of field	field_province
AB	Field N EA/ZD	field_eazd
☑	Date and time of field survey	field_date_surveyed
AB	District of field	field_district
AB	Name of agricultural farmer - field	field_name_of_farmer

Level I

Level II

Roster: FIELD ROSTER FOR FIELD-LEVEL *individual_field_roster*

AB	Province of field	field_province
AB	Field N EA/ZD	field_eazd
☑	Date and time of field survey	field_date_surveyed
AB	District of field	field_district
AB	Name of agricultural farmer - field	field_name_of_farmer
AB	Name of Enumerator - field	field_name_enumerator
AB	Farm sector - field	field_farm_sector
AB	Location and Number of Block	field_no_block
⚙	Field position	field_position
12	Area of the field (Ha)	field_size
⚙	Main purpose of the field	field_purpose
⚙	Please mark 5 main crops	field_fivecroplist

Roster: CROP ROSTER *crop_roster*

☑	Date of sowing	crop_date_sowing
☑	Did the sowing/planting take place	crop_sowingcurrentseason
12	Quantity of common seed used (in Kg)	crop_quantity_seed
12	Number of plants used	crop_quant_of_plants
12	Quantity of improved seed (in Kg)	crop_quant_improved_seed
⚙	Was manure of cattle applied?	crop_cow_manureapplied
⚙	Was manure of small livestock	crop_smalllives_manureapplied

Level III

Formatting Text with HTML tags

Formatting Text

- When and where can it be applied?
 - Formatting or drafting of Question texts and static-texts
- A few words about how to construct HTML tags
- Specific ones for text formatting
 - **Bold**
 - *Italics*
 - Underline
 - Color
 - Linebreaks

HTML tags

- 2 types:
 - Pairs: There's a start and end indicating where you want the text modified.
 - `<tag> Some text </tag>` **"/" always tells us to stop!**
 - Empty: Has an immediate effect on where it occurs
 - `<tag>`
- Why useful in CAPI?
 - It's used to draw enumerator attention to certain things, or could draw attention to different languages.
 - We use simple ones.

Basic tags for formatting

Effect	Tag	Example	Result
Bold	<code></code>	How tall is <code>Michael</code> ?	How tall is Michael ?
Italics	<code><i></i></code>	Where was he <code><i>born</i></code> ?	Where was he <i>born</i> ?
Underscore	<code><u></u></code>	Please list <code><u>all</u></code> members in the household	Please list <u>all</u> members of the household

Text color

- **Syntax**

`some text`

- **Example:**

Title

```
<font color="blue">Blue</font>, <font color="green">Green</font>, <font color="red">Red</font>, and normal
```

Blue, Green, Red, and normal

Empty tags: line break

- Line break: `
`
- Common use cases: the only way to introduce a blank line in question text

Example 1: Interviewer instructions

404. What is the area of this parcel
fff?

ENUMERATOR: Ask the farmer to
estimate the area in **acres**.

Question text

404. What is the area of this parcel %a402r%?

`

`

ENUMERATOR: Ask the farmer to estimate the area in `acres`.

Example 2: Specify units

5a. How much Rice (paddy) came
from purchases during the past 7
days?

QUANTITY

Question text

5a. How much %rosteritle% came from purchases during the past 7 days?

`

`

QUANTITY

>

Interactive Text Substitution


def: Auto-filling answer of some question into the text of another question

Inter. Text Substitution: What and How?

- What is it?
 - Makes data appear in a question which can help make the interview flow better.
 - EXAMPLE: How old is **Michael**?
 - “**Michael**” is a name that appears in the household roster.
- How it works
 - Surround the element that you want to pipe in “%” in the designer.
 - EXAMPLE: How old is **%rosteritle%**.
 - “**%rosteritle%**” is where the name “Michael” is contained.

Interactive Text Substitution

NEW CHAPTER / CROPS /

New Chapter 

Which crops are grown in this field? crops

Roster: **CROPS** crop_roster

12 How much %rosteritle% was harvested on that harvested_quantity

[ADD QUESTION](#) [ADD SUB-SECTION](#) [ADD ROSTER](#) [ADD STATIC TEXT](#)

NEW CHAPTER / CROPS /

Question type Variable name(?)

12 Numeric harvested_quantity

Variable label(?)

Harvested quantity

Question text

How much %rosteritle% was harvested on that day in kilos?


Integer Roster upper bound


[ADD INTERVIEWER INSTRUCTION](#)

Enabling condition (?)

Validation condition (?)

Error message (?)

Mandatory question Question scope **Interviewer** 

[SAVE](#) [CANCEL](#) [DELETE](#) [CLONE](#) [MOVE TO](#) 

Questions?