Survey Solutions

CRC228-B01-Wave-II-Kenya

SURVEY IDENTIFICATION INFORMATION
QUESTIONNAIRE DESCRIPTION

COVER
No sub-sections, No rosters, Questions: 14.

SECTION 0: HOUSEHOLD BASIC INFORMATION
Sub-sections: 1, No rosters, Questions: 21, Static texts: 6, Variables: 8.

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER
Sub-sections: 7, Rosters: 2, Questions: 64, Static texts: 10, Variables: 17.

SECTION 2: LAND TYPES, OWNERSHIP, AND ACCESS
Sub-sections: 2, Rosters: 1, Questions: 22, Static texts: 5, Variables: 2.

SECTION 3: CROPS AND PASTURE
Sub-sections: 2, Rosters: 1, Questions: 44, Static texts: 5, Variables: 3.

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION
Sub-sections: 3, Rosters: 1, Questions: 30, Static texts: 6, Variables: 3.

SECTION 5: SOCIAL CAPITAL
Sub-sections: 4, Rosters: 5, Questions: 37, Static texts: 6, Variables: 1.

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING
Sub-sections: 2, Rosters: 2, Questions: 30, Static texts: 6, Variables: 2.

SECTION 8: ECOLOGICAL SHOCKS
No sub-sections, Rosters: 2, Questions: 20, Static texts: 3, Variables: 2.

EXPERIMENT
Sub-sections: 3, Rosters: 5, Questions: 16, Static texts: 23.

SECTION 9: PERCEPTIONS ABOUT PROSOPIS INVASION
No sub-sections, Rosters: 1, Questions: 16, Static texts: 4, Variables: 2.

SECTION 10: COMMUNITY ASPIRATIONS
No sub-sections, Rosters: 1, Questions: 36, Static texts: 13, Variables: 3.

SECTION 11: INDIVIDUAL ASPIRATIONS
Sub-sections: 9, Rosters: 2, Questions: 78, Static texts: 23, Variables: 4.

SECTION 12: ASSETS
Sub-sections: 1, Rosters: 1, Questions: 8, Static texts: 4, Variables: 2.

SECTION 13-14: FOOD SECURITY AND DIET DIVERSITY
Sub-sections: 2, Rosters: 1, Questions: 12, Static texts: 4, Variables: 2.

SECTION 15: HOUSEHOLD SHOCKS AND COPING
No sub-sections, Rosters: 1, Questions: 7, Static texts: 3, Variables: 2.

SECTION 16: INSTITUTIONS, OTHER INCOME, FUTURE CONTACT

No sub-sections, Rosters: 2, Questions: 13, Static texts: 5, Variables: 2.

APPENDIX A — INSTRUCTIONS

APPENDIX B — CATEGORIES

APPENDIX C — VARIABLES

LEGEND

SURVEY IDENTIFICATION INFORMATION
QUESTIONNAIRE DESCRIPTION

Basic information

Title	CRC228-B01-Wave-II-Kenya
Subtitle	Combined Household Survey
Version identificator	Version 4.0 (May-2023)
Version notes	Post-pre-test

Survey data information

Study type	Household Survey
Kind of data	Sample survey data [ssd]
Mode of Data Collection	CAPI

Survey information

Country	Africa
Year	2023
Languages	English
Unit of analysis	Households
Coverage	Selected rural areas in Kenya, Tanzania, Zambia, Namibia, Botswana
Universe	Enumeration Area (EA)
Primary Investigator	Prof. Dr. Jan Börner; Prof. Dr.Thomas Heckelei; Prof. Dr. Peter Dannenberg
Consultants	Dr. Bisrat Gebrekidan
Funding	German Research Foundation under the CRC/Transregio 228: Future Rural Africa: Future-making and social-ecological transformation (Project number: 328966760)

Additional info

Notes	**CRC CONTRIBUTERS: ** Prof. Dr. Javier Revilla Diez, Prof. Dr. Matin Qaim, Prof. Dr. Michael Bolling, Dr. Martin Parlasca, Dr. Hanna Ihli, Dr. Gideon Tups, Dr. Carolin Hulke, Dr. Linus Kalvelage, Eva Salve Bacud, Paula Alexiou, Vanessa Amatotsero, Vincent Moseti, Manuel Bollman, Mfundo Mililo, Chrispinus Mutsami, Jackson Elias, Jessie Amarachi Ezebuihe, Jonas Guthoff **LOCAL PARTNERS** Dr. Eric Kioko (University of Nairobi), Dr. Theobald Theodery (Mzumbe University), Dr. Mosses J. Nduguru (Mzumbe University), Dr. Enock Sankala (University of Zambia), Prof. Elias Kuntashula (University of Zambia), Prof. Ekkehard Klingelhoeffer (UNAM-Katima) , Dr. Evans Simasiku (UNAM-Katima) , Mr

Salomo Mbai (NUST), Prof. Ayana Angassa Abdeta (BUAN), Dr. Melusi Rampart (BUAN)

COVER

Country	TEXT	ctry
Ward	TEXT	ward
Location	TEXT	loc
Village name	TEXT	village
I If the village name is empty please ask the respondent what the village is called. Otherwise put "-888"		
Name of the household head during Wave1	TEXT	head_wave1
Gender of HH head	TEXT	gender_hh_wave1
Age of the HH head in 2019	NUMERIC: INTEGER	age_hh_wave1
Marital status of the HH head in 2019	TEXT	marstat_hh_wave1
Ethnicity of HH head	TEXT	eth_hh_wave1
Respondent's relation to HH head	TEXT	reln_hh_wave1
Household size in 2019	NUMERIC: INTEGER	hh_size_wave1
GPS from Wave 1	GPS	gps_wave1
	N	
	W	
	A	
Household ID	TEXT	hhid

Group of the household in the experiment	TEXT	experiment_group

SECTION 0: HOUSEHOLD BASIC INFORMATION

[S0] START TIME	DATE: CURRENT TIME	s0_start_time
	....	

STATIC TEXT

E `!IsAnswered(s0_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

VARIABLE	LONG	country
1		

VARIABLE	STRING	part_inst
country==1? "Kenyatta University" : country==2? "Mzumbe University": country==3 ? "University of Zambia": country==4? "University of Namibia" : country==5? "he Botswana University of Agriculture and N And 28 other symbols [1]		

VARIABLE	STRING	currency
country==1 ? "KSH" : ""		

Name of interviewer	SINGLE-SELECT	inter
	01 ○ Allan Kiplimo Kiptum	
	02 ○ Faith J Kibet	
	03 ○ Gideon Kipyegon Cheptarus	
	04 ○ Haron Lepasio	
	05 ○ Jessica Nakwechuh	
	06 ○ Koskei Josephat Kipkorir	
	07 ○ Sylvia Jebet	
	08 ○ Julius Ngilip	
	09 ○ Beatrice Lekiremu	
	10 ○ Judy Kobetbet	
	11 ○ Kenneth Lekidogo	
	12 ○ Naomi Sherry Lempaine	

Did you make contact with the respondent?	SINGLE-SELECT	res_ident
	01 ○ Yes	
	00 ○ No	

What did the neighbor or the village guide inform you about the respondent? E `res_ident==0`	SINGLE-SELECT reason_not_interviewed 01 ◯ Refused 02 ◯ No competent respondent at time of the visit 03 ◯ None at home for extended amount of time 04 ◯ Household moved to another village/town/district 05 ◯ Household moved to a neighboring country 06 ◯ Household moved to unknown location 07 ◯ Household not found 08 ◯ Dwelling destroyed 96 ◯ Other (Specify)
Other ➡ specify: E `reason_not_interviewed==96`	TEXT reason_not_interviewed_other ⸱⸱

STATIC TEXT

E `res_ident==0`

PLEASE CONTACT THE SUPERVISOR AND DONT PROCEED TO THE NEXT SECTION

VARIABLE hhid + 'R'	STRING replacement_id

SECTION 0: HOUSEHOLD BASIC INFORMATION
HOUSEHOLD IDENTIFICATION
E `res_ident==1 || res_ident==0`

VARIABLE 18	LONG MINIMAL_AGE

STATIC TEXT

INTERVIEWER:

If you found the household and someone is answering the door, introduce yourself and try to find a competent respondent. A competent respondent must be %MINIMAL_AGE% year of age or older and must have knowledge of the household and its activities.

To confirm consent to begin the interview, read the following text: .....

STATIC TEXT

Good morning/afternoon, My name is %inter%, and I am part of the Future Rural Africa research project, conducted by the University of Bonn, University of Köln, and %part_inst%. We are conducting a research study to understand how rural households have adapted to changes in the social, economic, and ecological landscape due to changes in land use patterns, intensification of agriculture, infrastructure, and conservation programs.
We have selected your household as part of a larger sample group of several hundred households, randomly chosen to participate in our research study in 2019. We would like to invite you to participate in the study, and we will ask you a series of questions that will help us in our research process. The interview will take approximately two hour, and we will arrange a location and time that is convenient for you.
In addition, we would like to request your consent to collect the GPS points of the dwelling you reside in. The data collected will be used for research purposes and will be kept confidential.
Before you decide whether you would like to participate, we would like to explain some guidelines and your rights as a participant:
Guidelines:

I We will only begin the discussion with you when you have given your full consent to participate. I During the interview, we will ask you some questions about your household, including your education and occupation, income and expenditure, assets and shocks, farming and livestock, and aspirations. All answers are of great value, and there are no right or wrong answers. Throughout the entire data collection, processing, and analysis phases, the information you provide us will be kept confidential and anonymous. Any individual identifying information (such as names of people) will be removed from the data. I The data will be used only for research purposes, and will not be used to promote any program, whether by government or other organizations. I There are no risks or dangers from participating, but you may find some questions a bit sensitive (for instance, questions about your income and expenditure). I During the interview, you have the absolute freedom not to respond to a question. I You are free to withdraw from the interview at any time, although we hope you will stay with us until the end.

Your Rights:

I You have the right to understand the research and what it will involve. I You have the right to ask questions, and we will provide you with answers. I You have the right to decide whether or not to participate. I You have the right to change your mind and withdraw from the study at any time.

If you have any questions or concerns, please do not hesitate to contact Mr. Jonas Guthoff (+260975171973) or Dr. Enock Sankala (+260 96 8664320). If you have decided to participate, please confirm the following questions and sign (confirm verbally).

I hereby confirm that I have adequately received information about the study and I understand the objective of the research done under the project "Future Rural Africa"	SINGLE-SELECT · consent_1 01 ○ Yes 00 ○ No
I had ample time and opportunity to ask questions and obtain satisfactory answers from the research assistant in charge	SINGLE-SELECT · consent_2 01 ○ Yes 00 ○ No
I agree to answer your questions and I understand all my personal data will be treated confidentially.	SINGLE-SELECT · consent_3 01 ○ Yes 00 ○ No
I consent to the collection of the GPS points of my dwelling for research purposes.	SINGLE-SELECT · consent_4 01 ○ Yes 00 ○ No
VARIABLE consent_1==1 & consent_2==1 & consent_3==1 & consent_4==1	BOOLEAN · interviewed_consent
Name of the respondent E interviewed_consent==true V1 self.Split(' ').Length>1 M1 Please write name and surname	TEXT · respondent ....

Sex of the respondent	SINGLE-SELECT gender_resp
	01 ○ Men
	00 ○ Women
	96 ○ Others

Age of the respondent	NUMERIC: INTEGER age_resp
V1 age_resp>=18	
M1 The respondent must be at least 18 years old!	- .

Is he/she the respondent during Wave 1?	SINGLE-SELECT res_wave1
	01 ○ Yes
	00 ○ No

What is the relationship of the respondent (%respondent%) to the head of household?	SINGLE-SELECT res_rel
E interviewed_consent==true	01 ○ Self/HH head
	02 ○ Spouse
	03 ○ Son
	04 ○ Daughter
	05 ○ Brother
	06 ○ Sister
	07 ○ Father
	08 ○ Mother
	09 ○ Grandson
	10 ○ Granddaughter
	11 ○ Son-in-law
	12 ○ Daughter-in-law
	13 ○ Brother-in-law
	14 ○ Sister-in-law
	15 ○ Grandfather
	16 ○ Grandmother
	And 6 other symbols [86]

If not the HH head, what is the name of the household head?	TEXT res_head
E interviewed_consent==true && res_rel>1	....

Is the HH head the same in wave 1 2019?	SINGLE-SELECT head_wave1same_ind
	01 ○ Yes
	00 ○ No

What is the phone number of the respondent (%respondent%)	TEXT res_phone
	....

Is it possible to start the interview?	SINGLE-SELECT interview_possible
E interviewed_consent==true	01 ○ Yes
	00 ○ No

	GPS	gps_coordinates
GPS coordinates of the dwelling (to be collected outside the dwelling)		

E interview_possible==1
W1 self.Accuracy<50
M1 Accuracy too low, try again

N -

W -

A -

Please confirm the experiment group of the household

SINGLE-SELECT　　　　　　　　　　　　　experiment_group_ind

01　　◯ Treatment 1 (Only HH head watches video and plays game)

02　　◯ Treatment 2 (Both HH head and spouse watch video and play game)

03　　◯ Control group (No video, Only HH head plays game)

VARIABLE

(experiment_group_ind==1 && experiment_group!="T1") || (experiment_group_ind==2 && experiment_group!="T2") || (e xperiment_group_ind==3 && experiment_group!="Control")

BOOLEAN　　　　　　　　　　　　　　　　t_check

STATIC TEXT

E (experiment_group_ind==1 && experiment_group!="T1") || (experiment_group_ind==2 && experiment_group!="T2") || (exper iment_group_ind==3 && experiment_group!="Control")

V1 t_check != true

M1 The assigned experiment group identifier MUST be equal the experiment group you are typing. Please check at the cover page the experiment group of the HH.

ERROR!

[S0] END TIME

DATE: CURRENT TIME　　　　　　　　　　s0_end_time

....

STATIC TEXT

E !IsAnswered(s0_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

VARIABLE

Math.Round((s0_end_time - s0_start_time).Value.TotalSeconds / 60,2)

DOUBLE　　　　　　　　　　　　　　　　s0_duration

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER

VARIABLE	BOOLEAN	DEBUG_MODE
true		

[S1] START TIME	DATE: CURRENT TIME	s1_start_time
		....

STATIC TEXT

E `!IsAnswered(s1_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

VARIABLE	LONG	Interview_year
s1_start_time.Value.Year		

VARIABLE	LONG	interview_month
s1_start_time.Value.Month		

VARIABLE	STRING	rainy_month
country==1 ? "March - November" : country==2 ? "November - May":country==3? "November - April":country==4? "November - April":"November - April"		

VARIABLE	LONG	rainy_month_count
country==1 ? 9 : country==2 ? 7:6		

VARIABLE	STRING	dry_month
country==1 ? "December - February" : country==2 ? "June - October":country==3? "May - October":country==4? "May - October":"May - October"		

VARIABLE	LONG	dry_month_count
country==1 ? 3 : country==2 ? 5:6		

STATIC TEXT

FOR A COMPLETE LIST OF INDIVIDUALS CONNECTED TO THE HOUSEHOLD, USE THE FOLLOWING PROBE QUESTIONS:

First, give me the names of all the members of your immediate family who normally live and eat their meals together here starting with the head of the household.

LIST THE HOUSEHOLD HEAD ON LINE 1.

Next, give me the names of any other persons related to you or other household members who normally live and eat their meals together here.

Are there any other people not here now who normally live and eat their meals here? For example, household members studying elsewhere or traveling?

Next, give me the names of any other persons not related to you or other household members, but who normally live and eat their meals together here, such as servants, lodgers, or others who are not relatives.

DO NOT LIST SERVANTS WHO HAVE A HOUSEHOLD ELSEWHERE, AND GUESTS WHO ARE VISITING TEMPORARILY AND HAVE A HOUSEHOLD ELSEWHERE.

MAKE A COMPLETE LIST OF ALL INDIVIDUALS WHO NORMALLY LIVE AND EAT THEIR MEALS TOGETHER IN THIS HOUSEHOLD (AT LEAST 3 MONTHS IN THE LAST 12 MONTHS), STARTING WITH THE HEAD OF HOUSEHOLD.	LIST	numfamily

I CONFIRM THAT HOUSEHOLD HEAD HERE IS THE SAME AS HOUSEHOLD HEAD LISTED ON COVER PLEASE RECORDE ALL THE NAMES AS: FIRST NAME, SURNAME

V1 `self.All(x=>x.Item2.Split(' ').Length>1)`

M1 Please write name and surname

VARIABLE `numfamily.Length`	LONG	hh_size

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER
Roster: MEMEBER - %ROSTERTITLE%
generated by list question numfamily   r_members

VARIABLE `r_members.Count(x=>ha_rel==1)`	LONG	hhh_count
VARIABLE `numfamily[@rowcode-1].Item1`	LONG	s1_member_code
VARIABLE `numfamily[@rowcode-1].Item2`	STRING	s1_member_name

STATIC TEXT

Now you are aking question about - %s1_member_name%

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE%
BASIC DEMOGRAPHICS

During the past 12 months, how many months did %s1_member_name% live here?	NUMERIC: INTEGER	live_here

V1 `self.InRange(0,12)`

M1 Number of months must be between 0 and 12

If %s1_member_name% has not stayed for 12 months, what is the MAIN reason for absence? E `live_here < 12`	SINGLE-SELECT absence_res 01 ○ New arrivals - New born 02 ○ New arrivals - Returned home from abduction/displacement 03 ○ New arrivals - To escape insecurity from home area 04 ○ New arrivals - Bad living conditions at home 05 ○ New arrivals - To look for work 06 ○ New arrivals - Other economic reasons 07 ○ New arrivals - Education 08 ○ New arrivals - Marriage 09 ○ New arrivals - Divorce 10 ○ Members that left - Deceased 11 ○ Members that left - To escape insecurity from this area 12 ○ Members that left - Looking for work elsewhere 13 ○ Members that left - Other economic reasons 14 ○ Members that left - Illness 15 ○ Members that left - Education 16 ○ Members that left - Marriage And 4 other symbols [94]
Specify the MAIN reason for absence E `absence_res==96`	TEXT absence_res_oth ••
What is the sex of %s1_member_name%?	SINGLE-SELECT ha03 01 ○ Male 00 ○ Female
How old is %s1_member_name%? I PLEASE RECORD IN COMPLETE YEAR W1 `age.InRange(0,110)` M1 Age out of range, if not please leave a comment	NUMERIC: INTEGER age – – – – – – – – – – – – – – – – – – –

	SINGLE-SELECT	ha_rel

What is %s1_member_name%'s relationship to the head of household?

V1   r_members.Count(x=>x.ha_rel==1)<=1

M1   Only one person is allowed to be head of household, please verify.

01	○ SELF/HEAD
02	○ WIFE/HUSBAND
03	○ CHILD/ADOPTED CHILD
04	○ GRANDCHILD
05	○ NIECE/NEPHEW
06	○ MOTHER/FATHER
07	○ SISTER/BROTHER
08	○ SON/DAUGHTER-IN-LAW
09	○ BROTHER/SISTER-IN-LAW
10	○ GRANDFATHER/MOTHER
11	○ FATHER/MOTHER-IN-LAW
12	○ OTHER RELATIVE
13	○ SERVANT OR SERVANT'S RELATIVE
14	○ LODGER/LODGER'S RELATIVE
15	○ OTHER NON-RELATIVE

What is %s1_member_name%'s current marital status?

E   age>=$working_age

	SINGLE-SELECT	marital
01	○ Married monogamously	
02	○ Married polygamous	
03	○ Divorced /Separated	
04	○ Widow/ Widower	
05	○ Never Married	

If married woman polygamously, what is %s1_member_name%'s order in the marriage?

E   ha03==0 && marital==2

	SINGLE-SELECT	marstat_order
01	○ 1st wife	
02	○ 2nd wife	
03	○ 3rd wife	
04	○ More	

What is %s1_member_name%'s ethnic group?

E   age>=$working_age

	SINGLE-SELECT	ha07
01	○ Ilchamus	
02	○ Tugen	
03	○ Pokot	
04	○ Maasai	
96	○ Others, specify	

Specify Other

E   ha07==96

TEXT	ha07_other

....

What is %s1_member_name%'s religion? E `age>=$working_age`	SINGLE-SELECT religio 01 ○ Catholic 02 ○ Protestant demoninantions (incl all non-catholic denomi nations) 03 ○ Muslim 04 ○ African Inland Church (AIC) 10 ○ African Traditional religion 11 ○ Non-religious 96 ○ Other ➡ Please specify -88 ○ Does not know -99 ○ Refuse to answer
%s1_member_name%'s Religion, if response is "Other" E `religio==96`	TEXT religio_1 ....
Educational attainment of %s1_member_name % E `age>=3`	SINGLE-SELECT educ1 00 ○ No formal education 01 ○ Nursery/ Kindergarten/ECD 02 ○ Primary 1 03 ○ Primary 2 04 ○ Primary 3 05 ○ Primary 4 06 ○ Primary 5 07 ○ Primary 6 08 ○ Primary 7 09 ○ Primary 8 10 ○ Secondary school Year 1 11 ○ Secondary school Year 2 12 ○ Secondary school Year 3 13 ○ Secondary school Year 4 14 ○ University 1 15 ○ University 2 And 4 other symbols [73]
Is %s1_member_name% currently attending sc hool? E `educ1>0 && !(educ1==18 || educ1==96)`	SINGLE-SELECT educ2 01 ○ Yes 00 ○ No
How much money has the household spent on %s1_member_name% schooling during the pas t 12 months? E `educ2==1` W1 `educ3>=0` M1 Answer should be MORE THAN 0!	NUMERIC: DECIMAL educ3 – .

In the last 12 months, has %s1_member_name% undertaken any work on own farm or outside?	SINGLE-SELECT emp_member
	01　○ Yes
	00　○ No
I　Primary occupation is determined by the amount of time spent on any activity. If a member has two occupations, firstly maize farming where most of the time is spent and secondly livestock raising wher [And 191 other symbols [1]](#)	
E　age>= $working_age	

Is %s1_member_name% employed or involved in any work on OWN FARM, including farming and livestock?	SINGLE-SELECT emp_ownfarm
	01　○ Yes
	00　○ No
E　age>=$working_age && emp_member==1	

Is %s1_member_name% employed in any job or income-generating activities NOT in own farm but in off-farm (other's farm),own business, or non-farm labour?	SINGLE-SELECT emp_offfarm
	01　○ Yes
	00　○ No
E　age>= $working_age && emp_member==1	

VARIABLE emp_member==1 & (emp_ownfarm==0 & emp_offfarm==0)	BOOLEAN emp_check

STATIC TEXT

E　emp_member==1 && (emp_ownfarm==0 && emp_offfarm==0)

V1　emp_check != true

M1　If the memeber is engaged in any income generating activities, either it should be employed in any job away from home (off-farm or non-farm income) or he is engaged in on farm work

ERROR!

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE%

ON-FARM EMPLOYMENT

E　emp_ownfarm==1

STATIC TEXT

Now, we would like to talk about the participation of members of this household in on-farm or OWN farm activities including cash and food crop farming, pasture farming, and livestock keeping.

How many months did %s1_member_name% work on cash crops or pasture/fodder for selling during the rainy season (%rainy_month%) in the last 12 months?	NUMERIC: INTEGER Ibr13_1
W1　self.InRange(0,rainy_month_count)	
M1　Number of months can not be more than %rainy_month_count%	

How many months did %s1_member_name% work on cash crops or pasture/fodder for selling during the dry season (%dry_month%) in the last 12 months?	NUMERIC: INTEGER Ibr13_2
W1　self.InRange(0,dry_month_count)	
M1　Please confirm!! Number of month during the dry season can not be more than %dry_month_count%	

In a typical week, how many days did %s1_member_name% work on cash crops?	NUMERIC: INTEGER Ibr13_3
E　Ibr13_1>0 || Ibr13_2>0	
W1　self.InRange(1,7)	
M1　Number of days SHOULD be in between 1 to 7 days in a week!	

In a typical day, how many hours did %s1_member_name% work on cash crops?	NUMERIC: DECIMAL	Ibr13_4
E Ibr13_3>0	-----------------------------------	
W1 self.InRange(1,24)		
M1 Number of hours CANNOT be 0 and more than 24! Please confirm		

How many months did %s1_member_name% work on food crops during the rainy season (%rainy_month%) in the last 12 months?	NUMERIC: INTEGER	Ibr13_5
W1 self.InRange(0,rainy_month_count)	-----------------------------------	
M1 Please confirm. Number of Months must be between 0 and %rainy_month_count%		

How many months did %s1_member_name% work on food crops during the dry season (%dry_month%) in the last 12 months?	NUMERIC: INTEGER	Ibr13_6
W1 self.InRange(0,dry_month_count)	-----------------------------------	
M1 Please Confirm! Number of months must be between 0 and %dry_month_count%		

In a typical week, how many days did %s1_member_name% work on food crops?	NUMERIC: INTEGER	Ibr13_8
E Ibr13_5>0 || Ibr13_6>0	-----------------------------------	
W1 self.InRange(1,7)		
M1 Number of days MUST be between 1 to 7 days in a week! Please confirm.		

In a typical day, how many hours did %s1_member_name% work on food crops?	NUMERIC: DECIMAL	Ibr13_9
E Ibr13_8>0	-----------------------------------	
W1 self.InRange(1,24)		
M1 Number of hours CANNOT be 0 and more than 24! Please confirm.		

How many years of experience does %s1_member_name% have in cash or food crop cultivation? Please approximate in whole number of years (e.g. 8 months approx. 1 year)	NUMERIC: INTEGER	years_exp_crp
V1 self.InRange(0,(age-10))	-----------------------------------	

How many months did %s1_member_name% work in livestock keeping activities during the rainy season (%rainy_month%) in the last 12 months?	NUMERIC: INTEGER	Ibr13_10
W1 self.InRange(0,rainy_month_count)	-----------------------------------	
M1 Please confirm the number of months.		

How many months did %s1_member_name% work in livestock keeping activities during the dry season (%dry_month%) in the last 12 months?	NUMERIC: INTEGER	Ibr13_11
W1 self.InRange(0,dry_month_count)	-----------------------------------	
M1 Please confirm the number of months		

In a typical week, how many days did %s1_member_name% work in livestock keeping activities?	NUMERIC: INTEGER	Ibr13_12
E Ibr13_10>0 || Ibr13_11>0	-----------------------------------	
V1 self.InRange(1,7)		
M1 Number of days MUST be between 1 to 7 days in a week! Please confirm.		

In a typical day, how many hours did %s1_member_name% work in livestock keeping activities ?	NUMERIC: DECIMAL	Ibr13_13

E Ibr13_12>0

W1 self.InRange(1,24)

M1 Number of hours CANNOT be 0 and more than 24! Please confirm.

How many years of experience does %s1_member_name% have in livestock keeping? Please approximate in whole number of years (e.g. 8 months approx. 1 year)	NUMERIC: INTEGER	years_exp_liv

V1 self.InRange(0,(age-10))

VARIABLE emp_ownfarm==1 & (Ibr13_1 + Ibr13_2 + Ibr13_5 + Ibr13_6 + Ibr13_10 + Ibr13_11)==0	BOOLEAN	onfarm_emp_check

STATIC TEXT

E emp_ownfarm==1 & (Ibr13_1 + Ibr13_2 + Ibr13_5 + Ibr13_6 + Ibr13_10 + Ibr13_11)==0

V1 onfarm_emp_check != true

M1 If the member is engaged in any OWN farm income generating activities, his/her participation in at least one of on-farm activities (i.e. cash cropping, food cropping, livestock keeping, and pasture farming) MUST be >0! Please check.

ERROR!

What is the MAIN use of the money received from on farm activity by %s1_member_name%?

MULTI-SELECT: ORDERED   onfarm_main_use

01 ☐ Investment in own business

02 ☐ Food

03 ☐ Education

04 ☐ Health

05 ☐ Housing and furniture

06 ☐ Transportation

07 ☐ Entertainment

96 ☐ Others, specify

08 ☐ Member not receiving income, just helping or assistance

Specify Other use by %s1_member_name%?

TEXT   onfarm_main_use_oth

E onfarm_main_use.Contains(96)

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE%

OFF-FARM EMPLOYMENT

E emp_offfarm==1

	MULTI-SELECT	lbr3_1
What are the types of off-farm job or jobs AWAY from own farm is %s1_member_name% engaged in the last 12 months?	01 ☐ Large-scale crop cultivation 02 ☐ Small-scale crop cultivation 03 ☐ Livestock keeping 04 ☐ Pasture farming 05 ☐ Food industry (e.g. restaurants waiter, cashier) 06 ☐ Health (nurse, doctor, etc.) 07 ☐ Education (teacher, etc.) 08 ☐ Government officers/employees 09 ☐ Other public sector, specify 10 ☐ Agricultural retail trade/enterprise 11 ☐ Non-farm wholesale or retail trade/enterprise 12 ☐ Factory worker/manufacturing jobs 13 ☐ Construction labour 14 ☐ Transport (driver) 15 ☐ Travel/tourism 16 ☐ Hospitality (e.g. accommodation, logding, motels, hotels) And 5 other symbols [93]	

	TEXT	lbr3_1_oth
Please specify other type of off-farm job %s1_member_name% engaged in. E lbr3_1.ContainsAny(9,21)	....	

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE% / OFF-FARM EMPLOYMENT

Roster: BUSINESS INCOME - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>
generated by multi-select question lbr3_1

bus_member

	SINGLE-SELECT	emp_form
What is the type of employment?	01 ○ Self-employed/ Own business 02 ○ Employee	

	NUMERIC: INTEGER	emp_off_exp
What is the member's years of experience in these jobs? Please approximate in whole number of years (e.g. 8 months approx. 1 year). V1 self.InRange(1,(age-10)) M1 Years of experience MUST be at least 1 year! It was previously reported that the member has been involved in livestock activities.	– –	

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE% / OFF-FARM EMPLOYMENT / BUSINESS INCOME - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>

OWN BUSINESS

E emp_form==1

What is the total number of months %s1_member_name% worked in business during the dry season (%dry_month%) in the last 12 months? V1 `self.InRange(0,dry_month_count)` M1 The number of month can not be more than %dry_month_count%	NUMERIC: INTEGER bus_dry `------------------------------.`
What is the total number of months %s1_member_name% worked in this business during the rainy season (%rainy_month%) in the last 12 month? V1 `self.InRange(0,rainy_month_count)` M1 Number of month must be between 0 and %rainy_month_count%	NUMERIC: INTEGER bus_rain `------------------------------.`
VARIABLE `emp_form==1 & (bus_dry + bus_rain)==0`	BOOLEAN bus_check

STATIC TEXT

E `emp_ownfarm==1 & (bus_dry + bus_rain)==0`

V1 `bus_check != true`

M1 If the member is engaged in any OWN business activities, his/her participation in either dry or rainy season MUST be >0! Please check.

ERROR!

In a typical week, how many days does %s1_member_name% work in this job? E `bus_dry>0 || bus_rain>0` V1 `self.InRange(1,7)` M1 Number of days MUST be between 1 to 7 days in a week! Please confirm the number of days.	NUMERIC: INTEGER bus_days_wk `------------------------------.`
What is the total number of hours in a typical day %s1_member_name% worked in this business? E `bus_days_wk>0` W1 `self.InRange(1,24)` M1 Number of hours CANNOT be 0 and more than 24! Please confirm.	NUMERIC: INTEGER bus_hrs `------------------------------.`
What is the approximate total income (in %currency%) from the business operated by %s1_member_name% in the last 30 days?	NUMERIC: DECIMAL bus_sales `------------------------------.`
What is the MAIN use of the money received from this source? E `bus_sales>0`	MULTI-SELECT: ORDERED bus_main_use 001 ☐ Investment in own business 002 ☐ Food 003 ☐ Education 004 ☐ Health 005 ☐ Housing and furniture 006 ☐ Transportation 007 ☐ Entertainment 096 ☐ Others, specify -888 ☐ I don't know 008 ☐ Member not receiving income, just helping or assistance

Specify other income use	TEXT	bus_main_use_others
E bus_main_use.Contains(96)		
....		

What is the approximate amount of money (capital, hired labour, other costs) spent on the business in the last 12 months?	NUMERIC: DECIMAL	business_expense
	- -	

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE% / OFF-FARM EMPLOYMENT / BUSINESS INCOME - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>

EMPLOYED

E emp_form==2

Where is %s1_member_name%'s workplace located?	SINGLE-SELECT	lbr3_3
	01 ◯ In this village	
	02 ◯ In other rural area within or outside this district	
	03 ◯ Town or city within this district/region	
	04 ◯ Town or city in another district/region	
	05 ◯ Outside the country	

Is %s1_member_name%'s off-farm job permanent or seasonal?	SINGLE-SELECT	lbr3_4
	01 ◯ Permanent	
	02 ◯ Seasonal	

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE% / OFF-FARM EMPLOYMENT / BUSINESS INCOME - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT> / EMPLOYED

PERMANENT OR LONGER TERM

E lbr3_4==1

If permanent or longer term, what is %s1_member_name%'s wage rate per month (monthly income)?	NUMERIC: INTEGER	lbr3_5
	- -	
W1 self > 0		
M1 Please check again if the wage rate is zero		

What is the MAIN use of the money received from this source by %s1_member_name%? E lbr3_5>0	MULTI-SELECT: ORDERED	lbr3_5_1

001 ☐ Investment in own business
002 ☐ Food
003 ☐ Education
004 ☐ Health
005 ☐ Housing and furniture
006 ☐ Transportation
007 ☐ Entertainment
096 ☐ Others, specify
-888 ☐ I don't know
-999 ☐ Refused to answer
008 ☐ Member not receiving income, just helping or assistance

Specify other income use by %s1_member_name%? E lbr3_5_1.Contains(96)	TEXT	lbr3_5_1_oth

....

If permanent or longer term, how many days in a typical week did %s1_member_name% work in this job activity? V1 self.InRange(1,7) M1 Number of days MUST be between 1 to 7 days in a week! Please confirm the number of days.	NUMERIC: INTEGER	lbr3_6

- .

If permanent or longer term, how many hours in a typical day did %s1_member_name% work in this job? V1 self.InRange(1,24) M1 Number of hours CANNOT be 0 and more than 24! Please confirm.	NUMERIC: INTEGER	lbr3_7

- .

SECTION 1: HOUSEHOLD DEMOGRAPHICS AND ROSTER / MEMEBER - %ROSTERTITLE% / OFF-FARM EMPLOYMENT / BUSINESS INCOME - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT> / EMPLOYED

SEASONAL OR CASUAL

E lbr3_4==2

If seasonal/casual, how was %s1_member_name% paid? I Lumpsum is a single payment made at a particular time, as opposed to a number of smaller payments or instalments.	SINGLE-SELECT	lbr3_8

01 ○ Per hour
02 ○ Per day
03 ○ Per week
04 ○ Per fortnight
05 ○ Per month
06 ○ Per quarter
07 ○ Per half year
08 ○ Per year
09 ○ Lumpsum

If seasonal or casual, what is the amount of money paid to %s1_member_name% after each interval?	NUMERIC: INTEGER	lbr3_9
W1 self >=0		
M1 Amount of money paid can not be negative		

What is the MAIN use of the money received from this source by %s1_member_name%?	MULTI-SELECT: ORDERED	lbr3_9_1
E lbr3_9>0	001 ☐ Investment in own business	
	002 ☐ Food	
	003 ☐ Education	
	004 ☐ Health	
	005 ☐ Housing and furniture	
	006 ☐ Transportation	
	007 ☐ Entertainment	
	096 ☐ Others, specify	
	-888 ☐ I don't know	
	-999 ☐ Refused to answer	
	008 ☐ Member not receiving income, just helping or assistance	

Specify Other use of income by %s1_member_name%?	TEXT	lbr3_9_1_oth
E lbr3_9_1.Contains(96)		

If seasonal or casual, what is the number of months worked by %s1_member_name% during the rainy season (%rainy_month%) in the last 12 months?	NUMERIC: INTEGER	lbr3_10
V1 self.InRange(0,rainy_month_count)		
M1 Maximum number of months is %rainy_month_count%		

If seasonal or casual, what is the number of months worked by %s1_member_name% during the dry season (%dry_month%) in the last 12 months?	NUMERIC: INTEGER	lbr3_11
V1 self.InRange(0,dry_month_count)		
M1 Maximum number of months during dry season is %dry_month_count%		

VARIABLE lbr3_4==2 & (lbr3_10 + lbr3_11)==0	BOOLEAN	empseas_check

STATIC TEXT

E lbr3_4==2 & (lbr3_10 + lbr3_11)==0

V1 empseas_check != true

M1 If the member is engaged in any seasonal employment activities, his/her participation in either dry or rainy season MUST be >0! Please check.

ERROR!

If seasonal or casual, what is the number of days in a typical week worked by %s1_member_name%?	NUMERIC: INTEGER	lbr3_12

E lbr3_11 > 0 || lbr3_10 > 0
V1 self.InRange(1,7)
M1 Number of days MUST be between 1 to 7 days in a week! Please confirm the number of days.

If seasonal or casual, what is the number of hours in a typical day worked by %s1_member_name%?	NUMERIC: INTEGER	lbr3_13

E lbr3_12>0
W1 self.InRange(1,24)
M1 Number of hours CANNOT be 0 and more than 24! Please confirm.

[S1] END TIME	DATE: CURRENT TIME	s1_end_time

STATIC TEXT

E !IsAnswered(s1_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE SECTION

STATIC TEXT

E NumberUnansweredQuestions(section_1)>0

ATTENTION! YOU HAVE %unanswered_sec_1% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_1)	DOUBLE	unanswered_sec_1
VARIABLE Math.Round((s1_end_time - s1_start_time).Value.TotalSeconds / 60,2)	DOUBLE	s1_duration

SECTION 2: LAND TYPES, OWNERSHIP, AND ACCESS

[S2] START TIME	DATE: CURRENT TIME	s2_start_time
	....	

STATIC TEXT

E `!IsAnswered(s2_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

Now we would like to talk about land owned or used by this household in the last 12 months . Could you please indicate the amount of land you currently own, or use, or rent out?

SECTION 2: LAND TYPES, OWNERSHIP, AND ACCESS
ACCESS AND CONTROL OVER LAND

How is land measured in this region?	SINGLE-SELECT lnd_mes
	01 ◯ Acres
	02 ◯ Hectares
	96 ◯ Other ➡️ Please specify

Please specify if response to land measurement is Other and provide conversion factor to hectares or acres, e.g.: 1 "new unit" = 2 ha E `lnd_mes==96`	TEXT lnd_mes_1 ....

In total, in the last 12 months, what is the total area of land (in %lnd_mes%) for agricultural and/or pasture purposes that the household has access to or manages regardless if you own or just rent it? Enter 0 if none. If the area varies per season, enter the largest area managed in the last 12 months.	NUMERIC: DECIMAL lnd_size_access – – – – – – – – – – – – – – – .

In which seasons did you cultivate? (multi-select) E `lnd_size_access>0` V1 `self.Missing.Length==0` M1 You have not answered all the questions. Please check.	MULTI-SELECT: YES/NO lnd_season 01 ☐/☐ Dry season 02 ☐/☐ Wet season 03 ☐/☐ Third season

In the last 12 months, how much area of land (in %lnd_mes%) is used during dry season? E `lnd_size_access>0 && lnd_season.Yes.Contains(1)` V1 `(self<=lnd_size_access) && self>0` M1 Area used during dry season MUST NOT be more than the size of accessed land and MUST be greater than 0! It was mentioned that the HH cultivated during dry season in the last 12 months.	NUMERIC: DECIMAL lnd_size_dry – – – – – – – – – – – – – – – .

In the last 12 months, how much area of land (in %lnd_mes%) is used during wet season? E `lnd_size_access>0 && lnd_season.Yes.Contains(2)` V1 `(self<=lnd_size_access) && self>0` M1 Area used during wet season MUST NOT be more than the size of accessed land and MUST be greater than 0! It was mentioned that the HH cultivated during wet season in the last 12 months.	NUMERIC: DECIMAL lnd_size_wet – – – – – – – – – – – – – – – .

In the last 12 months, how much area of land (in %lnd_mes%) is used during the third season?	NUMERIC: DECIMAL	lnd_size_3season

E   lnd_size_access>0 && lnd_season.Yes.Contains(3)

V1   (self<=lnd_size_access) && self>0

M1   Area used during third season MUST NOT be more than the size of accessed land and MUST be greater than 0! It was mentioned that the HH cultivated during third season in the last 12 months.

STATIC TEXT

Please answer the following question for each land use type

In the last 12 months, did the household own, manage, or use the following land types?

V1   self.Missing.Length==0

M1   You have not answered all the questions! Please check.

MULTI-SELECT: YES/NO   lnd_use_ind

- 01 ☐/☐ Cropland
- 02 ☐/☐ Fallow
- 03 ☐/☐ Agroforestry, forestry, beehives
- 04 ☐/☐ Pasture (natural)
- 05 ☐/☐ Pasture (planted)
- 06 ☐/☐ Forest (natural)
- 07 ☐/☐ Forest (planted)
- 96 ☐/☐ Other agricultural land uses(e.g. wetland, fish pond)

Please specify other land use type that the HH manages or uses.

E   lnd_use_ind.Yes.Contains(96)

TEXT   lnd_use_ind_oth

SECTION 2: LAND TYPES, OWNERSHIP, AND ACCESS / ACCESS AND CONTROL OVER LAND

AGRICULTURAL LAND USES

SECTION 2: LAND TYPES, OWNERSHIP, AND ACCESS / ACCESS AND CONTROL OVER LAND / AGRICULTURAL LAND USES

Roster: LANDUSE_TYPE - %ROSTERTITLE%

generated by multi-select question lnd_use_ind   r_landuse

In the last 12 months, what is the total land area under the usage of %rostertitle% in %lnd_mes%?

V1   self>0 && self<=(lnd_size_access*3)

M1   Land size MUST be more than 0 but not more than 3x of reported area of land that the HH uses! Please check.

NUMERIC: DECIMAL   lnd_size

In the last 12 months, what is the total harvested area of %rostertitle% in %lnd_mes%? Enter 0 if none.

E   (@rowcode==1||@rowcode==3||@rowcode==4||@rowcode==5||@rowcode==6||@rowcode==7||@rowcode==96)

V1   lnd_size_harvest<=lnd_size

M1   Harvested area should NOT be more than the HH cultivated area!

NUMERIC: DECIMAL   lnd_size_harvest

In which season/s do you use the land as %rostertitle%?

E   (@rowcode==1||@rowcode==2||@rowcode==3||@rowcode==4||@rowcode==5||@rowcode==6||@rowcode==7||@rowcode==96) && lnd_size>0

MULTI-SELECT   lnd_season2

- 01 ☐ Dry season
- 02 ☐ Wet season
- 03 ☐ Middle/ third season

What is the ownership status or tenure type of land under %rostertitle%? I If land has multiple tenure statuses (e.g if household owns but also rents some of the land), select the status with largest share. E lnd_size > 0	SINGLE-SELECT lnd_ten 01 ◯ State owned 02 ◯ Private owned with land title 03 ◯ Private owned with no land title 04 ◯ Leased/rented 05 ◯ Contract farming land 06 ◯ Communally or community owned 07 ◯ Co-share/ co-farming 96 ◯ Others, specify
Specify other tenure status of %rostertitle% E lnd_ten==96	TEXT lnd_ten_oth ....
If %rostertitle% has land title, whose name is the land title in? E lnd_ten==2	MULTI-SELECT: LINKED lnd_title_own SOURCE OF CATEGORIES: ROSTER R_MEMBERS
Total irrigated area [in %lnd_mes%] of %rostertitle% V1 (self<=lnd_size) M1 Irrigated area MUST NOT be more than the reported HH land size!	NUMERIC: DECIMAL irrig_area - - - - - - - - - - - - - - - - - - - .
What is the size of the household's residential area? (in %lnd_mes%)	NUMERIC: DECIMAL house_area - - - - - - - - - - - - - - - - - - - .
In the last 5 years, have your household ever been involved in a land dispute concerning any land parcel under the household's usage?	SINGLE-SELECT lnd_07 01 ◯ Yes 00 ◯ No
What is/are the reasons for this land dispute? E lnd_07==1	MULTI-SELECT: ORDERED lnd_dispute_reason 01 ☐ Animals grazing, feeding on my plot 02 ☐ Theft, robbery of crops/ harvest 03 ☐ Water usage issues, irrigation schedule 04 ☐ Land grabbing 96 ☐ Others, specify
Please specify other reason for land dispute. E lnd_dispute_reason.Contains(96)	TEXT lnd_dispute_oth ....
[S2] END TIME	DATE: CURRENT TIME s2_end_time ....

STATIC TEXT

E   `!IsAnswered(s2_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E   `NumberUnansweredQuestions(section_2)>0`

ATTENTION! YOU HAVE %unanswered_sec_2% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE	DOUBLE	
`NumberUnansweredQuestions(section_2)`		unanswered_sec_2
VARIABLE	DOUBLE	
`Math.Round((s2_end_time - s2_start_time).Value.TotalSeconds / 60,2)`		s2_duration

E   `!IsAnswered(s2_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E   `NumberUnansweredQuestions(section_2)>0`

ATTENTION! YOU HAVE %unanswered_sec_2% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

SECTION 3: CROPS AND PASTURE

[S3] START TIME	DATE: CURRENT TIME	s3_start_time

STATIC TEXT

E !IsAnswered(s3_start_time)

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

SECTION 3: CROPS AND PASTURE

PRODUCTION DETAILS

E lnd_size_dry>0 || lnd_size_wet>0 || lnd_size_3season>0

How many crops types, including pasture, did the household grow/harvest in the last 12 months?	NUMERIC: INTEGER crop_num
V1 crop_num>0	
M1 Number of crops or pasture grown should be greater than 0! It was earlier reported the HH cultivates the land during dry or wet season in the last 12 months.	

In the last 12 months, what are the crops or pasture grass that the household grow or cultivate? Select all the apply.	MULTI-SELECT crop_name
V1 self.Count() == crop_num	01 ☐ African foxtail grass / Cenchrus ciliaris
M1 Number of crops planted and number of crops selected are not equal. Please confirm.	02 ☐ Massai love grass / Erasgrotis superba
	03 ☐ Other forage grass
	04 ☐ Banana
	05 ☐ Barley
	06 ☐ Beans
	07 ☐ Butternuts
	08 ☐ Cabbage
	09 ☐ Coffee
	10 ☐ Flowers
	11 ☐ Garlic
	12 ☐ Green gram
	13 ☐ Groundnuts
	14 ☐ Maize
	15 ☐ Mango
	16 ☐ Millet
	[And 12 other symbols [80]](#)

Specify Other Crop type	TEXT crop_name_oth
E crop_name.Contains(96)	

SECTION 3: CROPS AND PASTURE / PRODUCTION DETAILS

Roster: CROP PLANTED - %ROSTERTITLE%

E `crop_num>0`

In which seasons do you grow or cultivate %rostertitle%? (Multi-select)	MULTI-SELECT crop_season
	01 ☐ Dry season
	02 ☐ Wet season
	03 ☐ Third / Middle season

How many years have you been growing or cultivating %rostertitle%?	NUMERIC: DECIMAL crop_year

V1 `self>0`
M1 Years MUST be more than 0! It was previously reported that the HH has been growing the crop or pasture.

Type of seeds used for %rostertitle%	SINGLE-SELECT crop_seed
	01 ○ Traditional
	02 ○ Improved
	03 ○ Hybrid
	04 ○ Mixed but mainly traditional
	05 ○ Mixed but mainly improved
	06 ○ Mixed but mainly hybrid
	96 ○ Others, sepcify

Please specify other seed type for %rostertitle%.	TEXT crop_seed_oth

E `crop_seed==96`

Unit of measurement of the seed %rostertitle% every time you purchase them.	SINGLE-SELECT crop_seed_unit
	01 ○ Grams
	02 ○ Kilograms
	96 ○ Others, specify

Please specify other unit of measurement of the seed for %rostertitle%.	TEXT crop_seed_unit_oth

E `crop_seed_unit==96`

During %rostertitle%'s cultivation times in the last 12 months, what is the TOTAL amount of seed used? (in %crop_seed_unit%)	NUMERIC: DECIMAL crop_seed_amt

V1 `crop_seed_amt>0`
M1 Total seed used MUST be greater than 0! It was reported earlier that the HH cultivated or grew the crop in the last 12 months.

How much did you pay for the seeds of %rostertitle% the last time you used them? Enter 0 if none or saved seed (in Ksh per unit %crop_seed_unit%)	NUMERIC: DECIMAL crop_seed_price

Approximately how much TOTAL land did you allocate to cultivate %rostertitle% during in the last 12 months? (in %lnd_mes%) V1 `crop_area>0 && self<=(lnd_size_access*3)` M1 Total area under cultivation for the crop MUST be greater than 0! It was previously reported that the HH cultivated or grew the crop in the last 12 months. Total area under cultivation for the crop MUST NOT be greater than three times of reported land size accessed by the HH in the last 12 months. Please check.	NUMERIC: DECIMAL crop_area ------------------------------.
Is the crop %rostertitle% under contract farming?	SINGLE-SELECT crop_contract_ind 01 ◯ Yes 00 ◯ No
Approximately how much TOTAL land was under contract for %rostertitle% cultivation in the last 12 months? (in %lnd_mes%) E `crop_contract_ind==1` V1 `(crop_area_contract<=crop_area) && self>0` M1 Total contracted area MUST NOT be more than total cultivated area of the crop or pasture. Area contracted of the crop MUST be more than 0 too! It was previously reported that the crop is under contract farming. Please check.	NUMERIC: DECIMAL crop_area_contract ------------------------------.
Approximately how much TOTAL land was harvested for %rostertitle% in the last 12 months? (in %lnd_mes%) V1 `crop_area_harvest<=crop_area` M1 Total harvested area MUST NOT be more than total cultivated area of the crop or pasture.	NUMERIC: DECIMAL crop_area_harvest ------------------------------.
What is the unit of measurement for the harvest of %rostertitle%? E `crop_area_harvest>0`	SINGLE-SELECT crop_unit 01 ◯ Grams 02 ◯ Kilograms 03 ◯ Liters 04 ◯ Numbers 05 ◯ Basins 06 ◯ 2kg packet 07 ◯ 10kg bag 08 ◯ 25kg bag 09 ◯ 50 kg bag 10 ◯ 90 kg bag 11 ◯ 100 kg bag 12 ◯ Crates 13 ◯ Bunches 14 ◯ Debe 15 ◯ Wheelbarrow 16 ◯ Bale / Bundle And 7 other symbols [88]
Please specify other unit of measurement for the harvest of %rostertitle%. E `crop_unit==96`	TEXT crop_harvest_unit_oth ....

What is the TOTAL harvested quantity of %rostertitle% in the last 12 months? (in %crop_unit%)	NUMERIC: DECIMAL	crop_output
E crop_area_harvest>0 V1 crop_output>0 M1 Total harvested quantity MUST be greater than 0! It was reported that the HH harvested the crop.	_ .	

What is the unit of measurement for harvest consumed at home of %rostertitle%?	SINGLE-SELECT	crop_unit_homecons
E crop_area_harvest>0	01 ○ Grams 02 ○ Kilograms 03 ○ Liters 04 ○ Numbers 05 ○ Basins 06 ○ 2kg packet 07 ○ 10kg bag 08 ○ 25kg bag 09 ○ 50 kg bag 10 ○ 90 kg bag 11 ○ 100 kg bag 12 ○ Crates 13 ○ Bunches 14 ○ Debe 15 ○ Wheelbarrow 16 ○ Bale / Bundle [And 7 other symbols \[88\]](#)	

Amount of the harvest of %rostertitle% used for HOME CONSUMPTION? (in %crop_unit_homecons%) Enter 0 if none.	NUMERIC: DECIMAL	crop_output_home
E crop_output>0 V1 crop_output_home<=crop_output M1 Total quantity used for HOME CONSUMPTION MUST NOT be more than the harvested quantity!	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .	

Amount of the harvest of %rostertitle% SOLD or bartered immediately after harvest ? (in %crop_unit%) Enter 0 if none.	NUMERIC: DECIMAL	crop_output_sold
E crop_output>0 V1 crop_output_sold<=crop_output M1 Total quantity SOLD MUST NOT be more than the harvested quantity!	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .	

Selling price of %rostertitle% at sale in Ksh per %crop_unit%.	NUMERIC: DECIMAL	crop_price
E crop_output_sold>0 V1 crop_price>0 M1 Answer MUST be greater than 0! It was reported that the HH sold some harvest of the crop.	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .	

Amount of the harvest of %rostertitle% STORED for future selling or use? (in %crop_unit%) Enter 0 if none.	NUMERIC: DECIMAL crop_output_stored
E crop_output>0	
V1 self <=crop_output	
M1 Total quantity STORED MUST NOT be more than the harvested quantity!	

Amount of the harvest of %rostertitle% SAVED seeds for next planting? (in %crop_unit%) Enter 0 if none.	NUMERIC: DECIMAL crop_output_seeds
E crop_output>0	
V1 self <=crop_output	
M1 Total quantity of SAVED SEEDS MUST NOT be more than the harvested quantity!	

Amount of the harvest of %rostertitle% given FOR OTHER USES (e.g. in kind payment, gifts, weddings, funerals, etc.). (in %crop_unit%). Enter 0 if none.	NUMERIC: DECIMAL crop_output_oth
E crop_output>0	
V1 self <= crop_output	
M1 Total quantity of output for OTHER USES MUST NOT be more than the harvested quantity!	

Please specify other uses of %rostertitle% harvest.	TEXT crop_output_othuse
E crop_output_oth>0	

VARIABLE crop_output_home + crop_output_sold + crop_output_stored + crop_output_seeds + crop_output_oth	DOUBLE crop_output_verify

STATIC TEXT

E (crop_output_home + crop_output_sold + crop_output_stored + crop_output_seeds + crop_output_oth)!= crop_output

V1 (crop_output_verify != crop_output) != true

M1 The sum amount of the crop's harvest by utilization is NOT equal to the crop output reported. Please check the distribution of output by utilization again.

ERROR!

What is the total irrigated area of the crop %rostertitle%? Enter 0 if none is irrigated.	NUMERIC: DECIMAL crop_irrig
V1 self <= crop_area	
M1 Total irrigated area MUST NOT be more than the cultivated area!	

Did you apply any ORGANIC FERTILIZERS (e.g. manure, vermiculture, worms) in the cultivation of %rostertitle% in last 12 months?	SINGLE-SELECT cp07
	01 ◯ Yes
	00 ◯ No
I Organic fertilizer is a type of fertilizer made from natural materials such as animal waste (manure), compost, bone meal, and other organic matter. It is used to enhance soil fertility and promote pla And 170 other symbols [2]	
E crop_area>0	

Did you apply any INORGANIC FERTILIZERS in the cultivation of %rostertitle% in the last 12 months?	SINGLE-SELECT cp08
	01 ◯ Yes
	00 ◯ No
I An inorganic fertilizer is a type of fertilizer that does not contain organic matter and is derived from mineral sources such as nitrates, phosphates, and potash. Inorganic fertilizers are often highl And 281 other symbols [3]	
E crop_area>0	

Did you apply any PESTICIDE in the cultivation of %rostertitle% in the last 12 months? I A pesticide is a chemical substance used to control, eliminate, or prevent the growth and spread of harmful insects, rodents, and other pests that cause damage to crops. These chemicals can be either And 266 other symbols [4] E crop_area>0	SINGLE-SELECT cp09 01 ○ Yes 00 ○ No
Did you use a TRACTOR to plough or harvest your land or any MACHINERY in the cultivation of %rostertitle% in the last 12 months? E crop_area>0	SINGLE-SELECT cp10 01 ○ Yes 00 ○ No
Did you hire and pay any labour in the cultivation of %rostertitle% in the last 12 months? E crop_area>0	SINGLE-SELECT cp11 01 ○ Yes 00 ○ No

SECTION 3: CROPS AND PASTURE

CROP AND PASTURE EXPENDITURES

E crop_num>0

STATIC TEXT

Now I will ask you how much money you spent (in %currency%) on different inputs for crop production in the last 12 months. If the household did not spend money or use a particular input, please put 0.

Approximate amount of money spent on ORGANIC FERTILIZERS (e.g. manure, vermiculture, worms) in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_orgfert - .
Approximate amount of money spent on INORGANIC FERTILIZERS (e.g. N, P, K) in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_inorgfert - .
Approximate amount of money spent on PESTICIDES in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_pest - .
Approximate amount of money spent on MACHINERY (e.g. tractors) in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_machine - .
Approximate amount of money spent on HIRED LABOUR in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_labour - .
Approximate amount of money spent on RENTING LAND in last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_landrent - .
Approximate amount of money spent on TRANSPORT for inputs and produce to and from markets in the last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_transport - .
Approximate amount of money spent on IRRIGATION in the last 12 months? Enter 0 if none.	NUMERIC: INTEGER crp_exp_irrig - .

Approximate amount of money spent on Other inputs in last 12 months? Enter 0 if none.	NUMERIC: INTEGER	crp_exp_oth

Please specify what other inputs have you used for agricultural purposes. E crp_exp_oth>0	TEXT	crp_exp_othinput

[S3] END TIME	DATE: CURRENT TIME	s3_end_time

STATIC TEXT

E !IsAnswered(s3_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E NumberUnansweredQuestions(section_3)>0

ATTENTION! YOU HAVE %unanswered_sec_3% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_3)	DOUBLE	unanswered_sec_3
VARIABLE Math.Round((s3_end_time - s3_start_time).Value.TotalSeconds / 60,2)	DOUBLE	s3_duration

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION

section_4

[S4]START TIME	DATE: CURRENT TIME	s4_start_time

STATIC TEXT

E !IsAnswered(s4_start_time)

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

This section of the questionnaire is about livestock including poultry and beehives. Report for all animals on the holding, regardless of ownership, including those that are boarded (animals in pension), owned by another member of the household .

Did you or anyone in your household own any l ivestock including poultry and beehives in the l ast 12 months?	SINGLE-SELECT	any_livestock
	01 ◯ Yes	
	00 ◯ No	

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION
OWNERSHIP AND PRODUCTION DETAILS

E any_livestock==1

During the last 12 months, have you or any me mber of your household <u>owned</u> any of the follo wing? I OWNER(S) CAN BE WITHIN AND/OR OUTSIDE THE HOUSEHOLD	MULTI-SELECT	lv
	01 ☐ Bulls/Oxen/Steers	
	02 ☐ Cows/Heifers	
	03 ☐ Calves - (young female or m ale cow or bull)	
	04 ☐ Goats - He/She/Kids	
	05 ☐ Sheep - Rams/Ewes/Lambs	
	06 ☐ Camels	
	07 ☐ Donkey / Mules	
	08 ☐ Poultry (chicken, ducks, oth ers)	
	09 ☐ Beehives and other Insects (bees, crickets, etc.)	
	10 ☐ Horses	
	11 ☐ Dogs	
	96 ☐ Others, specify	

Specify other livestock type	TEXT	lv_oth
E lv.Contains(96)		

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION / OWNERSHIP AND PRODUCTION DETAILS
Roster: LIVESTOCK - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>
generated by multi-select question lv

r_livestock

Number of %rostertitle% owned 12 months ago	NUMERIC: INTEGER lv01_ago
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% currently owned	NUMERIC: INTEGER lv02
	- - - - - - - - - - - - - - - - - - - .

Breed of %rostertitle% owned by the household. Please select all that apply.

MULTI-SELECT   lv_breed

- 01 ☐ Traditional or local breeds
- 02 ☐ Regional (within Africa) or transboundary breeds
- 03 ☐ International transboundary breeds
- 04 ☐ Graded or crossbreds
- 96 ☐ Others, specify

Please specify other breed of %rostertitle% owned by the household.

E   lv_breed.Contains(96)

TEXT   lv_breed_oth

....

Number of %rostertitle% sold or bartered (including slaughtered or live animal) in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv03
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% slaughtered for own use in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv04
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% given as in-kind payment (e.g. for loans, labour, land, etc.) in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv_inkind_pay
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% given for free as gifts (e.g. dowry, bridal gifts, wedding, funeral, etc.) in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv05
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% died due to diseases in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv06
	- - - - - - - - - - - - - - - - - - - .
Number of %rostertitle% lost due to theft, cattle raids, attacks in the last 12 months. Enter 0 if none.	NUMERIC: INTEGER lv07
	- - - - - - - - - - - - - - - - - - - .

Price per %rostertitle% head sold including slaughter for sale and barter (live animal or slaughter) in %currency%.

E   lv03>0 || lv_inkind_pay>0
V1   self > 0
M1   Price must be more than 0! It was previously reported that the HH sold or pay the livestock.

NUMERIC: INTEGER   lv_price

- - - - - - - - - - - - - - - - - - - .

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION
LIVESTOCK INCOME

In the last 12 months, did the household produce other livestock products besides live and slaughtered animal? (e.g. meat, milk, sour milk, ghee, cheese, eggs, hides, honey, etc.)	SINGLE-SELECT liv_othproducts_ind 01 ◯ Yes 00 ◯ No

What other livestock products have your household produced (regardless if it was sold or not) besides the live and slaughter animal? Please select all that apply. (e.g. meat, milk, sour milk, ghee, cheese, eggs, hides, honey, etc.) E `liv_othproducts_ind==1`	MULTI-SELECT liv_othproducts 08 ☐ Meat 01 ☐ Milk 02 ☐ Cheese 03 ☐ Yogurt 04 ☐ Wool 05 ☐ Honey, beeswax 06 ☐ Honeybrew 07 ☐ Eggs 96 ☐ Others, specify

Please specify other livestock product that the household has produced besides the live and slaughter animal. E `liv_othproducts.Contains(96)`	TEXT liv_pdts_oth ....

How much is the approximate total income earned for all other livestock products produced and sold in the last 12 months? Enter 0 if no income is received, and just for family consumption. E `liv_othproducts_ind==1`	NUMERIC: INTEGER livinc_howmuch _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _

Are any of your livestock products including live and slaughtered animals, milk, cheese, eggs, etc. contracted by any company to supply them with your livestock products? E `liv_othproducts_ind==1`	SINGLE-SELECT liv_contract 01 ◯ Yes 00 ◯ No

If yes, what are the livestock products that have been contracted? Please select all that apply. E `liv_contract==1`	MULTI-SELECT contract_livspecies 01 ☐ Live animal 02 ☐ Slaughter animal or meat 03 ☐ Milk 04 ☐ Cheese 05 ☐ Yogurt 06 ☐ Wool 07 ☐ Honey, beeswax 08 ☐ Honeybrew 09 ☐ Eggs 96 ☐ Others, specify

If selling live or slaughtered animal, what livestock animal have been contracted? Please select all that apply.	MULTI-SELECT: LINKED SOURCE OF CATEGORIES: ROSTER R LIVESTOCK	contract_livtype
E contract_livspecies.Contains(1) || contract_livspecies.Contains(2)		

SECTION 4: LIVESTOCK OWNERSHIP AND PRODUCTION

LIVESTOCK EXPENDITURE

E any_livestock==1

STATIC TEXT

In the last 12 months, how much in total cost did your household spend on the following livestock inputs and management costs? Enter 0 if none.

Feed or fodder	NUMERIC: INTEGER	lvexp01_11
	------------------------------------.	
Rent for grazing land	NUMERIC: INTEGER	lvexp02_12
	------------------------------------.	
Medicines, vaccination, insemination and other vet services	NUMERIC: INTEGER	lvexp03_13
	------------------------------------.	
Maintenance costs (pens, barns, enclosures, shelterm kraals etc.)	NUMERIC: INTEGER	lvexp04_14
	------------------------------------.	
Hired labour for livestock management	NUMERIC: INTEGER	lvexp05_15
	------------------------------------.	
Any other livestock related expense (e.g salt)?	NUMERIC: INTEGER	lvexp06_16
	------------------------------------.	
Please specify other livestock costs that the household has spent. E lvexp06_16>0	TEXT	lvexp06_16_oth
	....	
VARIABLE lvexp01_11 + lvexp02_12 + lvexp03_13 + lvexp04_14 + lvexp05_15 + lvexp06_16	DOUBLE	lv_exp_verify

STATIC TEXT

E lv_exp_verify ==0

V1 lv_exp_verify != 0

M1 The total livestock expenses MUST NOT be 0! Please specify the costs spent for livestock production.

ERROR!

[S4]END TIME	DATE: CURRENT TIME	s4_end_time
	....	

STATIC TEXT

E !IsAnswered(s4_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

E `NumberUnansweredQuestions(section_4)>0`

ATTENTION! YOU HAVE %unanswered_sec_4% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE	DOUBLE	unanswered_sec_4
`NumberUnansweredQuestions(section_4)`		

VARIABLE	DOUBLE	s4_duration
`Math.Round((s4_end_time - s4_start_time).Value.TotalSeconds / 60,2)`		

SECTION 5: SOCIAL CAPITAL

[S5]START TIME	DATE: CURRENT TIME	s5_start_time

STATIC TEXT

E `!IsAnswered(s5_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

This Role Model sub-section should be asked to BOTH MEN AND WOMEN of the household, preferably the head and his/her spouse (e.g. husband and wife).

In case the other member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities.

Subsections Information, Cooperative, and Training are asked only to MAIN RESPONDENT.

Among the following members, who is availabl e for interview ?	MULTI-SELECT: LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	avaliable_member
I Please ask for ONE MEN AND WOMEN of the household, preferably th e head and his/her spouse (e.g. husband and wife). In case the membe r is not present or available for interview, we ask for other mal [And 278 other symbols [5]]		
F `age>$working_age`		
W1 `avaliable_member.Length==2`		
M1 You must interview one male and one female household memebers		

SECTION 5: SOCIAL CAPITAL

Roster: SOCIAL CAPITAL - %ROSTERTITLE%
generated by list question numfamily

r_social_capital

E `avaliable_member.Select(x=>x[0]).Contains(@rowcode)`

SECTION 5: SOCIAL CAPITAL / SOCIAL CAPITAL - %ROSTERTITLE%

ROLE MODELS

STATIC TEXT

Now we would like to talk about your connection to other people or households in this village. We ask you to mention your interactions with different people and name the three most influential persons in this village.

Please list up to three most respected or influe ntial individuals in this village that you turn to f or advice on agriculture and livestock-related matters, health intervention, or others.	LIST	infper

SECTION 5: SOCIAL CAPITAL / SOCIAL CAPITAL - %ROSTERTITLE% / ROLE MODELS

Roster: INFLUENTIAL PEOPLE - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>
generated by list question infper

r_infu

Which of the following functions applies to %rostertitle%?	MULTI-SELECT as07 01 ☐ Government worker 02 ☐ Private extension work (e.g. Kenya seed extensionist, dealers, traders) 03 ☐ Religious leader 04 ☐ Village/ Traditional/ Cultural leader 05 ☐ Village elder 06 ☐ Teacher or health worker 07 ☐ Agricultural innovator / model farmer 08 ☐ NGO worker 09 ☐ Friend 10 ☐ Relative 11 ☐ Neighbour 96 ☐ Others, specify
Please specify the other role that applies to %rostertitle%. E `as07.Contains(96)`	TEXT as07_oth ....
Gender of %rostertitle%?	SINGLE-SELECT network_mostinf_gender 01 ○ Men 00 ○ Women 96 ○ Others
Ethnicity of %rostertitle%?	SINGLE-SELECT network_mostinf_eth 01 ○ Ilchamus 02 ○ Tugen 03 ○ Pokot 04 ○ Maasai 96 ○ Others, specify
Please specify Other ethnicity. E `network_mostinf_eth==96`	TEXT network_eth_oth ....
Age group of %rostertitle%?	SINGLE-SELECT network_mostinf_agegrp 01 ○ In their 20s 02 ○ In their 30s 03 ○ In their 40s 04 ○ In their 50s 05 ○ In their 60s 06 ○ >70

What is the walking time to the place where you mostly meet %rostertitle% to receive the advice? (in minutes)	NUMERIC: DECIMAL	network_mostinf_time
	_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .	
In the last 30 days, how many times did you talk with %rostertitle%? V1 self <= 31 M1 Number of days CANNOT be more than 31 days!	NUMERIC: INTEGER _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .	network_mostinf_freq

SECTION 5: SOCIAL CAPITAL
INFORMATION AND ADVISORY SERVICE PROVIDER

STATIC TEXT

Now we would like to talk about the household information and advisory service providers or where do the household mainly seek advice or information.

Who in the household mainly receives information? I Please mention first who most frequently receives the information. [multi-select ordered]	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	info_recipient
Where or who does the household FREQUENTLY seek, go to, or talk to about any advice or information outside your household? V1 self.Missing.Length==0 M1 You have not answered all the questions. Please check.	MULTI-SELECT: YES/NO 01 ☐/☐ Government extension (in person) 02 ☐/☐ Private extension (e.g. Kenya seed extensionist, dealers, traders) (in-person) 03 ☐/☐ Religious leader 04 ☐/☐ Village leader 05 ☐/☐ Village elder 06 ☐/☐ NGO (in person) 07 ☐/☐ Other farmers (e.g. progressive farmers) 08 ☐/☐ Radio 09 ☐/☐ Television 10 ☐/☐ Phone/mobile phone 96 ☐/☐ Others, specify	info_source
Please specify other information and advisory service provider. E info_source.Yes.Contains(96)	TEXT	info_source_oth

SECTION 5: SOCIAL CAPITAL / INFORMATION AND ADVISORY SERVICE PROVIDER
Roster: INFORMATION AND ADVISORY SOURCES - %ROSTERTITLE%
generated by multi-select question info_source

r_infosource

Gender of %rostertitle%? E (@rowcode>=1 && @rowcode<=7) || @rowcode==96	SINGLE-SELECT 01 ◯ Men 00 ◯ Women 96 ◯ Others	network_info_gender

Ethnicity of %rostertitle%? E (@rowcode>=1 && @rowcode<=7) || @rowcode==96	SINGLE-SELECT network_info_eth 01 ◯ Ilchamus 02 ◯ Tugen 03 ◯ Pokot 04 ◯ Maasai 96 ◯ Others, specify
Please specify Other ethnicity. E network_info_eth==96	TEXT network_info_eth_oth ....
Age group of %rostertitle%? E (@rowcode>=1 && @rowcode<=7) || @rowcode==96	SINGLE-SELECT network_info_agegrp 01 ◯ In their 20s 02 ◯ In their 30s 03 ◯ In their 40s 04 ◯ In their 50s 05 ◯ In their 60s 06 ◯ >70
What is the walking time to the place where you mostly meet %rostertitle% to receive the advice? (in minutes)	NUMERIC: DECIMAL network_info_time – – – – – – – – – – – – – – – – – – – .
In the last 30 days, how many times did you meet with the information provider %rostertitle%? E (@rowcode>=1 && @rowcode<=7) || @rowcode==96 V1 self <= 31 M1 Number of days CANNOT be more than 31 days!	NUMERIC: INTEGER network_freq – – – – – – – – – – – – – – – – – – – .

SECTION 5: SOCIAL CAPITAL
COOPERATIVE MEMBERSHIP

STATIC TEXT

Now we would like to talk about the participation or membership of the household members in different groups in the community.

	MULTI-SELECT: YES/NO	group_ind
What are the groups or associations you know are existing in the community? Please select all that apply.	01 ☐/☐ Agricultural / livestock / fisheries producer's group	
V1 `self.Missing.Length==0`	02 ☐/☐ Contract growers group	
M1 You have not answered all the questions. Please check.	03 ☐/☐ Water users' group or irrigator's association	
	04 ☐/☐ Forest users' group	
	05 ☐/☐ Credit or microfinance group or loan	
	06 ☐/☐ Savings group, self or mutual -help groups (e.g. merry-go-round, table banking)	
	07 ☐/☐ Trade / marketing / business association and groups	
	08 ☐/☐ Religious group	
	09 ☐/☐ Men's group	
	10 ☐/☐ Women's group	
	11 ☐/☐ Youth group	
	13 ☐/☐ Parent/ Teacher's / School association	
	14 ☐/☐ Political party	
	96 ☐/☐ Other, specify	

	TEXT	group_ind_oth
Please specify the other organization or group in the community.		
E `group_ind.Yes.Contains(96)`	....	

SECTION 5: SOCIAL CAPITAL / COOPERATIVE MEMBERSHIP
Roster: ORGANIZATIONS/GROUPS - %ROSTERTITLE%
generated by multi-select question group_ind   r_group

	MULTI-SELECT: LINKED	group_mem_hh
Who in the household is a member of %rostertitle%?	SOURCE OF CATEGORIES: ROSTER R MEMBERS	
I Leave it blank if none is a member. Ignore the error message.		

VARIABLE	LONG	num_coopmem
`group_mem_hh.Length`		

	SINGLE-SELECT	group_member_influ
If household has member, to what extent do you feel like they can influence decisions in the group %rostertitle%?	01 ◯ Not at all	
E `num_coopmem>0`	02 ◯ Small extent	
	03 ◯ Medium extent	
	04 ◯ High extent	

	SINGLE-SELECT	group_influ
To what extent do you feel does the group influence your life or life in the community beyond the group activities %rostertitle%?	01 ◯ Not at all	
	02 ◯ Small extent	
	03 ◯ Medium extent	
	04 ◯ High extent	

Approximately, how many of the members are females in %rostertitle%?	SINGLE-SELECT	group_fem
	01 ◯ None	
	02 ◯ Less than half	
	03 ◯ About half	
	04 ◯ More than half	
	05 ◯ All	

Approximately, how many of the members are less than 35 in %rostertitle%?	SINGLE-SELECT	group_agegrp
	01 ◯ None	
	02 ◯ Less than half	
	03 ◯ About half	
	04 ◯ More than half	
	05 ◯ All	

Approximately, how many of the members are of your ethnic group or have the same ethnic group as you in %rostertitle%?	SINGLE-SELECT	group_eth
	01 ◯ None	
	02 ◯ Less than half	
	03 ◯ About half	
	04 ◯ More than half	
	05 ◯ All	

What is the walking time to the place where the group usually meets? %rostertitle% (in minutes)	NUMERIC: DECIMAL	group_time
V1 self>0		
M1 Walking time to the group meeting location MUST be more than 0!		

In the last 30 days, how many times did the metings are normally held in the group %rostertitle%?	NUMERIC: INTEGER	group_freq
V1 self <= 31		
M1 Number of days CANNOT be more than 31 days!		

SECTION 5: SOCIAL CAPITAL

TRAININGS

STATIC TEXT

Now we would like to talk about the houehold participation in different trainings held in the community.

In the last 5 years (from 2018-2023), have you or anyone in the household attended any training?	SINGLE-SELECT	train_ind
	01 ◯ Yes	
	00 ◯ No	

If yes, what are the trainings that you or anyone in the household attended? Please select all that apply. E `train_ind==1`	MULTI-SELECT		train_type
	01	☐ Crop production	
	02	☐ Livestock production	
	03	☐ Human nutrition	
	04	☐ Prosopis management	
	05	☐ Charcoal production	
	06	☐ Honeybee production	
	07	☐ Brewing, wine/beer making	
	08	☐ Entrepreneurship/ business training	
	96	☐ Others, specify	

Please specify other training that you have attended in the past 5 years. E `train_type.Contains(96)`	TEXT train_type_oth
	....

SECTION 5: SOCIAL CAPITAL / TRAININGS

Roster: TRAINING ATTENDED- %ROSTERTITLE%
generated by multi-select question `train_type`   r_train

When was the training held? %rostertitle%?	MULTI-SELECT		train_year
	01	☐ 2018	
	02	☐ 2019	
	03	☐ 2020	
	04	☐ 2021	
	05	☐ 2022	
	06	☐ 2023	

Who in the household attended the training %rostertitle%?	MULTI-SELECT: LINKED SOURCE OF CATEGORIES: ROSTER <u>R MEMBERS</u> training_mem_hh

What is the walking time to the place of the training %rostertitle%? (in minutes) V1 `self>0` M1 Walking time to the training location MUST be more than 0!	NUMERIC: DECIMAL train_time – – – – – – – – – – – – – – – – – – – .

Total duration or how long did the most recent training in the last 12 months %rostertitle% take place? (in days) V1 `self>=1 && self<=365` M1 Training duration MUST be more than 1 day. If it takes place only for a half day, consider it as 1 day. Consider just the number of days.	NUMERIC: INTEGER train_duration – – – – – – – – – – – – – – – – – – – .

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING

<div style="text-align: right">section_6</div>

[S6]START TIME

DATE: CURRENT TIME

<div style="text-align: right">s6_start_time</div>

....

STATIC TEXT

E `!IsAnswered(s6_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

This section should be asked to BOTH MEN AND WOMEN of the household, preferably the head and his/her spouse (e.g. husband and wife). In case the other member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities.

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING
Roster: TIME AND ROLE FOR - %ROSTERTITLE%
generated by list question numfamily

<div style="text-align: right">r_gender_roles</div>

E `avaliable_member.Select(x=>x[0]).Contains(@rowcode)`

RECORD THE TIME WHEN YOU START INTERVIE WING %rostertitle%

DATE: CURRENT TIME

<div style="text-align: right">start_time_gender_1</div>

....

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING / TIME AND ROLE FOR - %ROSTERTITLE%
TIME ALLOCATION

STATIC TEXT

Ask how they spent yesterday/ past 24 hours, starting with the time they wake up until they retire for the night. What were the major, specific activities and the simultaneous activities done during a certain time of the day? This includes everything, e.g. resting, eating, personal care, work inside and outside the home, caring for children, cooking, shopping, socializing, etc., even if it didn't take you much time. The area of interest is in agricultural activities such as farming, gardening, and livestock raising whether in the field or on the homestead, but equally important are other activities spent in e.g. caring for children, especially if it happened while you did some other activity (e.g., collecting water while carrying a child or cooking while watching after a sleeping child). Ask respondents to narrate their day themselves.

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING / TIME AND ROLE FOR - %ROSTERTITLE% / TIME ALLOCATION
Roster: TIME INTERVALS - %ROSTERTITLE%
generated by fixed list

<div style="text-align: right">f_time</div>

01	3:00 - 3:30am
02	3:31 - 4:00am
03	4:01 - 4:30am
04	4:31 - 5:00am
05	5:01 - 5:30am
06	5:31 - 6:00am
07	6:01 - 6:30am
08	6:31 - 7:00am
09	7:01 - 7:30am
10	7:31 - 8:00am
11	8:01 - 8:30am
12	8:31 - 9:00am
13	9:01 - 9:30am

14	9:31 - 10:00am
15	10:01 -10:30am
16	10:31 - 11:00am
17	11:01 - 11:30am
18	11:31 - 12:00pm
19	12:01 - 12:30pm
20	12:31 - 1:00pm
21	1:01 - 1:30pm
22	1:31 - 2:00pm
23	2:01 - 2:30pm
24	2:31 - 3:00pm
25	3:00 - 3:30pm
26	3:31 - 4:00pm
27	4:01 - 4:30pm
28	4:31 - 5:00pm
29	5:01 - 5:30pm
30	5:31 - 6:00pm
31	6:01 - 6:30pm
32	6:31 - 7:00pm
33	7:01 - 7:30pm
34	7:31 - 8:00pm
35	8:01 - 8:30pm
36	8:31 - 9:00pm
37	9:01 - 9:30pm
38	9:31 - 10:00pm
39	10:01 - 10:30pm
40	10:31 - 11:00pm
41	11:01 - 11:30pm
42	11:31 - 12:00am
43	12:01 - 12:30am
44	12:31 - 1:00am
45	1:01 - 1:30am
46	1:31 - 2:00am
47	2:01 - 2:30am
48	2:31 - 3:00am

What primary activity did you perform between %rostertitle%?	SINGLE-SELECT f_prim
	01 O Sleeping, napping, resting
	02 O Eating and drinking
	03 O Personal care
	04 O Leisure (e.g. watching TV, listening radio, reading, exercising, hobbies)
	05 O Attending school, training or studying, school meetings
	06 O Work as employed
	07 O Own business work
	08 O Land preparation, tilling, prosopis removal
	09 O Weeding and pest/disease management
	10 O Harvesting
	11 O Drying, processing farm product, and post-harvest tasks
	12 O Large livestock caring, grazing (e.g. cattle, camel)
	13 O Small livestock (e.g. sheep, goat, pig) caring, grazing
	14 O Poultry (e.g. chicken, duck, eggs, turkey) caring, grazing
	15 O Fishing, fishpond culture
	16 O Beekeeping-related activities
	And 21 other symbols [62]

Please specify other primary activity performed between %rostertitle%? E f_prim==96	TEXT f_prim_o ....

Did you do any secondary activity between %rostertitle%?	SINGLE-SELECT f_sec
	01 O Yes
	00 O No

What secondary activity did you perform between %rostertitle%? E f_sec==1	SINGLE-SELECT f_seca 01 ◯ Sleeping, napping, resting 02 ◯ Eating and drinking 03 ◯ Personal care 04 ◯ Leisure (e.g. watching TV, listening radio, reading, exercising, hobbies) 05 ◯ Attending school, training or studying, school meetings 06 ◯ Work as employed 07 ◯ Own business work 08 ◯ Land preparation, tilling, prosopis removal 09 ◯ Weeding and pest/disease management 10 ◯ Harvesting 11 ◯ Drying, processing farm product, and post-harvest tasks 12 ◯ Large livestock caring, grazing (e.g. cattle, camel) 13 ◯ Small livestock (e.g. sheep, goat, pig) caring, grazing 14 ◯ Poultry (e.g. chicken, duck, eggs, turkey) caring, grazing 15 ◯ Fishing, fishpond culture 16 ◯ Beekeeping-related activities And 21 other symbols [62]

SECTION 6-7: GENDERED TIME USE AND DECISION-MAKING / TIME AND ROLE FOR - %ROSTERTITLE%

HOUSEHOLD DECISION MAKING

E hh_size>1

STATIC TEXT

Ask who makes the decisions about each of the following activity. You can phrase the question like this: "Who in the household makes decisions about [activity]?" Record in order of importance. Please mention FIRST the member who makes the most primary decision.

Who makes the decision to Crop farming—what crop to grow, when and how to till and manage the crops (weeding, fertilizer, etc.) E crop_num>0	MULTI-SELECT: ORDERED, LINKED weai_1 SOURCE OF CATEGORIES: ROSTER R_MEMBERS
Who makes the decision to Marketing of crop farm produce (when/whom/where to sell, who negotiates the price)? E crop_num>0	MULTI-SELECT: ORDERED, LINKED weai_2 SOURCE OF CATEGORIES: ROSTER R_MEMBERS

Question	Type	Variable
Who makes the decision on how any cash earned from crop farming is spent? E `crop_num>0`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_3
Who makes the decision to how much money to spend on farm inputs? E `crop_num>0`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_4
Who makes the decision if the household need to consult an agricultural technician, extension agent, or other people who are experts	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_5
Who makes the decision to Purchase and sale of livestock like cattle and goats (e.g. which to buy, where/when to sell, etc.) E `any_livestock==1`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_6
Who makes the decision to How any cash earned from the sale of livestock or livestock products like milk and eggs is spent? E `any_livestock==1`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_7
Who makes the decision on the use of large livestock (cattle, donkey) E `any_livestock==1`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_8
Who makes the decision on the use of small livestock (goats, sheep) E `any_livestock==1`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_9
Who makes the decision on the use of poultry E `any_livestock==1`	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_22
Who makes the decision on the types of non-agricultural activities your household involves itself in, such as small business, casual and wage labour, and providing services to others	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_10
Who makes the decision on how any cash earned from wage work or non-farm work is spent	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_11
Who makes the decision on how much money to spend on food?	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_12
Who makes the decision on how much money to spend on capital investments (machinery, water pumps, etc.) for agriculture?	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_13
Who makes the decision on purchase and sale of durable goods (e.g., Purchase and sale of TVs, radios, fridge)	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_14
Who makes the decision on purchase and sale of land and houses?	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_15

Who makes the decision on expenditure on children's education	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_16
Who makes the decision on how to allocate remittances	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_17
Who makes the decision on whether to borrow money and how much to borrow?	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_18
Who makes the decision on whether they attend a training or seminar	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_19
Who makes the decision on if they will adopt or use the new techniques/knowledge they have acquired or learned	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_20
Who makes the decision on use of land?	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	weai_21
RECORD THE TIME WHEN YOU FINISH INTERVIEWING %rostertitle%	DATE: CURRENT TIME	end_time_gender_1

[S6]END TIME	DATE: CURRENT TIME	s6_end_time

STATIC TEXT

E `!IsAnswered(s6_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E `NumberUnansweredQuestions(section_6)>0`

ATTENTION! YOU HAVE %unanswered_sec_6% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE `NumberUnansweredQuestions(section_6)`	DOUBLE	unanswered_sec_6
VARIABLE `Math.Round((s6_end_time - s6_start_time).Value.TotalSeconds / 60,2)`	DOUBLE	s6_duration

SECTION 8: ECOLOGICAL SHOCKS

E `country==1`

[S8]START TIME	DATE: CURRENT TIME	s8_start_time

STATIC TEXT

E `!IsAnswered(s8_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

Are your fields or pasture infested by any of the following pests and others you may know? V1 `self.Missing.Length==0` M1 You have not answered all the questions. Please check.	MULTI-SELECT: YES/NO pest_infest 01 ☐/☐ Fall army worm armyworm 02 ☐/☐ Pathenium Parthenium 03 ☐/☐ Prosopis prospis 96 ☐/☐ Others ➡☐ Specify

Please specify other invasive species affecting your fields or pasture. E `pest_infest.Yes.Contains(96)`	TEXT pest_infest_oth

---

SECTION 8: ECOLOGICAL SHOCKS

Roster: INVASIVE SPECIES %ROSTERTITLE%

generated by multi-select question `pest_infest`

How severe is the infestation from %rostertitle%?	SINGLE-SELECT pest_severe 01 ○ Not severe infestation - a small number of pests present 02 ○ Moderate infestation - moderate number of pests present 03 ○ Severe infestation - large number of pests present 04 ○ Extremely infestation - overwhelming number of pests present

Rate the damage caused by the %rostertitle% in your fields and/or pasture	SINGLE-SELECT pest_rate 01 ○ Low (<25% plants damaged) 02 ○ Average (25-50% plants damaged) 03 ○ High (50-75% plants damaged) 04 ○ Very high (>75% plants damaged)

What are the various management techniques you use in controlling the %rostertitle%? I Please mention first what you most often use. [multi-select ordered]	MULTI-SELECT: ORDERED eco_mgmt 01 ☐ Use of natural enemies/ sugars and soups that attracts natural enemies 02 ☐ Early planting, resistant varieties 03 ☐ Intercropping 04 ☐ Crop rotation 05 ☐ Weeding 06 ☐ Use of pesticides or chemical agents 07 ☐ Crop diversification 08 ☐ Intensive cultivation 09 ☐ Handpicking and crushing egg masses/ catterpillars 10 ☐ Sand and ash 11 ☐ Cutting the trees 12 ☐ Burning 13 ☐ Uprooting seedlings and trees 14 ☐ Pruning 15 ☐ Do nothing 96 ☐ Others, specify

SECTION 8: ECOLOGICAL SHOCKS / INVASIVE SPECIES %ROSTERTITLE%

Roster: CONTROL STRATEGIES- %ROSTERTITLE%
generated by multi-select question eco_mgmt   r_control_strat

Please specify Other management techniques E eco_mgmt.Contains(96)	TEXT eco_mgmt_oth ....
How much do you spend on average using the management practice to control the %rostertitle%? Enter 0 if none.	NUMERIC: INTEGER cost_management – – – – – – – – – – – – – – –
How effective do you think is your control strategy to manage the invasive species?	SINGLE-SELECT how_effective 01 ○ Highly effective 02 ○ Moderately effective 03 ○ Slightly effective 04 ○ Not at all effective

What do you think is the most effective way to manage the %rostertitle%? I Record in order of importance. Please mention first the most effective control strategy for you. (multi-select ordered)	MULTI-SELECT most_effective 01 ☐ Use of natural enemies/ sugars and soups that attracts natural enemies 02 ☐ Early planting, resistant varieties 03 ☐ Intercropping 04 ☐ Crop rotation 05 ☐ Weeding 06 ☐ Use of pesticides or chemical agents 07 ☐ Crop diversification 08 ☐ Intensive cultivation 09 ☐ Handpicking and crushing egg masses/ catterpillars 10 ☐ Sand and ash 11 ☐ Cutting the trees 12 ☐ Burning 13 ☐ Uprooting seedlings and trees 14 ☐ Pruning 15 ☐ Do nothing 96 ☐ Others, specify
Please specify Other most effective management techniques. E most_effective.Contains(96)	TEXT most_effective_oth ....

Why can't you practice or adopt the more effective control strategy for %rostertitle%?	MULTI-SELECT: ORDERED	why_not_control
I Record in order of importance. Please mention first the most effective control strategy for you. (multi-select ordered)	01 ☐ Lack of resources or funding	
	02 ☐ Limited knowledge or understanding of the strategy	
	03 ☐ Inability to access the necessary equipment or materials	
	04 ☐ Difficulty in implementing the strategy in a specific location or environment	
	05 ☐ Resistance or opposition from neighbours	
	06 ☐ Legal or regulatory barriers that prohibit the use of certain pest control methods	
	07 ☐ Labour intensive and time consuming	
	08 ☐ May have negative effect on health	
	96 ☐ Others, specify	
	99 ☐ Does not apply, HH already adopting the most effective for them	

Please specify Other reasons why you don't practice or adopt the control strategy.	TEXT	why_not_control_oth
E why_not_control.Contains(96)	....	

Who in the household is mainly involved in controlling the %rostertitle%?	SINGLE-SELECT: LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	who_control

How often do you control the %rostertitle%?	SINGLE-SELECT	control_freq
	01 ○ Only few days at the beginning of cropping season (less than a month)	
	02 ○ 1-2 months (beginning and few times in the middle of cropping season)	
	03 ○ Every month of the cropping season	
	96 ○ Others, specify	

Please specify other frequency of controlling the %rostertitle%.	TEXT	control_freq_oth
E control_freq==96	....	

How many days in one month do you normally have to control pest %rostertitle%?	NUMERIC: INTEGER days_control_pest
V1 self <= 30 && self>0 M1 Answer MUST be less than 30 days in a month BUT more than 0!	– .

Do you find prosopis in a 10-m radius space around your household?	SINGLE-SELECT prosopis_hh 01 ◯ Yes 00 ◯ No

In 2019, are your fields or pasture infested by prosopis?	SINGLE-SELECT pros_infest_2019 01 ◯ Yes 00 ◯ No

[S8]END TIME	DATE: CURRENT TIME s8_end_time ....

STATIC TEXT

E   !IsAnswered(s8_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E   NumberUnansweredQuestions(section_8)>0

ATTENTION! YOU HAVE %unanswered_sec_8% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_8)	DOUBLE unanswered_sec_8
VARIABLE Math.Round((s8_end_time – s8_start_time).Value.TotalSeconds / 60,2)	DOUBLE s8_duration

EXPERIMENT

STATIC TEXT

General information

<u>Enumerator</u>: In treatment group 1 (T1), ONLY the HEAD of the household should watch the video and play the game. In treatment group 2 (T2), BOTH HEAD AND SPOUSE (e.g., husband and wife) should watch the video and play the game. In the control group, NO VIDEO is shown, and ONLY the HEAD should play the game.

<u>T1 ONLY HH HEAD watches and plays game</u>:
READ: We will now move on to the second part of the survey, where we will carry out TWO activities together. First, we will watch a short video and then we will ask you to make a real decision about Prosopis management in your community in a decision-making task. We will also ask you a few more questions about your aspirations, future-making behavior, and perceptions about Prosopis.

<u>T2 BOTH HEAD AND SPOUSE watch and play game</u>:
READ: We will now move on to the second part of the survey, where we will carry out TWO activities together. First, we will watch a short video and then we will ask you to make a real decision about Prosopis management in your community in a decision-making task. We will also ask you a few more questions about your aspirations, future-making behavior, and perceptions about Prosopis.

<u>Control group NO VIDEO and ONLY HH HEAD plays game</u>:
READ: We will now move on to the second part of the survey, where we will carry out ONE activity together. First, we will ask you to make a real decision about Prosopis management in your community in a decision-making task and then ask you a few more questions about your aspirations, future-making behavior, and perceptions about Prosopis.

EXPERIMENT
T1 ONLY HH HEAD WATCHES VIDEO AND PLAYS PUBLIC GOODS GAME
E   `experiment_group_ind==1`

Who will watch the video and play game?	MULTI-SELECT: LINKED $\qquad$ t1_resp
	SOURCE OF CATEGORIES: ROSTER R_MEMBERS

I   <u>Enumerator</u>: In treatment group 1 (T1), ONLY the HEAD of the household should watch the video. Hence, only one member MUST watch the video. In case the member is not present or available for in
And 320 other symbols [6]

F   `age>=18`
E   `experiment_group_ind==1`
V1 `self.Length==1`
M1 In treatment 1 HH, only one member preferably the HH head should watch the video. Hence, only one member MUST watch the video.

STATIC TEXT

<u>Enumerator</u>: Introduce the video and get the video ready on the tablet to play.

<u>T1 ONLY HH HEAD watches video</u>:
READ: The video that you will watch on the tablet shows the story of two communities in Baringo where Prosopis has invaded the area. In the video, members of both communities explain the work they do together and how managing Prosopis will protect their future.

<u>Enumerator</u>: Show the video on the tablet.

<u>Enumerator</u>: At the end of the video, ask the respondent for his/her opinion on the video. Allow the respondent to give a brief opinion. If the respondent is hesitant to respond, ask more direct questions like do you like the video? Why?

EXPERIMENT / T1 ONLY HH HEAD WATCHES VIDEO AND PLAYS PUBLIC GOODS GAME
Roster: COLLECTIVE ACTION VIDEO T1- %ROSTERTITLE%
generated by list question numfamily $\qquad$ r_videot1

E   `t1_resp.Select(x=>x[0]).Contains(@rowcode)`

STATIC TEXT

For each of the following statements, on a scale of 1 (Strongly disagree) to 5 (Strongly agree), how much you agree with the statements.

5-point ratings

- -	-	+/-	+	++
1	2	3	4	5
*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

---

1. I like the video.

SINGLE-SELECT   `video_liket1`

- 01 ○ Strongly disagree
- 02 ○ Disagree
- 03 ○ Indifferent (neither nor)
- 04 ○ Agree
- 05 ○ Strongly agree

---

2. The characters in the video are similar to me.

SINGLE-SELECT   `video_characterst1`

- 01 ○ Strongly disagree
- 02 ○ Disagree
- 03 ○ Indifferent (neither nor)
- 04 ○ Agree
- 05 ○ Strongly agree

---

3. My village can be as successful in the future as the villages in the video.

SINGLE-SELECT   `video_villagesuccesst1`

- 01 ○ Strongly disagree
- 02 ○ Disagree
- 03 ○ Indifferent (neither nor)
- 04 ○ Agree
- 05 ○ Strongly agree

STATIC TEXT

Now let's move to the game.

In treatment group 1 (T1), ONLY the HEAD of the household should play the game.

T1 ONLY HH HEAD plays game:
Enumerator: Have 1 envelope with 300 KES (in the form of 10-KES vouchers) and 1 receipt form (to be signed by the head) ready for the game.

STATIC TEXT

[1] Instructions for the experiment: Experimenter explains to respondent

1. Prosopis is often considered as a common property resource because it grows on common grazing areas. In this game, you and 14 of your neighbors, chosen at random, will decide on contributions to Prosopis management in your village. Depending on the local invasion level, management will focus on prevention, early detection and rapid response, or control. You will not know who the neighbors are who are also playing this game. We will give you and your neighbors money in the form of vouchers and ask you to contribute to Prosopis management from that money. Contributions will be used for a single intervention (e.g., clearing, sowing, and follow-up weeding of common grazing areas) and will be available only once. The decisions that you and your neighbors make determine the budget available for Prosopis management in your village. We respect the decision of every villager who participates in this game. We will

not evaluate whether your decision is right or wrong.

2. At the beginning you will be given 300 KES in the form of 10-KES vouchers (experimenter places the envelope (with the personal code) containing the vouchers in front of the respondent).

3. You have to decide how much of these 300 KES you want to contribute to a group pot for Prosopis management in your village and how much you want to keep. You must leave the amount (i.e., the number of vouchers) you want to contribute to the group pot in the envelope, and take out the amount (i.e., the number of vouchers) you want to keep and put it in your pocket. Then you have to close the envelope and return it to me.

4. You can contribute all or nothing to the group pot, or you can contribute part of it and keep part. Whether and how you divide it is up to you.

5. Your neighbors who participate in this game will receive the same amount and face the same choice. None of you will know each other's contributions.

6. The amount that you and your neighbors contribute to the group pot is multiplied by 2 by us.

7. The total amount of contributions from you and your neighbors will be announced anonymously a few days later, after we have completed the games in your village, at an organized meeting with you, your neighbors, and the village committee. During the meeting, the envelopes will be opened by our research assistant and the money will be counted and publicly announced. The group's contribution is multiplied by 2. The money is immediately sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in your village. You will receive the equivalent value of the vouchers kept by M-pesa transfer.

STATIC TEXT

[2] Experiment explanation example: Experimenter explains to respondent

1. Let's consider some examples:

a. <u>EXAMPLE 1</u>: If you, for instance, decide to contribute 100 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 100 KES (= 10 x 10-KES vouchers) in the envelope. I close the envelope and return it to you.]

b. And what happens with the remaining 200 KES? [ANSWER OF THE RESPONDENT: I can keep it. I will take out 200 KES (= 20 x 10-KES vouchers) from the envelope and put it in my pocket.] (Please let the respondent demonstrate this.)

c. <u>EXAMPLE 2</u>: And if you, for instance, decide to contribute 300 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave the entire 300 KES (all vouchers) in the envelope.]

d. <u>EXAMPLE 3</u>: And if you, for instance, decide to contribute 0 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I take the entire 300 KES (all vouchers) out of the envelope and put it in my pocket.]

e. <u>EXAMPLE 4</u>: If you, for instance, decide to contribute 150 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 150 KES (= 15 x 10-KES vouchers) in the envelope.

f. How many people will participate in this game? [ANSWER OF THE RESPONDENT: I will play the game with 14 of my neighbors from my village.]

g. Will you know who the other people in the game are? [ANSWER OF THE RESPONDENT: No, I will not know who they are.]

h. Will you know how much your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: No, I will not know how much they contribute.]

i. What happens to the money that you and your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: The money we contribute to the group pot will be multiplied by 2 by you.]

j. When will you know about the budget available for Prosopis management in your village? [ANSWER OF THE RESPONDENT: Only in a few days. The total amount of contributions will be announced at a meeting after my neighbors are also done with this game.]

k. What will happen during this meeting? [ANSWER OF THE RESPONDENT: The envelopes will be opened, the money will be counted and publicly announced. Then the group contribution is multiplied by 2. The money will be sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in my village.]

2. Is this clear?

3. To make sure you understand the game, could you please repeat the rules of the game?

STATIC TEXT

[3] Instructions to the experimenter

1. Examples are repeated until the experimenter feels confident about the respondent's understanding.

2. Once the experimenter is satisfied with the respondent's understanding, the actual decision is made.

STATIC TEXT

[4] Instructions for the experiment: Experimenter explains to respondent

1. Please take your decision now.

2. Please leave the amount (KES) (i.e., the number of vouchers) you want to contribute to the group pot in the envelope and take out the amount (KES) (i.e., the number of vouchers) you want to keep and put it in your pocket. Once you are ready, please close the envelope and return it to me. We will keep your contribution decision anonymous. This means that non one in the village will know about your contribution.

3. Take as much time as you need for your decision. In the meantime, I will turn around, so that I don't disturb you. Just call me when you are done.

4. Do you have any questions?

STATIC TEXT

[5] Instructions to the experimenter

1. The experimenter collects the closed envelope from the respondent.

2. A receipt form must be signed by the respondent.

Experimental material

1 envelope (personal code) with 300 KES in the form of 10-KES vouchers

Receipt form

EXPERIMENT / T1 ONLY HH HEAD WATCHES VIDEO AND PLAYS PUBLIC GOODS GAME
Roster: PUBLIC GOODS GAME T1- %ROSTERTITLE%
generated by list question numfamily

pgg_t1

E `t1_resp.Select(x=>x[0]).Contains(@rowcode)`

Did you make sure that the respondent provides an MPESA number (if he/she can provide) where to send the money?	SINGLE-SELECT pgg_mpesa_t1
	01 ⚪ Yes
	00 ⚪ No
Did you make sure that the respondent signed the payment form?	SINGLE-SELECT pgg_sign_t1
	01 ⚪ Yes
	00 ⚪ No

EXPERIMENT
T2 BOTH HH HEAD AND SPOUSE WATCH VIDEO AND PLAY PUBLIC GOODS GAME

E `experiment_group_ind==2`

Who will watch the video and play game?	MULTI-SELECT: LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	t2_resp

I   <u>Enumerator</u>: In treatment group 2 (T2), BOTH HEAD AND SPOUSE (e.g., husband and wife) should watch the video. Hence, two members both men and women MUST watch the video. In case the member is n And 350 other symbols [7]

F   age>=18

E   experiment_group_ind==2

V1 self.Length==2

M1 In treatment 2 HH, two member preferably the HH head and his/her spouse should watch the video. Hence, two members both men and women MUST watch video.

STATIC TEXT

Enumerator: Introduce the video and get the video ready on the tablet to play.

T2 BOTH HEAD AND SPOUSE watch the video:
READ: The video that you will watch on the tablet shows the story of two communities in Baringo where Prosopis has invaded the area. In the video, members of both communities explain the work they do together and how managing Prosopis will protect their future.

Enumerator: Show the video on the tablet.

Enumerator: At the end of the video, ask the respondent for his/her opinion on the video. Allow the respondent to give a brief opinion. If the respondent is hesitant to respond, ask more direct questions like do you like the video? Why?

EXPERIMENT / T2 BOTH HH HEAD AND SPOUSE WATCH VIDEO AND PLAY PUBLIC GOODS GAME
Roster: COLLECTIVE ACTION VIDEO T2- %ROSTERTITLE%
generated by list question numfamily   r_t2

E   t2_resp.Select(x=>x[0]).Contains(@rowcode)

What do you think about the video? Please state your opinion. Positive and negative opinions are welcome.	TEXT	video_opiniont2

STATIC TEXT

For each of the following statements, on a scale of 1 (Strongly disagree) to 5 (Strongly agree), how much you agree with the statements.

1. I like the video.	SINGLE-SELECT	video_liket2
	01 ○ Strongly disagree	
	02 ○ Disagree	
	03 ○ Indifferent (neither nor)	
	04 ○ Agree	
	05 ○ Strongly agree	

2. The characters in the video are similar to me.	SINGLE-SELECT `video_characterst2` 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
3. My village can be as successful in the future as the villages in the video.	SINGLE-SELECT `video_villagesuccesst2` 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree

STATIC TEXT

Now let's move to the game.

In treatment group 2 (T2), BOTH HEAD AND SPOUSE (e.g., husband and wife) should play the game.

<u>*T2 BOTH HEAD AND SPOUSE play game:*</u>
<u>*Enumerator:*</u> *Have 2 envelopes with 300 KES each (in the form of 10-KES vouchers) and 2 receipt forms (to be signed by the head and spouse) ready for the game.*

STATIC TEXT

[1] Instructions for the experiment: Experimenter explains to respondent

1. Prosopis is often considered as a common property resource because it grows on common grazing areas. In this game, you and 14 of your neighbors, chosen at random, will decide on contributions to Prosopis management in your village. Depending on the local invasion level, management will focus on prevention, early detection and rapid response, or control. You will not know who the neighbors are who are also playing this game. We will give you and your neighbors money in the form of vouchers and ask you to contribute to Prosopis management from that money. Contributions will be used for a single intervention (e.g., clearing, sowing, and follow-up weeding of common grazing areas) and will be available only once. The decisions that you and your neighbors make determine the budget available for Prosopis management in your village. We respect the decision of every villager who participates in this game. We will not evaluate whether your decision is right or wrong.

2. At the beginning you will be given 300 KES in the form of 10-KES vouchers (experimenter places the envelope (with the personal code) containing the vouchers in front of the respondent).

3. You have to decide how much of these 300 KES you want to contribute to a group pot for Prosopis management in your village and how much you want to keep. You must leave the amount (i.e., the number of vouchers) you want to contribute to the group pot in the envelope, and take out the amount (i.e., the number of vouchers) you want to keep and put it in your pocket. Then you have to close the envelope and return it to me.

4. You can contribute all or nothing to the group pot, or you can contribute part of it and keep part. Whether and how you divide it is up to you.

5. Your neighbors who participate in this game will receive the same amount and face the same choice. None of you will know each other's contributions.

6. The amount that you and your neighbors contribute to the group pot is multiplied by 2 by us.

7. The total amount of contributions from you and your neighbors will be announced anonymously a few days later, after we have completed the games in your village, at an organized meeting with you, your neighbors, and the village committee. During the meeting, the envelopes will be opened by our research assistant and the money will be counted and publicly announced. The group's contribution is multiplied by 2. The money is immediately sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in your village. You will receive the equivalent value of the vouchers kept by M-pesa transfer.

STATIC TEXT

1. Let's consider some examples:

a. <u>EXAMPLE 1</u>: If you, for instance, decide to contribute 100 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 100 KES (= 10 x 10-KES vouchers) in the envelope. I close the envelope and return it to you.]

b. And what happens with the remaining 200 KES? [ANSWER OF THE RESPONDENT: I can keep it. I will take out 200 KES (= 20 x 10-KES vouchers) from the envelope and put it in my pocket.] (Please let the respondent demonstrate this.)

c. <u>EXAMPLE 2</u>: And if you, for instance, decide to contribute 300 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave the entire 300 KES (all vouchers) in the envelope.]

d. <u>EXAMPLE 3</u>: And if you, for instance, decide to contribute 0 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I take the entire 300 KES (all vouchers) out of the envelope and put it in my pocket.]

e. <u>EXAMPLE 4</u>: If you, for instance, decide to contribute 150 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 150 KES (= 15 x 10-KES vouchers) in the envelope.

f. How many people will participate in this game? [ANSWER OF THE RESPONDENT: I will play the game with 14 of my neighbors from my village.]

g. Will you know who the other people in the game are? [ANSWER OF THE RESPONDENT: No, I will not know who they are.]

h. Will you know how much your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: No, I will not know how much they contribute.]

i. What happens to the money that you and your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: The money we contribute to the group pot will be multiplied by 2 by you.]

j. When will you know about the budget available for Prosopis management in your village? [ANSWER OF THE RESPONDENT: Only in a few days. The total amount of contributions will be announced at a meeting after my neighbors are also done with this game.]

k. What will happen during this meeting? [ANSWER OF THE RESPONDENT: The envelopes will be opened, the money will be counted and publicly announced. Then the group contribution is multiplied by 2. The money will be sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in my village.]

2. Is this clear?

3. To make sure you understand the game, could you please repeat the rules of the game?

STATIC TEXT

[3] Instructions to the experimenter

1. Examples are repeated until the experimenter feels confident about the respondent's understanding.

2. Once the experimenter is satisfied with the respondent's understanding, the actual decision is made.

STATIC TEXT

[4] Instructions for the experiment: Experimenter explains to respondent

1. Please take your decision now.

2. Please leave the amount (KES) (i.e., the number of vouchers) you want to contribute to the group pot in the envelope and take out the amount (KES) (i.e., the number of vouchers) you want to keep and put it in your pocket. Once you are ready, please close the envelope and return it to me. We will keep your contribution decision anonymous. This means that non one in the village will know about your contribution.

3. Take as much time as you need for your decision. In the meantime, I will turn around, so that I don't disturb you. Just call me when you are done.

4. Do you have any questions?

[5] Instructions to the experimenter

1. The experimenter collects the closed envelope from the respondent.

2. A receipt form must be signed by the respondent.

Experimental material

1 envelope (personal code) with 300 KES in the form of 10-KES vouchers

Receipt form

EXPERIMENT / T2 BOTH HH HEAD AND SPOUSE WATCH VIDEO AND PLAY PUBLIC GOODS GAME

Roster: PUBLIC GOODS GAME T2- %ROSTERTITLE%

generated by list question numfamily

pgg_t2

E `t2_resp.Select(x=>x[0]).Contains(@rowcode)`

Did you make sure that the respondent provides an MPESA number (if he/she can provide) where to send the money?	SINGLE-SELECT pgg_mpesa_t2 01 ○ Yes 00 ○ No
Did you make sure that the respondent signed the payment form?	SINGLE-SELECT pgg_sign_t2 01 ○ Yes 00 ○ No

---

EXPERIMENT

CONTROL GROUP NO VIDEO AND ONLY HH HEAD PLAYS GAME

E `experiment_group_ind==3`

Now let's move to the game.

In the control group, ONLY the HEAD should play the game.

Control group ONLY HH HEAD plays game:
Enumerator: Have 1 envelope with 300 KES (in the form of 10-KES vouchers) and 1 receipt form (to be signed by the head) ready for the game.

Who will play the game?	MULTI-SELECT: LINKED control_resp SOURCE OF CATEGORIES: ROSTER R MEMBERS
I <u>Enumerator</u>: In the control group, NO VIDEO is shown, and ONLY the HEAD should play the game. Hence, only one member preferably HH head MUST watch play game. In case the member is not present o And 338 other symbols [8]	
F `age>=18`	
E `experiment_group_ind==3`	
V1 `self.Length==1`	
M1 In control HH, only one member preferably the HH head should play the game. Hence, only one member MUST be selected.	

[1] Instructions for the experiment: Experimenter explains to respondent

1. Prosopis is often considered as a common property resource because it grows on common grazing areas. In this game, you and 14 of your neighbors, chosen at random, will decide on contributions to Prosopis management in your village. Depending on the local invasion level, management will focus on prevention, early detection and rapid response,

or control. You will not know who the neighbors are who are also playing this game. We will give you and your neighbors money in the form of vouchers and ask you to contribute to Prosopis management from that money. Contributions will be used for a single intervention (e.g., clearing, sowing, and follow-up weeding of common grazing areas) and will be available only once. The decisions that you and your neighbors make determine the budget available for Prosopis management in your village. We respect the decision of every villager who participates in this game. We will not evaluate whether your decision is right or wrong.

2. At the beginning you will be given 300 KES in the form of 10-KES vouchers (experimenter places the envelope (with the personal code) containing the vouchers in front of the respondent).

3. You have to decide how much of these 300 KES you want to contribute to a group pot for Prosopis management in your village and how much you want to keep. You must leave the amount (i.e., the number of vouchers) you want to contribute to the group pot in the envelope, and take out the amount (i.e., the number of vouchers) you want to keep and put it in your pocket. Then you have to close the envelope and return it to me.

4. You can contribute all or nothing to the group pot, or you can contribute part of it and keep part. Whether and how you divide it is up to you.

5. Your neighbors who participate in this game will receive the same amount and face the same choice. None of you will know each other's contributions.

6. The amount that you and your neighbors contribute to the group pot is multiplied by 2 by us.

7. The total amount of contributions from you and your neighbors will be announced anonymously a few days later, after we have completed the games in your village, at an organized meeting with you, your neighbors, and the village committee. During the meeting, the envelopes will be opened by our research assistant and the money will be counted and publicly announced. The group's contribution is multiplied by 2. The money is immediately sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in your village. You will receive the equivalent value of the vouchers kept by M-pesa transfer.

STATIC TEXT

[2] Experiment explanation example: Experimenter explains to respondent

1. Let's consider some examples:

a. <u>EXAMPLE 1</u>: If you, for instance, decide to contribute 100 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 100 KES (= 10 x 10-KES vouchers) in the envelope. I close the envelope and return it to you.]

b. And what happens with the remaining 200 KES? [ANSWER OF THE RESPONDENT: I can keep it. I will take out 200 KES (= 20 x 10-KES vouchers) from the envelope and put it in my pocket.] (Please let the respondent demonstrate this.)

c. <u>EXAMPLE 2</u>: And if you, for instance, decide to contribute 300 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave the entire 300 KES (all vouchers) in the envelope.]

d. <u>EXAMPLE 3</u>: And if you, for instance, decide to contribute 0 KES to the group pot, what do you have to do? [ANSWER OF THE RESPONDENT: I take the entire 300 KES (all vouchers) out of the envelope and put it in my pocket.]

e. <u>EXAMPLE 4</u>: If you, for instance, decide to contribute 150 KES to the group pot for Prosopis management in your village, what do you have to do? [ANSWER OF THE RESPONDENT: I have to leave 150 KES (= 15 x 10-KES vouchers) in the envelope.

f. How many people will participate in this game? [ANSWER OF THE RESPONDENT: I will play the game with 14 of my neighbors from my village.]

g. Will you know who the other people in the game are? [ANSWER OF THE RESPONDENT: No, I will not know who they are.]

h. Will you know how much your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: No, I will not know how much they contribute.]

i. What happens to the money that you and your neighbors contribute to the group pot? [ANSWER OF THE RESPONDENT: The money we contribute to the group pot will be multiplied by 2 by you.]

j. When will you know about the budget available for Prosopis management in your village? [ANSWER OF THE RESPONDENT: Only in a few days. The total amount of contributions will be announced at a meeting after my neighbors are also done with this game.]

k. What will happen during this meeting? [ANSWER OF THE RESPONDENT: The envelopes will be opened, the money will be counted and publicly announced. Then the group contribution is multiplied by 2. The money will be sent to the village treasurer via M-pesa, who is responsible for the budget that will later be used for Prosopis management in my village.]

2. Is this clear?

3. To make sure you understand the game, could you please repeat the rules of the game?

STATIC TEXT

[3] Instructions to the experimenter

1. Examples are repeated until the experimenter feels confident about the respondent's understanding.

2. Once the experimenter is satisfied with the respondent's understanding, the actual decision is made.

STATIC TEXT

[4] Instructions for the experiment: Experimenter explains to respondent

1. Please take your decision now.

2. Please leave the amount (KES) (i.e., the number of vouchers) you want to contribute to the group pot in the envelope and take out the amount (KES) (i.e., the number of vouchers) you want to keep and put it in your pocket. Once you are ready, please close the envelope and return it to me. We will keep your contribution decision anonymous. This means that non one in the village will know about your contribution.

3. Take as much time as you need for your decision. In the meantime, I will turn around, so that I don't disturb you. Just call me when you are done.

4. Do you have any questions?

STATIC TEXT

[5] Instructions to the experimenter

1. The experimenter collects the closed envelope from the respondent.

2. A receipt form must be signed by the respondent.

Experimental material

1 envelope (personal code) with 300 KES in the form of 10-KES vouchers

Receipt form

EXPERIMENT / CONTROL GROUP NO VIDEO AND ONLY HH HEAD PLAYS GAME

Roster: PUBLIC GOODS GAME CONTROL- %ROSTERTITLE%

generated by list question numfamily

pgg_control

E `control_resp.Select(x=>x[0]).Contains(@rowcode)`

Did you make sure that the respondent provides an MPESA number (if he/she can provide) where to send the money?	SINGLE-SELECT 01 ○ Yes 00 ○ No	pgg_mpesa_control
Did you make sure that the respondent signed the payment form?	SINGLE-SELECT 01 ○ Yes 00 ○ No	pgg_sign_control

SECTION 9: PERCEPTIONS ABOUT PROSOPIS INVASION

[S9]START TIME	DATE: CURRENT TIME	s9_start_time

STATIC TEXT

E `!IsAnswered(s9_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

Perceptions about Prosopis Invasion This subsection should be asked to BOTH MEN AND WOMEN in the household.

SECTION 9: PERCEPTIONS ABOUT PROSOPIS INVASION
Roster: PROSOPIS-GENDER - %ROSTERTITLE%
generated by list question numfamily

r_invasive_gen

E `avaliable_member.Select(x=>x[0]).Contains(@rowcode)`

Does Prosopis provide you more benefits or di sadvantages?	SINGLE-SELECT — prosopis_advantage
	01 ◯ More benefits
	02 ◯ More disadvantage
	03 ◯ Neutral

To what extent do you want to eradicate Proso pis? I Completely eradicate - I want to eliminate all prosopis from the area, regardless of the potential consequences or impacts on other ecosystems Targeted eradication - I want to remove prosopis from spe And 515 other symbols [9]	SINGLE-SELECT — will_prosopis_eradicate
	01 ◯ Completely eradicate
	02 ◯ Targeted eradication or sust ainable management
	03 ◯ Limited control
	04 ◯ No action
	96 ◯ Other ➡️ specify:

Please specify Other. E `will_prosopis_eradicate == 96`	TEXT — will_prosopis_eradicate_other

Has the density/cover of Prosopis increased/de creased today compared to 2019?	SINGLE-SELECT — prosopis_density
	01 ◯ Increased
	02 ◯ Decreased
	03 ◯ Just the same

What do you mainly use Prosopis for? I Please select all that apply. Mention first the most important use [multi-select ordered].	MULTI-SELECT: ORDERED prosopis_use 01 ☐ As a shade against the sun 02 ☐ For firewood and charcoal production 03 ☐ Fencing and building materials 04 ☐ Placing bee hives for honey production 05 ☐ Wind protection (prevent whirl winds) 06 ☐ Soil and water conservation 07 ☐ Production of ropes 08 ☐ As animal fodder 09 ☐ Source of Hired labour for my additional income 10 ☐ Nothing, no use to me 96 ☐ Other, specify
Please specify Other use of Prosopis for you. E prosopis_use.Contains(96)	TEXT prosopis_use_other
In a year how much income (in KSH) do you get from Prosopis (either using and selling the prosopis plant e.g. as charcoal, or getting employed as labourer in removing prosopis)? Enter 0 if no income is received. I RECORD 0 if no income is recived	NUMERIC: INTEGER income_use_1
Who in the household is mainly responsible in this income-generating activities related to Prospis (e.g. charcoal making, hired labourer, etc.)? Specify in relation to the HH head. E income_use_1>0	MULTI-SELECT: LINKED who SOURCE OF CATEGORIES: ROSTER R MEMBERS

What are the MAIN problems you are facing with Prosopis today? I Please mention your topmost problem first. [multiselect ordered]	MULTI-SELECT: ORDERED prp_problem 01 ☐ Declining pastures 02 ☐ Reduced farmlands 03 ☐ Livestock lose their teeth 04 ☐ bad tasting meat 05 ☐ Death of livestock 06 ☐ Flooding 07 ☐ Soil erosion, degradation 08 ☐ Health issues to humans (e.g. malaria) 09 ☐ Competition for resources (e.g. water, soil nutrients) 10 ☐ Declining yields or production 11 ☐ Fire risk 12 ☐ Damage to infrastructure (e.g. irrigation canals) 13 ☐ Difficulty in control and removal 14 ☐ Social and cultural impacts (e.g. conflicts) 96 ☐ Others, specify
Please specify Other main problem you are facing with Prosopis. E prp_problem.Contains(96)	TEXT prp_problem_oth ....
Are you willing to participate in any 1-year program meant to take out Prosopis?	SINGLE-SELECT prosopis_group_ind 01 ◯ Yes 00 ◯ No
If yes, how many hours per day in 5 working days are you able to invest in this program? E prosopis_group_ind==1 V1 self>0 && self<=24 M1 Hours MUST be more than 0 but NOT more than 24 hours!	NUMERIC: DECIMAL prosopis_group_hours --------------------------------
What do you think is the effective community program to control Prosopis invasion?	SINGLE-SELECT prosopis_control_effective 01 ◯ Exchange labour-to-labour within community 02 ◯ Encourage community to cultivate lands 03 ◯ Pay people to remove Prosopis 96 ◯ Others, specify

Please specify other community program/s you think is/are effective in controling Prosopis.	TEXT	prosopis_control_effectiveoth
E prosopis_control_effective==96		

[S9]END TIME	DATE: CURRENT TIME	s9_end_time

STATIC TEXT

E `!IsAnswered(s9_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E `NumberUnansweredQuestions(section_9)>0`

ATTENTION! YOU HAVE %unanswered_sec_9% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE `NumberUnansweredQuestions(section_9)`	DOUBLE	unanswered_sec_9
VARIABLE `Math.Round((s9_end_time - s9_start_time).Value.TotalSeconds / 60,2)`	DOUBLE	s9_duration

SECTION 10: COMMUNITY ASPIRATIONS

[S10]START TIME	DATE: CURRENT TIME	s10_start_time
		....

STATIC TEXT

E `!IsAnswered(s10_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

This section should be asked to BOTH MEN AND WOMEN of the household, preferably the head and his/her spouse (e.g. husband and wife). In case the other member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The same men and women respondents of the household MUST be asked for all the sections requiring BOTH gender interviews.

SECTION 10: COMMUNITY ASPIRATIONS

Roster: COMMUNITY ASPIRATIONS - %ROSTERTITLE%
generated by list question numfamily

r_comm_asp

E `avaliable_member.Select(x=>x[0]).Contains(@rowcode)`

STATIC TEXT

Participation Aspirations Number of organized meetings of village residents

What is the maximum number of organized meetings of village residents to discuss village issues and events that your village can hold per year? Enter number.	NUMERIC: INTEGER	meeting_max
V1 `self<500`		
M1 Too much number of meetings! Is that realistic? Please confirm.		

What is the minimum number of organized meetings of village residents to discuss village issues and events that your village can hold per year? Enter number.	NUMERIC: INTEGER	meeting_min
E `meeting_max>0`		
V1 `self<500`		
M1 Too much number of meetings! Is that realistic? Please confirm.		
V2 `self<meeting_max`		
M2 Minimum number MUST NOT be more than maximum number.		

What is the number of organized meetings of village residents to discuss village issues and events that your village holds per year at present? Enter number.	NUMERIC: INTEGER	meeting_current
V1 `self<=meeting_max`		
M1 Present number of meetings MUST NOT be more than maximum number of meetings in the village that you mentioned.		

What is the number of organized meetings of village residents to discuss village issues and events that you would like your village to hold per year in the future? Enter number.	NUMERIC: INTEGER	meeting_future
V1 `self < 500`		
M1 Too much number of meetings! Is that realistic? Please confirm.		

What is the number of organized meetings of village residents to discuss village issues and events that you would have liked your village to achieve 5 years ago for today? Enter number. V1 `self < 500` M1 Too much number of meetings! Is that realistic? Please confirm.	NUMERIC: INTEGER meeting_past ------------------------------.

STATIC TEXT

Housing Aspirations A very high level (5) of housing conditions means finished walls (cement, stone with lime/cement, bricks, cement blocks, covered adobe, or wood planks/shingles). In contrast, a very low level (1) of housing conditions means natural walls (cane/palm/trunks, grass/reeds, or mud/cow dung), no walls, bamboo with mud, stone with mud, or other. A moderate level (2, 3, or 4) of housing conditions means uncovered adobe, plywood, cardboard, reused wood, or corrugated iron sheets.

5-point ratings

-- / - / +/- / + / ++
1 / 2 / 3 / 4 / 5
* / ** / *** / **** / *****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

On a scale of 1 to 5, where 1 indicates a very low level of housing conditions and 5 indicates a very high level of housing conditions, what is the level of housing conditions in your village at present? V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	NUMERIC: INTEGER housing_present ------------------------------.
What is the level of housing conditions that you would like your village to achieve in the future? V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	NUMERIC: INTEGER housing_future ------------------------------.
What is the level of housing conditions that you would have liked your village to achieve 5 years ago for today? V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	NUMERIC: INTEGER housing_past ------------------------------.

What particular housing conditions would you like your village to achieve in the future?	SINGLE-SELECT housing_future_type
	01 ⭘ Grass and mud houses, no electricity, no toilet
	02 ⭘ Mud wall, iron sheets roof, no cement, no electricity, no toilet
	03 ⭘ Both iron sheets walls and roof, solar lighting, pit latrine toilets
	04 ⭘ Stone walls, iron sheets roof, cemented floor, latrine, water tanks
	05 ⭘ Cement, stones, bricks, toilets inside
	96 ⭘ Others, specify

| Please specify other housing conditions.

E housing_future_type==96 | TEXT   housing_future_type_oth

.... |

STATIC TEXT

Community Engagement Aspirations Contribution to village projects

What is the maximum annual contribution that a person in your village can contribute to village projects? (in KES)	NUMERIC: INTEGER engage_max
What is the minimum annual contribution that a person in your village can contribute to village projects? (in KES) E engage_max>0 V1 self<engage_max M1 Minimum number MUST not be more than maximum number!	NUMERIC: INTEGER engage_min
What is the average annual contribution that a person in your village contributes to village projects at present? (in KES) V1 self<=engage_max M1 Present annual contribution MUST NOT be more than the maximum number that you mentioned.	NUMERIC: INTEGER engage_present
What is the average annual contribution that you would like each village resident to contribute to village projects in the future? (in KES)	NUMERIC: INTEGER engage_future
What is the average annual contribution that each village resident contributes to village projects that you would have liked to achieve 5 years ago for today? (in KES)	NUMERIC: INTEGER engage_past

STATIC TEXT

Security Aspirations A very high level (5) of security means that you feel extremely safe every day without fear of violence, theft or vandalism. In contrast, a very low level (1) of security means that the fear of violence, theft or vandalism has a strong negative impact on your life.

5-point ratings

– –	–	+/–	+	++
1	**2**	**3**	**4**	**5**
*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

On a scale of 1 to 5, where 1 indicates a very low level of security and 5 indicates a very high level of security, what is the level of security your village has at present?

V1   self.InRange(1,5)
M1   Answer MUST be between 1 to 5!

NUMERIC: INTEGER   security_present

‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ .

What is the level of security that you would like your village to achieve in the future?

V1   self.InRange(1,5)
M1   Answer MUST be between 1 to 5!

NUMERIC: INTEGER   security_future

‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ .

What is the level of security that you would have liked your village to achieve 5 years ago for today?

V1   self.InRange(1,5)
M1   Answer MUST be between 1 to 5!

NUMERIC: INTEGER   security_past

‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ ‒ .

What form of insecurities would you like your village to prioritize to solve in the future in order to feel safe? Please mention first the most priority.

MULTI-SELECT: ORDERED   security_priority

01 ☐ Bandit attacks

02 ☐ Cattle rustling, cattle raids, cattle theft

03 ☐ Theft of money and assets like boda-boda

04 ☐ Con-man, con-artist

96 ☐ Others, specify

Please specify other forms of insecurities.

E   security_priority.Contains(96)

TEXT   security_priority_oth

· ·

STATIC TEXT

Social Support Aspirations A very high level (5) of social support means that people in your community receive full support when they need it. In contrast, a very low level (1) of social support means that community members receive little support when they need it. Social support refers to all resources. whether material, psychological, financial, or emotional, provided by a social network.

5-point ratings

--	-	+/-	+	++
1	2	3	4	5
*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

On a scale of 1 to 5, where 1 indicates a very low level of social support and 5 indicates a very high level of social support, what is the level of social support (whether formal or informal) in your village at present?

V1 `self.InRange(1,5)`
M1 Answer MUST be between 1 to 5!

NUMERIC: INTEGER — support_present

`- - - - - - - - - - - - - - - - - - - - - - - - - .`

What is the level of social support that you would like your village to achieve in the future?

V1 `self.InRange(1,5)`
M1 Answer MUST be between 1 to 5!

NUMERIC: INTEGER — support_future

`- - - - - - - - - - - - - - - - - - - - - - - - - .`

What is the level of social support that you would have liked your village to achieve 5 years ago for today?

V1 `self.InRange(1,5)`
M1 Answer MUST be between 1 to 5!

NUMERIC: INTEGER — support_past

`- - - - - - - - - - - - - - - - - - - - - - - - - .`

What is your MOST preferred type of social support to have in the future?

SINGLE-SELECT — support_type

- 01 ◯ Emotional support (e.g. comforting behaviours)
- 02 ◯ Instrumental (e.g. material goods and services like fertilizer, seeds, pesticides)
- 03 ◯ Financial (e.g. credit, loans, subsidies or aids)
- 04 ◯ Informational (e.g. training, extension advice on agriculture, livestock, health, or others)
- 05 ◯ Structural (e.g. social network, coops, frequency of interaction)
- 96 ◯ Others, specify

Please specify your other most preferred social support.

E `support_type==96`

TEXT — support_type_oth

`..................................................`

STATIC TEXT

Environmental Care Aspirations A very high level (5) of environmental quality means that people take highest care for the

environment and future generation in their village. In contrast, a very low level (1) of environmental quality means that people take little care for the environment and future generation.

5-point ratings

	--	-	+/-	+	++
	1	2	3	4	5
	*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
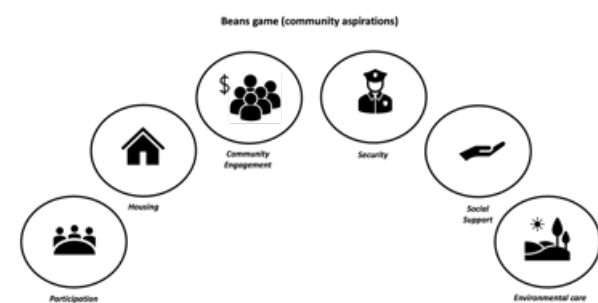Locus of control
Trust

On a scale of 1 to 5, where 1 indicates a very low level of environmental care and 5 indicates a very high level of environmental care, what is the level of environmental care in your village at present?	NUMERIC: INTEGER envt_present
V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	--.

What is the level of environmental care that you would like your village to achieve in the future?	NUMERIC: INTEGER envt_future
V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	--.

What is the level of environmental care that you would have liked your village to achieve 5 years ago for today?	NUMERIC: INTEGER envt_past
V1 `self.InRange(1,5)` M1 Answer MUST be between 1 to 5!	--.

STATIC TEXT

Dimension importance We have asked you about participation, housing, community engagement, security, social support, and environmental care. Each of these six categories appears here.

STATIC TEXT

Here are 24 bean seeds that you need to distribute among these six categories, depending on how important each category is to you personally. The more seeds you assign to a category, the more important it is to you.

Beans game (community aspirations)

Number of seeds for participation	NUMERIC: INTEGER imp_particip
V1 `self.InRange(0,24)` M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	--.

	NUMERIC: INTEGER	imp_housing
Number of seeds for housing		
V1 `self.InRange(0,24)`		
M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	- -.	

	NUMERIC: INTEGER	imp_engage
Number of seeds for community engagement		
V1 `self.InRange(0,24)`		
M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	- -.	

	NUMERIC: INTEGER	imp_security
Number of seeds for security		
V1 `self.InRange(0,24)`		
M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	- -.	

	NUMERIC: INTEGER	imp_support
Number of seeds for social support		
V1 `self.InRange(0,24)`		
M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	- -.	

	NUMERIC: INTEGER	imp_envt
Number of seeds for environmental care		
V1 `self.InRange(0,24)`		
M1 Number of seeds assigned MUST NOT be more than 24! Answer MUST be between 0 and 24!	- -.	

VARIABLE	LONG	total_seeds_comm
`imp_particip + imp_housing + imp_engage + imp_security + imp_support + imp_envt`		

STATIC TEXT

E `total_seeds_comm!=24`

V1 `(total_seeds_comm !=24) != true`

M1 The sum of total beans is less than 24, it should be 24!

The total number of seeds allocated to the six dimenstions (participation, housing, community engagement, security, social support, and environmental care) must be equal to 24. Please check again the distribution of the seeds across the dimensions.

[S10] END TIME	DATE: CURRENT TIME	s10_end_time
	....	

STATIC TEXT

E `!IsAnswered(s10_start_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E `NumberUnansweredQuestions(section_10)>0`

ATTENTION! YOU HAVE %unanswered_sec_10% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE	DOUBLE	unanswered_sec_10
`NumberUnansweredQuestions(section_10)`		

VARIABLE	DOUBLE	s10_duration
`Math.Round((s10_end_time - s10_start_time).Value.TotalSeconds / 60,2)`		

SECTION 11: INDIVIDUAL ASPIRATIONS

[S11]START TIME	DATE: CURRENT TIME	s11_start_time
	....	

STATIC TEXT

E `!IsAnswered(s11_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

Now, we would like to talk about how you currently rate yourself and your household's achievements. We will also talk about how you would like to see yourself and the household what you think you & your household will achieve in the next 5 to 10 years.

STATIC TEXT

This section on aspirations should be asked to BOTH MEN AND WOMEN of the household, preferably the head and his/her spouse (e.g. husband and wife). In case the other member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The same men and women respondents of the household MUST be asked for all the sections requiring BOTH gender interviews.

SECTION 11: INDIVIDUAL ASPIRATIONS
ASPIRATIONS

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS
Roster: ASPIRATION OF - %ROSTERTITLE%
generated by list question `numfamily`

r_main_members

E `avaliable_member.Select(x=>x[0]).Contains(@rowcode)`

RECORD THE TIME WHEN YOU START INTERVIE WING %rostertitle%	DATE: CURRENT TIME	start_time_aspi_1
	....	

STATIC TEXT

Now, we would like to talk about aspirations - that is, your goals (what you want to achieve) in life now and in the future. We will talk about your aspired (1) INCOME (in Ksh), (2) ASSETS (in Ksh) [the things you own], (3) LIVESTOCK (the number and types of animals you current and want to have), (4) SOCIAL STATUS [how you aspire others to see you in the society], (5) EDUCATION (education you aspire for your children or the children in your community), (6) OCCUPATIONS [your aspired employment or job]. We are also interested in your aspirations for agriculture.

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%
ASPIRATION LEVELS

STATIC TEXT

Income Aspirations Please report in Ksh.

What is the maximum level of income a person in your village can earn in a month?	NUMERIC: INTEGER	inc_max

V1 `self > 0`
M1 Maximum income in the village MUST be more than 0!

What is the minimum level of income an person with job in your village can earn in a month?	NUMERIC: INTEGER	inc_min
V1 `inc_min < inc_max && inc_min>0`		
M1 Minimum income MUST NOT be more than the maximum income in the village and MUST NOT be 0!		
What is your present level of income per month?	NUMERIC: INTEGER	inc_present
V1 `self<=inc_max`		
M1 Reported present income MUST NOT be more than the maximum income you mentioned!		
What level of monthly income would you like to have in the future?	NUMERIC: INTEGER	inc_future

STATIC TEXT

Asset Aspirations *Please report the value of assets in Ksh.*

What is the maximum value of assets a person has in this village? (Assets here include assets like house, vehicle, tv, mobile phone, furniture, EXCEPT LIVESTOCK)	NUMERIC: INTEGER	asset_max
V1 `self > 0`		
M1 Maximum in the village MUST be more than 0!		
What is the minimum value of assets a person has in this village? (Assets here include assets like house, vehicle, tv, mobile phone, furniture, EXCEPT LIVESTOCK)	NUMERIC: INTEGER	asset_min
V1 `self < asset_max`		
M1 Minimum MUST NOT be more than the maximum in the village!		
What is the current value of your assets at present?	NUMERIC: INTEGER	asset_present
V1 `self<=asset_max`		
M1 Reported present asset value MUST NOT be more than the maximum asset value you mentioned!		
What value of assets would you like to achieve in the future?	NUMERIC: INTEGER	asset_future

STATIC TEXT

Livestock Aspirations *Please report the number and type of animals you aspire to have in the future.*

Which among the livestock is your 3 MOST preferred or the MOST productive? Mention first the most important one for you.	MULTI-SELECT: ORDERED	liv_prefer
	01 ☐ Bulls/Oxens/Steers	
	02 ☐ Cows/Heifer	
	03 ☐ Calves - (young female or male cow)	
	04 ☐ Goats	
	05 ☐ Sheep	
	06 ☐ Camels	
	07 ☐ Donkey/Mules	
	08 ☐ Poultry (chicken, ducks, others)	
	09 ☐ Beehives and other insects (bees, crickets, etc.)	
	10 ☐ Horses	
	96 ☐ Other livestock or animals for productive uses	

Please specify Other livestock or animals for productive uses?	TEXT	liv_prefer_oth
E `liv_prefer.Contains(96)`	....	

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE% / ASPIRATION LEVELS

Roster: LIVESTOCK IN THE VILLAGE - %ROSTERTITLE%
generated by multi-select question `liv_prefer`   r_liv_asp

What is the maximum number of %rostertitle% a person has in this village? Enter number.	NUMERIC: INTEGER	liv_max
	--.	

What is the minimum number of %rostertitle% a person who owns livestock can have in this village? Enter number.	NUMERIC: INTEGER	liv_min
E `liv_max>0`	--.	
V1 `self < liv_max && self>0`		
M1 Minimum MUST NOT be more than the reported maximum in the village and MUST NOT be 0!		

How many %rostertitle% do you have currently? Enter number.	NUMERIC: INTEGER	liv_present
I Please mention again the types and number of livestock you currenty owned, as you reported in Section 4: Livestock Ownership.	--.	
E `liv_max>0`		
V1 `self<=liv_max`		
M1 Reported number of livestock MUST NOT be more than the maximum number you mentioned!		

How many %rostertitle% would you like to have in the future? Enter number.	NUMERIC: INTEGER	liv_future
	--.	

STATIC TEXT

Social Status Aspirations *Please report the level of social status in the society's ladder that you aspire.*

Best off → 10
9
8
7
6
5
4
3
2
1 ← Worst off

On a scale of 1 to 10, with 1 being the lowest and 10 the highest level of social status one has, what is the level of social status you have at present? V1 self>=1 && self<=10 M1 Social status score MUST be between 1 to 10.	NUMERIC: INTEGER stat_present - .
What is the level of social status that you would like to achieve in the future? V1 self>=1 && self<=10 M1 Social status score MUST be between 1 to 10.	NUMERIC: INTEGER stat_future - .

STATIC TEXT

Education Aspirations Please report the level of education that you aspire for your children or children in this community.

What is the maximum level of education an individual has in this village?	SINGLE-SELECT educ_max 00 ○ No formal education 01 ○ Nursery/ Kindergarten/ECD 02 ○ Primary 1 03 ○ Primary 2 04 ○ Primary 3 05 ○ Primary 4 06 ○ Primary 5 07 ○ Primary 6 08 ○ Primary 7 09 ○ Primary 8 10 ○ Secondary school Year 1 11 ○ Secondary school Year 2 12 ○ Secondary school Year 3 13 ○ Secondary school Year 4 14 ○ University 1 15 ○ University 2 And 4 other symbols [73]

What is the minimum level of education an indi
vidual has in this village?

V1 `self <= educ_max`

M1 Minimum MUST NOT be more than the maximum in the village.

SINGLE-SELECT   educ_min

00 ○ No formal education
01 ○ Nursery/ Kindergarten/ECD
02 ○ Primary 1
03 ○ Primary 2
04 ○ Primary 3
05 ○ Primary 4
06 ○ Primary 5
07 ○ Primary 6
08 ○ Primary 7
09 ○ Primary 8
10 ○ Secondary school Year 1
11 ○ Secondary school Year 2
12 ○ Secondary school Year 3
13 ○ Secondary school Year 4
14 ○ University 1
15 ○ University 2

And 4 other symbols [73]

James is a son in this household. He is five year
s old. If there were no limitations to the house
hold's capacity to educate him, how many year
s of schooling would you wish James to achieve
?

SINGLE-SELECT   educ_male_future

00 ○ No formal education
01 ○ Nursery/ Kindergarten/ECD
02 ○ Primary 1
03 ○ Primary 2
04 ○ Primary 3
05 ○ Primary 4
06 ○ Primary 5
07 ○ Primary 6
08 ○ Primary 7
09 ○ Primary 8
10 ○ Secondary school Year 1
11 ○ Secondary school Year 2
12 ○ Secondary school Year 3
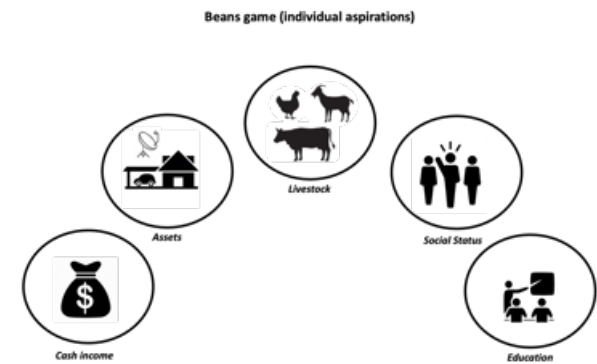13 ○ Secondary school Year 4
14 ○ University 1
15 ○ University 2

And 4 other symbols [73]

Mary is a daughter in this household. She is five years old. If there were no limitations to the household's capacity to educate her, how many years of schooling would you wish Mary to achieve?	SINGLE-SELECT educ_fem_future

SINGLE-SELECT   educ_fem_future

- 00 ○ No formal education
- 01 ○ Nursery/ Kindergarten/ECD
- 02 ○ Primary 1
- 03 ○ Primary 2
- 04 ○ Primary 3
- 05 ○ Primary 4
- 06 ○ Primary 5
- 07 ○ Primary 6
- 08 ○ Primary 7
- 09 ○ Primary 8
- 10 ○ Secondary school Year 1
- 11 ○ Secondary school Year 2
- 12 ○ Secondary school Year 3
- 13 ○ Secondary school Year 4
- 14 ○ University 1
- 15 ○ University 2

And 4 other symbols [73]

STATIC TEXT

Now I will give you 20 bean seeds. Please distribute these 20 seeds according to how you value the dimensions of life aspirations. That is, INCOME, ASSSETS, LIVESTOCK, SOCIAL STATUS, EDUCATION

Beans game (individual aspirations)

Assets   Livestock   Social Status   Cash income   Education

Number of seeds for income V1 self.InRange(0,20) M1 It must be between 0 and 20	NUMERIC: INTEGER imp_inc - - - - - - - - - - - - - - - - - - - .
Number of seeds for assets (land, machinery, and other productive assets, EXCEPT livestock) V1 self.InRange(0,20) M1 It must be between 0 and 20	NUMERIC: INTEGER imp_asset - - - - - - - - - - - - - - - - - - - .
Number of seeds for livestock V1 self.InRange(0,20) M1 It must be between 0 and 20	NUMERIC: INTEGER imp_livs - - - - - - - - - - - - - - - - - - - .
Number of seeds for social status (level of social status in the society's ladder) V1 self.InRange(0,20) M1 It must be between 0 and 20	NUMERIC: INTEGER imp_stat - - - - - - - - - - - - - - - - - - - .

Number of seeds for education	NUMERIC: INTEGER	imp_educ

V1 `self.InRange(0,20)`
M1 It must be between 0 and 20

- -

VARIABLE	LONG	asp_ind_seeds
`imp_inc + imp_asset + imp_livs + imp_stat + imp_educ`		

STATIC TEXT

E `asp_ind_seeds!=20`
V1 `asp_ind_seeds > 20`
M1 The sum of total beans is less than 20, it should be 20!
V2 `asp_ind_seeds < 20`
M2 The sum of total beans is greater than 20, it should be 20!

The total number of seeds allocated to the five dimenstions (income, asset, livestock, social status, education) must be equal to 20. Please check again the distribution of the seeds across the dimensions.

STATIC TEXT

Occupational Aspirations Please report the occupations, jobs, business, or any form of employment that you aspire in the future.

What kind of occupation or livelihood do you a spire to do in 5 years? Please mention top 3 wit h the first one your topmost aspired job. [multi -select ordered]	MULTI-SELECT: ORDERED	occup_future
	01 ☐ Large-scale crop cultivation	
	02 ☐ Small-scale crop cultivation	
	03 ☐ Livestock keeping/raising	
	04 ☐ Pasture farming	
	05 ☐ Fishing	
	06 ☐ Agricultural wage labour (hi red agricultural labour)	
	07 ☐ Self-employed agribusiness/ agrienterprise	
	08 ☐ Self-employed non-farm bus iness (wholesale/retail trade , etc.)	
	09 ☐ Food industry (e.g. restaura nts waiter, cashier)	
	10 ☐ Health (nurse, doctor, etc.)	
	11 ☐ Education/Teacher	
	12 ☐ Government officers/emplo yees/ civil servant	
	13 ☐ Other public sector jobs, sp ecify	
	14 ☐ Factory worker/manufacturi ng jobs	
	15 ☐ Construction labour	
	16 ☐ Transport/Driver	

And 10 other symbols [89]

What occupation would you wish for your male child or male children in this community? Please mention top 3 with the first one your topmost aspired job. [multi-select ordered]

MULTI-SELECT: ORDERED   occup_future_male

01 ☐ Large-scale crop cultivation

02 ☐ Small-scale crop cultivation

03 ☐ Livestock keeping/raising

04 ☐ Pasture farming

05 ☐ Fishing

06 ☐ Agricultural wage labour (hired agricultural labour)

07 ☐ Self-employed agribusiness/ agrienterprise

08 ☐ Self-employed non-farm business (wholesale/retail trade, etc.)

09 ☐ Food industry (e.g. restaurants waiter, cashier)

10 ☐ Health (nurse, doctor, etc.)

11 ☐ Education/Teacher

12 ☐ Government officers/employees/ civil servant

13 ☐ Other public sector jobs, specify

14 ☐ Factory worker/manufacturing jobs

15 ☐ Construction labour

16 ☐ Transport/Driver

And 10 other symbols [89]

What occupation would you wish for your female child? Please mention top 3 with the first one your topmost aspired job. [multi-select ordered]	MULTI-SELECT: ORDERED occup_future_fem
	01 ☐ Large-scale crop cultivation
	02 ☐ Small-scale crop cultivation
	03 ☐ Livestock keeping/raising
	04 ☐ Pasture farming
	05 ☐ Fishing
	06 ☐ Agricultural wage labour (hired agricultural labour)
	07 ☐ Self-employed agribusiness/ agrienterprise
	08 ☐ Self-employed non-farm business (wholesale/retail trade, etc.)
	09 ☐ Food industry (e.g. restaurants waiter, cashier)
	10 ☐ Health (nurse, doctor, etc.)
	11 ☐ Education/Teacher
	12 ☐ Government officers/employees/ civil servant
	13 ☐ Other public sector jobs, specify
	14 ☐ Factory worker/manufacturing jobs
	15 ☐ Construction labour
	16 ☐ Transport/Driver
	And 10 other symbols [89]

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%

AGRICULTURAL ASPIRATIONS

STATIC TEXT

Agricultural Aspirations Now we will talk about your aspirations or hopes in doing agricultural-related jobs including farming and livestock keeping.

How likely would you encourage your children or the children and youth in the community to be in agriculture--farm, livestock, or venture into farming (agribusiness or agrienterprise)?	SINGLE-SELECT youth_agri
	01 ○ Very unlikely
	02 ○ Unlikely
	03 ○ Maybe, maybe not
	04 ○ Likely
	05 ○ Very likely

What are the reasons why you are more likely to encourage your children or children in this village to be in agriculture? Please write. E youth_agri==4 || youth_agri==5	TEXT tofarm_why

What are the reasons why you are less likely or indifferent to encourage your children or children in this village to be in agriculture? E `youth_agri==1 || youth_agri==2 || youth_agri==3`	TEXT notfarm_why ....

STATIC TEXT

How likely would you aspire your children or children of this community to be employed as:

-AGRICULTURAL PRODUCER: farmer, pastoralists -AGRICULTURAL ENTREPRENEUR: running agricultural businesses and processing agri-products like crop and livestock products selling, honey selling, wine brewing, etc.) -NON-FARM work or businesses: employees, beauty salons, grocery shops/ kiosk

Please distribute the 10 bean seeds among these three types of categories of work.

Number of seeds for your children or children in this village to be AGRICULTURAL PRODUCER (i.e. farmer, pastoralist)- You grow crops or raise animals and sell them directly at harvest. V1 `self<=10` M1 Answer MUST NOT be more than 10 seeds!	NUMERIC: INTEGER asp_agriprod ------------------------------------
Number of seeds for your children or children in this village to be AGRICULTURAL ENTREPRENEUR (running agricultural businesses and processing agri-products like crop and livestock products selling, honey selling, wine brewing, etc.)- You grow crops or raise animals, sell them at the market area, slaughter animal and sell the meat, process some products and sell. V1 `self<=10` M1 Answer MUST NOT be more than 10 seeds!	NUMERIC: INTEGER asp_agrientrep ------------------------------------
Number of seeds for your children or children in this village to be in NON-FARM work or business (e.g. beauty salons, grocery shops/ kiosk, employees)- You run a non-farm shop like groceries or kiosk, sell clothes, or work as an employee. V1 `self<=10` M1 Answer MUST NOT be more than 10 seeds!	NUMERIC: INTEGER asp_nonfarm ------------------------------------
VARIABLE `asp_agriprod + asp_agrientrep + asp_nonfarm`	LONG asp_distri

STATIC TEXT

E `asp_distri!=10`
V1 `(asp_distri !=10) != true`
M1 The distribution MUST be equal to 10 seeds!. Please check again.

The distribution MUST be equal to 10! Please check again.

At ANY POINT IN LIFE or ANY AGE, how likely would you want any of your children or youth to engage in farming or farming business or agriculture-related work?	SINGLE-SELECT youth_agri_anyage 01 ⬭ Very unlikely 02 ⬭ Unlikely 03 ⬭ Maybe, maybe not 04 ⬭ Likely 05 ⬭ Very likely

At what age do you think your children can engage in farming/livestock keeping or agriculture-related work? (Age in completed years) E `youth_agri_anyage >= 3 && youth_agri_anyage <= 5` V1 `self >=10 && self<=120` M1 Age to farm MUST be between 10 and 120 years old!	NUMERIC: INTEGER youth_agri_age — — — — — — — — — — — — — — — — — .
Who among your household members would you pass on farming or livestock keeping or your agricultural work?	MULTI-SELECT: LINKED farm_successor SOURCE OF CATEGORIES: ROSTER R_MEMBERS
In case your children or young people would want to farm, how would they obtain land in this village?	SINGLE-SELECT land_obtain 01 ◯ They will be allocated land not previously cultivated (virgin land or pasture) 02 ◯ They will be allocated family land now under fallow 03 ◯ They will inherit land already under cultivation 04 ◯ They will rent or borrow land 05 ◯ They will purchase land 96 ◯ Others, specify
Please specify other way of obtaining land. E `land_obtain==96`	TEXT land_obtain_oth ··

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%

ASPIRATION IMPORTANCE AND ACHIEVING THEM

With your aspirations shared, how confident are you that your household can achieve these goals?	SINGLE-SELECT asp_confi 01 ◯ Very unlikely 02 ◯ Unlikely 03 ◯ Maybe, maybe not 04 ◯ Likely 05 ◯ Very likely
With your aspirations shared, how many years from now do you think you can achieve these goals? V1 `self>0` M1 The number of years MUST be greater than 0! V2 `self<=100` M2 Too large number! Is that realistic? Please confirm.	NUMERIC: INTEGER asp_year — — — — — — — — — — — — — — — — — —

How satisfied are you with your life?	SINGLE-SELECT	satis_life

01 ○ Very dissatisfied
02 ○ Dissatisfied
03 ○ Neither
04 ○ Satisfied
05 ○ Very satisfied

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%
[C] ECONOMIC BEHAVIOUR

Have you ever invested your money?	SINGLE-SELECT	invest_ind

01 ○ Yes
00 ○ No

What did you invest in?

I Record in order of importance. Please mention first the main investment you have made.

E invest_ind==1

MULTI-SELECT: ORDERED   invest_what

01 ☐ Education of children
02 ☐ Buying agricultural inputs
03 ☐ Hiring farm labourers
04 ☐ Buying/renting farm equipment
05 ☐ Buying livestock
06 ☐ Buying agricultural land
07 ☐ Establishing non-farm business
08 ☐ Bank deposits, savings
09 ☐ Mutual funds
10 ☐ Insurance products
11 ☐ Food expenditures
12 ☐ Clothing and footwear
13 ☐ House furnishings, construction, and reconstruction
14 ☐ Health and related expenses
15 ☐ House expenses like water, electricity, gas, fuel
16 ☐ Recreation and culture like vacation, weddings, festivals, celebrations

And 3 other symbols [68]

Please specify other type of investment you made.

E invest_what.Contains(96)

TEXT   invest_what_oth

....

Suppose you were offered a loan, how will you mainly invest it?	MULTI-SELECT: ORDERED	loan_purpose

01 ☐ Education of children

02 ☐ Buying agricultural inputs

03 ☐ Hiring farm labourers

04 ☐ Buying/renting farm equipment

05 ☐ Buying livestock

06 ☐ Buying agricultural land

07 ☐ Establishing non-farm business

08 ☐ Bank deposits, savings

09 ☐ Mutual funds

10 ☐ Insurance products

11 ☐ Food expenditures

12 ☐ Clothing and footwear

13 ☐ House furnishings, construction, and reconstruction

14 ☐ Health and related expenses

15 ☐ House expenses like water, electricity, gas, fuel

16 ☐ Recreation and culture like vacation, weddings, festivals, celebrations

And 3 other symbols [68]

Please specify other purpose of loan.	TEXT	loan_purpose_oth

E `loan_purpose.Contains(96)`

....

How much loan in total will you borrow for the loan purpose your loan purposes?	NUMERIC: INTEGER	loan_amt

- -

RECORD THE TIME WHEN YOU FINISH INTERVIEWING %rostertitle%	DATE: CURRENT TIME	end_time_aspi_1

....

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%
SELF-EFFICACY

STATIC TEXT

Now we would like to ask you a series of questions about how you evaluate your abilities to be successful in life, your hopes about your way to achieve the goals, how much control you have to be successful in life, and your trust about your own community. Let's begin.

STATIC TEXT

For each of the following statements, on a scale of 1 (Strongly disagree) to 5 (Strongly agree), please tell me how much you agree with the statements.

5-point ratings

- -	-	+/-	+	++
1	2	3	4	5
*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

I can think of a way out of the problems I am facing in my main livelihoods (such as crop production, livestock keeping, enterprises, non-farm work).

V1 self>=1 && self<=5
M1 Answer MUST be between 1 to 5 only!

SINGLE-SELECT   eff1

01 ○ Strongly disagree
02 ○ Disagree
03 ○ Indifferent (neither nor)
04 ○ Agree
05 ○ Strongly agree

I am confident that I can work hard to achieve my goals

V1 self>=1 && self<=5
M1 Answer MUST be between 1 to 5 only!

SINGLE-SELECT   eff2

01 ○ Strongly disagree
02 ○ Disagree
03 ○ Indifferent (neither nor)
04 ○ Agree
05 ○ Strongly agree

I am confident that I can accomplish my production goals at the end of the harvest or my income goals (if not farming).

V1 self>=1 && self<=5
M1 Answer MUST be between 1 to 5 only!

SINGLE-SELECT   eff3

01 ○ Strongly disagree
02 ○ Disagree
03 ○ Indifferent (neither nor)
04 ○ Agree
05 ○ Strongly agree

I can solve most of my farm-related or job-related problems if I invest the necessary hard work.

V1 self>=1 && self<=5
M1 Answer MUST be between 1 to 5 only!

SINGLE-SELECT   eff4

01 ○ Strongly disagree
02 ○ Disagree
03 ○ Indifferent (neither nor)
04 ○ Agree
05 ○ Strongly agree

I can invest the right effort to live a better life.

V1 self>=1 && self<=5
M1 Answer MUST be between 1 to 5 only!

SINGLE-SELECT   eff5

01 ○ Strongly disagree
02 ○ Disagree
03 ○ Indifferent (neither nor)
04 ○ Agree
05 ○ Strongly agree

I can achieve all I wish for my family.	SINGLE-SELECT	eff6

V1 `self>=1 && self<=5`
M1 Answer MUST be between 1 to 5 only!

01 ◯ Strongly disagree
02 ◯ Disagree
03 ◯ Indifferent (neither nor)
04 ◯ Agree
05 ◯ Strongly agree

People like yourself have influence in making this village a better place to live.	SINGLE-SELECT	eff7

V1 `self>=1 && self<=5`
M1 Answer MUST be between 1 to 5 only!

01 ◯ Strongly disagree
02 ◯ Disagree
03 ◯ Indifferent (neither nor)
04 ◯ Agree
05 ◯ Strongly agree

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%
LOCUS OF CONTROL

STATIC TEXT

For each of the following statements, on a scale of 1 (Strongly disagree) to 5 (Strongly agree), please tell me how much you agree with the statements.

5-point ratings

--	-	+/-	+	++
1	2	3	4	5
*	**	***	****	*****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

How my life takes course is dependent on me.	SINGLE-SELECT	loc1

V1 `self>=1 && self<=5`
M1 Answer MUST be between 1 to 5 only!

01 ◯ Strongly disagree
02 ◯ Disagree
03 ◯ Indifferent (neither nor)
04 ◯ Agree
05 ◯ Strongly agree

What happens to me is my own doing.	SINGLE-SELECT	loc2

V1 `self>=1 && self<=5`
M1 Answer MUST be between 1 to 5 only!

01 ◯ Strongly disagree
02 ◯ Disagree
03 ◯ Indifferent (neither nor)
04 ◯ Agree
05 ◯ Strongly agree

A citizen plays a role in making decisions about the future of the government. V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc3 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
Compared to others, I have not achieved what I deserved. V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc4 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
What one achieves is, in the first instance, a question of destiny and luck. V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc5 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
I often experience that others make decisions about my own life. V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc6 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
The possibilities I have in life are dependent on social circumstances (e.g. family set ups, family economic status, surroundings, culture, norms , and other social factors). V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc7 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
Getting a good job depends mainly on being in the right place at the right time. V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT loc8 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%

TRUST

STATIC TEXT

For each of the following statements, on a scale of 1 (Strongly disagree) to 5 (Strongly agree), please tell me how much

you agree with the statements.

5-point ratings

- -   -   +/-   +   ++
1   2   3   4   5
*   **   ***   ****   *****

Use for:
Community aspirations: housing aspirations, security aspirations, social support aspirations, environmental care aspirations
Individual aspirations: agricultural aspirations, life satisfaction
Self-efficacy
Village efficacy
Locus of control
Trust

Most of the people in my village are trustworthy and honest. V1 `self>=1 && self<=5` M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust1 01 ⭕ Strongly disagree 02 ⭕ Disagree 03 ⭕ Indifferent (neither nor) 04 ⭕ Agree 05 ⭕ Strongly agree
Most of the people in my village are concerned with their own welfare. V1 `self>=1 && self<=5` M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust2 01 ⭕ Strongly disagree 02 ⭕ Disagree 03 ⭕ Indifferent (neither nor) 04 ⭕ Agree 05 ⭕ Strongly agree
In my village, one has to be careful, or someone will take advantage of us V1 `self>=1 && self<=5` M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust3 01 ⭕ Strongly disagree 02 ⭕ Disagree 03 ⭕ Indifferent (neither nor) 04 ⭕ Agree 05 ⭕ Strongly agree
Most of the people in my village come forward to help us out when we are in need V1 `self>=1 && self<=5` M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust4 01 ⭕ Strongly disagree 02 ⭕ Disagree 03 ⭕ Indifferent (neither nor) 04 ⭕ Agree 05 ⭕ Strongly agree
I feel like a member of this village V1 `self>=1 && self<=5` M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust5 01 ⭕ Strongly disagree 02 ⭕ Disagree 03 ⭕ Indifferent (neither nor) 04 ⭕ Agree 05 ⭕ Strongly agree

If the need arises, a mother can leave her child with one of the households in this village and e xpect it to be safe V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust6 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
People lend money to one another in times of need, and get the money they lent back V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust7 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
If someone loses a cow, goat or chicken he or s he will easily find others in this village to help t o seek and find it V1 self>=1 && self<=5 M1 Answer MUST be between 1 to 5 only!	SINGLE-SELECT trust8 01 ◯ Strongly disagree 02 ◯ Disagree 03 ◯ Indifferent (neither nor) 04 ◯ Agree 05 ◯ Strongly agree
Suppose that 10 of your neighbors are invited t o help in community activities. How many woul d show up? [0-10] V1 self>=0 && self<=10 M1 Answer MUST be between 0 to 10 only!	NUMERIC: INTEGER trust9 ------------------------------

SECTION 11: INDIVIDUAL ASPIRATIONS / ASPIRATIONS / ASPIRATION OF - %ROSTERTITLE%
RISK AND TIME PREFERENCES

STATIC TEXT

How willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks".
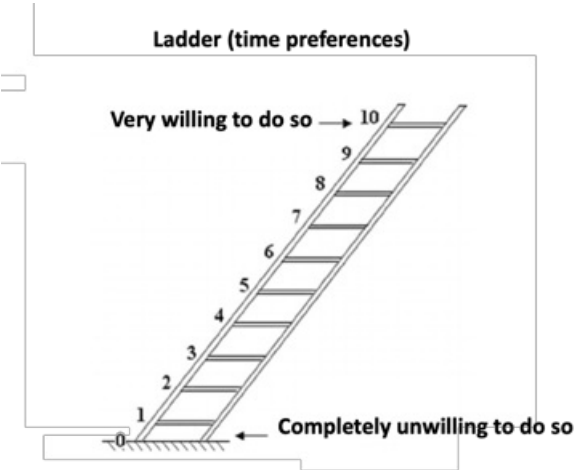
Please tell me, in general, how willing or unwilling you are to take risks. Please use a scale from 0 to 10, where 0 means you are "completely unwilling to take risks" and a 10 means you are "very willing to take risks". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	NUMERIC: INTEGER risk
V1 self>=0 && self<=10	
M1 Answer MUST be between 0 to 10 only!	

STATIC TEXT

How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future? Please again indicate your answer on a scale from 0 to 10, where 0 means you are "completely unwilling to do so" and a 10 means you are "very willing to do so".

Ladder (time preferences)

How willing are you to give up something that is beneficial for you today in order to benefit more from that in the future? Please again indicate your answer on a scale from 0 to 10, where 0 means you are "completely unwilling to do so" and a 10 means you are "very willing to do so". You can also use any numbers between 0 and 10 to indicate where you fall on the scale, like 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10.	NUMERIC: INTEGER time
V1 self>=0 && self<=10	
M1 Answer MUST be between 0 to 10 only!	

[S11] END TIME	DATE: CURRENT TIME s11_end_time

STATIC TEXT

E   !IsAnswered(s11_start_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E   NumberUnansweredQuestions(section_11)>0

ATTENTION! YOU HAVE %unanswered_sec_11% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_11)	DOUBLE unanswered_sec_11
VARIABLE Math.Round((s11_end_time - s11_start_time).Value.TotalSeconds / 60,2)	DOUBLE s11_duration

SECTION 12: ASSETS

[S12]START TIME	DATE: CURRENT TIME s12_start_time

STATIC TEXT

E   !IsAnswered(s12_start_time)

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

SECTION 12: ASSETS
ASSETS

STATIC TEXT

Ask if the household owns the following items. Then, continue asking how many the household owns and their estimated total value, who in the household primarily owns, who makes decision about its use or sale.

Does your household own any of these items?	MULTI-SELECT: YES/NO ha0
V1 self.Missing.Length==0 M1 You haven't answered all the questions.	01 ☐/☐ Smart phones (touch screen) 02 ☐/☐ Simple mobile phones (keypad) 03 ☐/☐ Cars, vans 04 ☐/☐ Motorcycles /Scooter/ Boda-boda 05 ☐/☐ Bicycle 06 ☐/☐ Buildings (house, motels/hotels, other buildings) 07 ☐/☐ Electric Stoves 08 ☐/☐ Gas or Paraffin Stove 09 ☐/☐ Microwave 10 ☐/☐ Refrigerator 11 ☐/☐ Freezer 12 ☐/☐ Washing Machine 13 ☐/☐ Radio 14 ☐/☐ Television 15 ☐/☐ Computer- laptop or desktop 16 ☐/☐ Tablet/Ipads And 16 other symbols [95]

SECTION 12: ASSETS / ASSETS
Roster: ITEM OWN - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>
generated by multi-select question ha0

Please specify other asset that the household owns.	TEXT ha0_oth
E ha0.Yes.Contains(96)	

How many %rostertitle% does your household own?	NUMERIC: INTEGER	ha0_1
V1 self.InRange(1,100)		
M1 Answer MUST be more than 0! It was reported that the HH owns the a sset. Please verify the number of %rostertitle% owned.		

Who in your houshold owns (the majority) of %rostertitle%? Please mention first the one who mainly owns the asset.	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	ha0_3
F age>= $working_age		

Who can make decisions about the use or sale of %rostertitle%? Please mention first the one who mainly owns the asset.	MULTI-SELECT: ORDERED, LINKED SOURCE OF CATEGORIES: ROSTER R MEMBERS	ha0_5
F age>= $working_age		

If you wanted to sell ONLY ONE of the %rostert itle% today, how much would you receive in %c urrency%?	NUMERIC: INTEGER	ha0_4
I IF MORE THAN ONE ITEM, REFER TO NEWEST ASSET.		
V1 ha0_4>0		
M1 Asset value MUSt be more than 0!		

[S12]END TIME	DATE: CURRENT TIME	s12_end_time

STATIC TEXT

E !IsAnswered(s12_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E NumberUnansweredQuestions(section_12)>0

ATTENTION! YOU HAVE %unanswered_sec_12% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_12)	DOUBLE	unanswered_sec_12

VARIABLE Math.Round((s12_end_time - s12_start_time).Value.TotalSe conds / 60,2)	DOUBLE	s12_duration

SECTION 13-14: FOOD SECURITY AND DIET DIVERSITY

[S13]START TIME	DATE: CURRENT TIME s13_start_time

STATIC TEXT

E !IsAnswered(s13_start_time)

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

STATIC TEXT

Identify the person responsible for preparing meals in the household.Explain that you would like to ask some questions about the food that was eaten by the household members in the past 7 days.

Start asking questions about subjective food availability questions.

Continue asking questions about the types of foods groups that were consumed by the household members in the specified time period.

Who is responding for this section? F age >= 15	SINGLE-SELECT: LINKED s13_respondent SOURCE OF CATEGORIES: ROSTER R MEMBERS

SECTION 13-14: FOOD SECURITY AND DIET DIVERSITY
FOOD INSECURITY EXPERIENCE SCALE

During the last 12 months, was there a time when, because of lack of money or other resources anyone in your household: V1 self.Missing.Length==0 M1 You havent answered all the question.	MULTI-SELECT: YES/NO food_security 01 ☐/☐ … was worried about not having enough food to eat? 02 ☐/☐ … was unable to eat healthy and nutritious foods? 03 ☐/☐ … ate only a few kinds of foods? 04 ☐/☐ … had to skip a meal? 05 ☐/☐ … ate less than you thought you should? 06 ☐/☐ … ran out of food? 07 ☐/☐ … was hungry but did not eat? 08 ☐/☐ … went without eating for a whole day?
[food_sufficent] How many months during the past 12 months,did your household had sufficient food from own production? V1 self.InRange(0,12) M1 Number of months must be between 0 and 12	NUMERIC: INTEGER food_sufficent
[food_sufficent2] How many months during the past 12 months,did your household had sufficient food from own production and bought and other means of getting food? V1 self.InRange(0,12) M1 Number of months must be between 0 and 12	NUMERIC: INTEGER food_sufficent2

[food_sufficent3] How many months during th
e past 12 months, did your household experien
ce shortage of food?

V1 self.InRange(0,12)

M1 Check the number of months it must be 0-12

NUMERIC: INTEGER   food_sufficent3

- -

[food_sufficent4] Which of the months your ho
usehold experienced shortage of food?

E food_sufficent3 > 0

V1 self.Count()==food_sufficent3

M1 The number of months selected and the number of months specified i
n the previous question are NOT equal!

MULTI-SELECT: ORDERED   food_sufficent4

01	☐ January
02	☐ February
03	☐ March
04	☐ April
05	☐ May
06	☐ June
07	☐ July
08	☐ August
09	☐ September
10	☐ October
11	☐ November
12	☐ December

SECTION 13-14: FOOD SECURITY AND DIET DIVERSITY
DIETERY DIVERSITY - 7 DAYS

In the last 7 days, did your household consume
any

I It is not necessary to read out to the respondent the exact name of the
food group, but simply ask (for example) about fruits, vegetables or tu
bers.

V1 self.Missing.Length==0

M1 You havent answered all the questions

MULTI-SELECT: YES/NO   food_groups_7d

01	☐/☐ Cereals- rice, maize, chapatti, wheat, sorghum, bread, etc
02	☐/☐ Roots and tubers- potato, sweet potato, cassava, arrow roots, cooking banana
03	☐/☐ Vegetables- spinach, pumpkin, cabbage, tomato, onion
04	☐/☐ Fruits- orange, mango, guava, rice paw paw/papaya, pineapple, etc
05	☐/☐ Meat, poultry, organ meat- goat, sheep, cow, chicken, liver, kidney, intestines
06	☐/☐ Eggs
07	☐/☐ Fish and seafood (dried or fresh)- sardines, dagaa/omena
08	☐/☐ Pulses, legumes, nuts, seeds
09	☐/☐ Milk and milk products - fresh, powdered, yogurt, cheese, etc.
10	☐/☐ Oil/fats- oil, fat, butter, ghee, etc.
11	☐/☐ Sugar and sweets- sugar, honey, sweets, desserts
12	☐/☐ Miscellaneous- tea, coffee, beverages, condiments, spices

Roster: NEW ROSTER - %ROSTERTITLE%

generated by multi-select question food_groups_7d

r_food_ind

| How many days in the last 7 days was the %ros tertitle% consumed? | NUMERIC: INTEGER | numdays_7d |

E `food_groups_7d.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,1 2)`

W1 `self.InRange(1,7)`

M1 Check the number of days. It MUST be more than 0 but less than 7 day s!

How was %rostertitle% obtained/sourced?

E `food_groups_7d.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,1 2)`

MULTI-SELECT: ORDERED   food_source_7d

01 ☐ Own production (crops, ani mals)

02 ☐ Hunting, fishing

03 ☐ Gathering

04 ☐ Borrowed

05 ☐ Purchased with wages

06 ☐ Exchanged labor for food

07 ☐ Exchanged items for food

08 ☐ Gift (food) from relatives

09 ☐ Food aid (NGOs, others)

96 ☐ Other, specify

| Please specify other way how you source out t he food. | TEXT | foos_source_oth |

E `food_source_7d.Contains(96)`

| [S13] END TIME | DATE: CURRENT TIME | s13_end_time |

STATIC TEXT

E `!IsAnswered(s13_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E `NumberUnansweredQuestions(section_13)>0`

ATTENTION! YOU HAVE %unanswered_sec_13% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

| VARIABLE | DOUBLE | unanswered_sec_13 |
| `NumberUnansweredQuestions(section_13)` | | |

| VARIABLE | DOUBLE | s13_duration |
| `Math.Round((s13_end_time - s13_start_time).Value.TotalSe conds / 60,2)` | | |

SECTION 15: HOUSEHOLD SHOCKS AND COPING

[S15]START TIME	DATE: CURRENT TIME s15_start_time

STATIC TEXT

E `!IsAnswered(s15_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

In the last 12 months, has your household been affected by any of the following events?	MULTI-SELECT: YES/NO **sh**

V1 `self.Missing.Length==0`

M1 You havent answered all the questions!

21	☐/☐ COVID-19 lockdown measures
22	☐/☐ Fallen sick of COVID-19
23	☐/☐ Household member died of COVID-19 (report number of persons)
01	☐/☐ Chronic or severe illness or accident of a household member
02	☐/☐ Death of a household member
03	☐/☐ Household member jailed
04	☐/☐ Fire on property
05	☐/☐ Robbery/burglary
06	☐/☐ Dwelling damaged
07	☐/☐ Drought or extended period of no rain
08	☐/☐ Floods
09	☐/☐ Crop failure, crop diseases or pest infestation
10	☐/☐ Livestock disease/death
11	☐/☐ Livestock theft (including raids)
12	☐/☐ Household business failure (non-agricultural)
13	☐/☐ Loss of employment

And 8 other symbols [82]

Specify Other shock	TEXT sh_oth

E `sh.Yes.Contains(96)`

SECTION 15: HOUSEHOLD SHOCKS AND COPING
Roster: SHOCK - %ROSTERTITLE%
generated by multi-select question sh

How severe was the effect of %rostertitle% on your household?	SINGLE-SELECT sh_2

01	◯ Very severe
02	◯ Severe
03	◯ Mild
04	◯ Very mild

How did your household cope with %rostertitle %?	MULTI-SELECT: ORDERED	sh_3

I PLEASE RECORD IN ORDER OF IMPORTANCE.

V1 sh_3.Contains(22) ? sh_3.Length==1 : true

M1 Error! You CANNOT combine "DID NOTHING" with other options.

01 ☐ Unconditional help from relatives/friends

02 ☐ Unconditional help from government

03 ☐ Reduced food or relied on less preferred option

04 ☐ Changed cropping practices (crop choices or technology)

05 ☐ Household member(s) took on more employment

06 ☐ Household member(s) migrated

07 ☐ Relied on savings

08 ☐ Received insurance pay out

09 ☐ Obtained credit (from formal institutions or friends)

10 ☐ Sold household assets

11 ☐ Sold livestock

12 ☐ Migrated to another place

13 ☐ Reported the case to police/authorities

14 ☐ Did nothing

96 ☐ Used other coping strategies

Please specify Other coping strategy	TEXT	sh_3_oth

E sh_3.Contains(96)

[S15]END TIME	DATE: CURRENT TIME	s15_end_time

STATIC TEXT

E !IsAnswered(s15_end_time)

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E NumberUnansweredQuestions(section_15)>0

ATTENTION! YOU HAVE %unanswered_sec_15% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_15)	DOUBLE	unanswered_sec_15
VARIABLE Math.Round((s15_end_time - s15_start_time).Value.TotalSeconds / 60,2)	DOUBLE	s15_duration

SECTION 16: INSTITUTIONS, OTHER INCOME, FUTURE CONTACT

section_16

[S16]START TIME	DATE: CURRENT TIME	s16_start_time
	....	

STATIC TEXT

E `!IsAnswered(s16_start_time)`

PLEASE RECORD THE START TIME BEFORE YOU START THE SECTION

Have you or any member of the household received extension service, advice, or information through mobile phone?	SINGLE-SELECT phone_extension 01 ○ Yes 00 ○ No
How much was your savings last month? Enter 0 if no savings.	NUMERIC: INTEGER saving_hmuch ------------------------------------
What is the walking time to the main market (in minutes)? V1 `self>0` M1 Distance to the main market MUST be more than 0!	NUMERIC: INTEGER market_maindist ------------------------------------
What is the walking time to the nearest village market? (in minutes) V1 `self>0` M1 Distance to the main market MUST be more than 0!	NUMERIC: INTEGER market_neardist ------------------------------------
Did you or any members of the household use a mobile money account (e.g. MPESA) for savings or other transactions in the last 12 months?	SINGLE-SELECT phone_money 01 ○ Yes 00 ○ No
How often do you or any members of the household use internet, including social networking sites such as Facebook, Whatsapp, etc.?	SINGLE-SELECT internet_freq 01 ○ Daily 02 ○ At least once or few times a week 03 ○ At least once or few times a month 04 ○ Never

During the last 12 months, did any members of your household receive any income from the f ollowing sources?

V1 self.Missing.Length == 0

M1 You have not answered all the questions. Please check.

01	☐/☐	National remittances - cash transfers/gifts fr om individuals (relative s, friends) within the c ountry
02	☐/☐	International remittan ces - cash transfers/gif ts from individuals (rel atives, friends) from a broad
03	☐/☐	Savings, interest or ot her investment income
04	☐/☐	Rental income, residen tial property (apartme nt, house)
05	☐/☐	Rental income, comme rcial property (shop, st ore)
06	☐/☐	Income from SALE of p roperty (e.g. land, do n ot include rental incom e)
07	☐/☐	Transfers support fro m government/NGOs (some kind of public/N GO transfer program (given money in daily/w eekly/ monthly basis)
08	☐/☐	Payments for environ mental/ecological servi ces or forest products or nature conservation e.g., payments by the c onservancies
96	☐/☐	Other ➡ ☐ specify:

Please specify other income source.

E othhhinc.Yes.Contains(96)

TEXT   othhhinc_oth

....

SECTION 16: INSTITUTIONS, OTHER INCOME, FUTURE CONTACT
Roster: OTHERINCOME - %ROSTERTITLE%
generated by multi-select question othhhinc

r_otherincome

If yes, approximately how much in a year was t he average earning for %rostertitle%?

V1 self >0

M1 Average income per year for the source MUST be more than 0! It was previously reported that the HH received income from the source.

NUMERIC: INTEGER   inc_oth_amt

- -

STATIC TEXT

In order for us to be able to contact you in the future, please provide us with telephone numbers where each household member can be reached.

SECTION 16: INSTITUTIONS, OTHER INCOME, FUTURE CONTACT
Roster: CONTACT INFORMATION - <FONT COLOR="MAROON">%ROSTERTITLE%</FONT>
generated by list question numfamily

E age>15

r_contact

Does %rostertitle% have their own phone number?	SINGLE-SELECT	memeber_isphone
	01 ◯ Yes	
	00 ◯ No	

WRITE PHONE NUMBER	TEXT	phone_number
I record number without the country code. eg. 0813435234 E memeber_isphone==1	....	

STATIC TEXT

We thank you for the time and patience you spent with us! Again, we ensure you that the information you provided will be held confidential and only be used for research purposes. Those information are very valuable for shaping the programs and policies in Kenya and globally for agricultural and pastoral communities. Asante sana!

[S16]END TIME	DATE: CURRENT TIME	s16_end_time
	....	

STATIC TEXT

E `!IsAnswered(s16_end_time)`

PLEASE RECORD THE END TIME BEFORE YOU START THE NEXT SECTION

STATIC TEXT

E `NumberUnansweredQuestions(section_16)>0`

ATTENTION! YOU HAVE %unanswered_sec_16% UNANSWERED QUESTIONS REMAINING IN THIS SECTION!

VARIABLE NumberUnansweredQuestions(section_16)	DOUBLE	unanswered_sec_16

VARIABLE Math.Round((s16_end_time - s16_start_time).Value.TotalSeconds / 60,2)	DOUBLE	s16_duration

APPENDIX A — INSTRUCTIONS

[1] emp_member: In the last 12 months, has %s1_member_name% undertaken any work on own farm or outside?

Primary occupation is determined by the amount of time spent on any activity. If a member has two occupations, firstly maize farming where most of the time is spent and secondly livestock raising where a couple of hours is spent. Accoridngly, the primary occupation falls under crop farming/cultivation. At least one member of the household should be involved in income-generating activity.

[2] cp07: Did you apply any ORGANIC FERTILIZERS (e.g. manure, vermiculture, worms) in the cultivation of %rostertitle% in last 12 months?

Organic fertilizer is a type of fertilizer made from natural materials such as animal waste (manure), compost, bone meal, and other organic matter. It is used to enhance soil fertility and promote plant growth. Organic fertilizers release nutrients gradually over time and improve soil structure, leading to better water retention and increased biodiversity in the soil.

[3] cp08: Did you apply any INORGANIC FERTILIZERS in the cultivation of %rostertitle% in the last 12 months?

An inorganic fertilizer is a type of fertilizer that does not contain organic matter and is derived from mineral sources such as nitrates, phosphates, and potash. Inorganic fertilizers are often highly concentrated and contain essential plant nutrients in a form that can be readily absorbed by plants. They are widely used in commercial agriculture, but can also be used in subsistence farming. Examples of inorganic fertilizers include ammonium nitrate, urea, and superphosphate.

[4] cp09: Did you apply any PESTICIDE in the cultivation of %rostertitle% in the last 12 months?

A pesticide is a chemical substance used to control, eliminate, or prevent the growth and spread of harmful insects, rodents, and other pests that cause damage to crops. These chemicals can be either synthetic or natural and are formulated to work in various ways, including killing the pest directly, repelling them, or altering their biology or behavior to prevent them from causing damage. Pesticides can come in many forms, including sprays, baits, and fumigant.

[5] avaliable_member: Among the following members, who is available for interview ?

Please ask for ONE MEN AND WOMEN of the household, preferably the head and his/her spouse (e.g. husband and wife). In case the member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The SAME selected MEN and WOMEN members will be asked for the other sections requiring both gender interviews such as GENDER ROLES AND TIME ALLOCATION SECTION. ONE OF THE SELECTED MEMBER MUST BE THE RESPONDENT.

[6] t1_resp: Who will watch the video and play game?

<u>Enumerator</u>: In treatment group 1 (T1), ONLY the HEAD of the household should watch the video. Hence, only one member MUST watch the video. In case the member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The SAME selected MEN and WOMEN members will be asked for the other sections requiring both gender interviews such as GENDER ROLES AND TIME ALLOCATION, ASPIRATION SECTIONS. ONE OF THE SELECTED MEMBER MUST BE THE RESPONDENT.

[7] t2_resp: Who will watch the video and play game?

<u>Enumerator</u>: In treatment group 2 (T2), BOTH HEAD AND SPOUSE (e.g., husband and wife) should watch the video. Hence, two members both men and women MUST watch the video. In case the member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The SAME selected MEN and WOMEN members will be asked for the other sections requiring both gender interviews such as GENDER ROLES AND TIME ALLOCATION, ASPIRATION SECTIONS. ONE OF THE SELECTED MEMBER MUST BE THE RESPONDENT.

[8] control_resp: Who will play the game?

<u>Enumerator</u>: In the control group, NO VIDEO is shown, and ONLY the HEAD should play the game. Hence, only one member preferably HH head MUST watch play game. In case the member is not present or available for interview, we ask for other male/female member of similar age who is involved in farm activities. The SAME selected MEN and WOMEN members will be asked for the other sections requiring both gender interviews such as GENDER ROLES AND TIME ALLOCATION, ASPIRATION SECTIONS. ONE OF THE SELECTED MEMBER MUST BE THE RESPONDENT.

[9] will_prosopis_eradicate: To what extent do you want to eradicate Prosopis?

Completely eradicate - I want to eliminate all prosopis from the area, regardless of the potential consequences or impacts on other ecosystems Targeted eradication - I want to remove prosopis from specific areas where it is causing significant problems, but not necessarily eliminate it completely Limited control - I want to reduce the population of prosopis in the area, but not necessarily eliminate it entirely No action - I do not believe prosopis is causing significant problems and do not see the need to take any action to eradicate it Sustainable management - I want to manage the population of prosopis in a way that balances its potential negative impacts with its positive contributions to the ecosystem

APPENDIX B — CATEGORIES

[1] martial_c
Categories: 1:Married monogamously, 2:Married polygamous, 3:Divorced /Separated, 4:Widow/ Widower, 5:Never Married

[2] yes_no
Categories: 1:Yes, 0:No

[3] mgrt_int
Categories: 1:Yes permanently migrate, 2:Yes temporarily migrate, 3:No intention to migrate, -88:Don't know, -99:Refuse to answer

[4] dist_name
Categories: 31:Kilombero, 32:Ulanga, 33:Kilolo, 34:Iringa, 35:Malinyi, 11:Katima Mulilo Rural, 12:Kabbe North, 13:Sibbinda, 14:Judea Lyaboloma, 15:Kongola, 16:Kabbe South, 17:Linyanti, 41:Churo, 42:Marigat, 43:Mondi, 44:Makutani, 45:Tangulbei, 21:Sesheke, 22:Mwandi, 23:Sioma

[5] ea_name
Categories: 11101:Liselo, 11102:Mafuta 1, 11103:Mafuta 2, 11104:Bukalo A, 11105:Bukalo B, 11106:Chabalala, 11107:Mafuta 4, 11108:25-26 Miles, 11109:27-28 Miles, 11110:Mafuta 3, 11111:Miyako, 11112:Ioma, 11201:Imukusi, 11202:Chaze, 11203:Lisikili-Kalimbeza, 11204:Ntonda, 11205:Namyundu, 11206:Libula, 11301:Sibbinda 1, 11302:Sibbinda 2, 11303:Bito, 11304:Masokotwane, 11305:Lusu, 11306:Kakoma, 11307:Sachinga, 11308:Makolanga, 11401:Sachona, 11402:Lianshulu 1, 11403:Lianshulu 2, 11404:Nongozi, 11405:Mbambazi, 11501:Gesthemane, 11502:Mawizyu, 11503:Mayuni, 11601:Kalala, 11602:Impalila North, 11603:Impalila South, 11604:Nakabolelwa, 11605:Ngoma, 11606:Makoma, 11607:Itomba, 11608:Kasika, 11609:Libula South, 11701:Sitanta, 11702:Malengalenga 1, 11703:Malengalenga 2, 33401:Mwatenga, 33402:Uwanja wa Ndege 'B', 33403:Sokoni, 33404:Igula 'A' & Sekuse, 33405:Kifufu, 33406:Kibalali, 33407:Kihesa Kilolo & Milanzi, 33408:Ukang'a & Mlanda 'B', 33409:Malawi & Migoli 'B', 33410:Mivinjeni, 33411:Matalawe, 33412:Sadani 'A', 33413:Lukolela, 33414:Kigasi 'A' & Kigasi 'B', 33415:Mwefu & Nganawasi, 33416:Vikula, 33417:Mahanzi & Kibulilo, 33418:Luganga, 33419:Mbuyuni, 33420:Zagaza'A' &'B', 33421:Mseke 'A', 33301:Ibumila, 33302:Mkulima, 33303:Ibofwe & Lutwina, 33304:Muhiliwa & Kihoroto, 33305:Ulyakadodo, 33306:Mjimwema, 33307:Isengavakiva, 33308:Wotalisoli, 33309:Mwanzi, 33101:Mlumbaji 'A', 33102:Ihanga, 33103:Idandu, 33104:Kilama A, 33105:Maendeleo, 33106:Minazini, 33107:Mbalaji, 33108:Kidatu A, 33109:Kikandekande, 33110:Mwamaloba, 33111:Shuleni, 33112:Kibugumo, 33113:Londo, 33114:Kibulubutu, 33115:Mkusi, 33116:Relini, 33117:Msufini, 33101:Kisiwani, 33501:Ipera Asilia, 33102:Kichangani Kati, 33203:Kiningu, 33502:Kipingo A, 33503:Mchangani A, 33504:Mikoroshini, 33204:Msogezi 'B', 33506:Mashariki, 33507:Chalula, 33508:Barabarani, 33118:Kidatu B, 33509:Saganotia, 44201:Kamungei, 44202:Kiwanja Ndege, 44203:Kapkun South, 44204:Kaptich, 44205:Ndubet, 44206:Sirinyo, 44207:Chemeron Upper, 44208:Ilkarkar, 44209:Marti, 44210:Sesia, 44211:Nairangi Nkare, 44212:Lesua, 44213:Nkoipiriri, 44214:Nailiapu, 44215:Twetye, 44216:Chepkerkeren, 44217:Maji Ndege, 44218:Tirngongwonin, 44219:Kewamur, 44401:Eletepes, 44402:Nenteiyo, 44101:Cheptaran, 44102:Marigat, 44103:Nyalilpich, 44104:Chepngotiny, 44105:Churo Centre, 44106:Chepelow, 44107:Kaptuya, 44108:Kadia, 44301:Kaitunga, 44302:Markasian, 44303:Chemiril, 44304:Ademeyon, 44305:Mosoin, 44306:Chepkokoch, 44307:Lumuyek, 44501:Komolion, 44502:Modok, 44503:Chepukat, 44504:Relenoi, 44505:Pombo, 44506:Sosion, 44507:Chemakutach, 44508:Lochel/Kang'iruru, 44509:Seretion, 44220:Ilngeriyoi, 44221:Chepkech, 22101:Imusho, 22102:Kalobelelwa1, 22103:Kalobelelwa2, 22104:Katima 1, 22105:Katima 2, 22106:Luampungu 1, 22107:Luampungu 2, 22108:Lusu 1, 22109:Lusu 2, 22110:Silumbu, 22201:Mushukula, 22202:Magumwi, 22203:Simungoma, 22204:Kalundu, 22301:Kalongola 1, 22302:Kalongola 2, 22304:Liwandamo 1, 22305:Liwandamo 2, 22306:Mbeta, 22307:Mbume 1, 22308:Mbume 2, 22309:Nalwashi 1, 22310:Nalwashi 2, 22311:Nangweshi 1, 22312:Nangweshi 2, 22314:Sikabenga 3, 22315:Sikabenga 1, 22316:Sikabenga 2, 22317:Sioma 1, 22318:Sioma 2

[6] decision_maker
Categories: 1:Husband only, 2:Husband > Wife (Husband dominates), 3:Both equally husband and wife, 4:Wife > Husband (Wife dominates), 5:Wife only, 6:Son/Son-in-law, 7:Daughter/Daughter-in-law, 8:Father/Father-in-law, 9:Mother/Mother-in-law, 10:Brother/Brother-in-law, 11:Sister/Sister-in-law, 12:Grandson, 13:Granddaughter, 14:Grandfather, 15:Grandmother, 16:Other male members, 17:Other female members

[7] seed_source_ch
Categories: 1:Used my own from previous season, 2:Bought from neighbours, 3:Bought from agrovet shop, 4:Bought from mobile agro dealer, 5:Bought from warehouse/godown, 6:Bought from commercial farm, 7:Bought from government, 8:Bought from NGO, 9:Provided free of charge from NGO, 10:Bought from farmer association, 96:Bought from other source

[8] month
Categories: 1:January, 2:February, 3:March, 4:April, 5:May, 6:June, 7:July, 8:August, 9:September, 10:October, 11:November, 12:December

[9] rice_cul
Categories: 1:Bunding only, 2:Bunding and levelling, 3:None of the above

[10] sever
Categories: 1:Very severe, 2:Severe, 3:Mild, 4:Very mild

[11] educ2_c
Categories: 1:No formal education, 2:Some primary school, 3:Some secondary school, 4:Some post-secondary school, 5:Other schooling (e.g religious schooling), -88:Dont know, -99:Refuse to answer

[12] age_grp
Categories: 1:In their 20s, 2:In their 30s, 3:In their 40s, 4:In their 50s, 5:In their 60s, 6:>70

[13] trust
Categories: 1:strongly distrust, 2:distrust, 3:indifferent, 4:trust, 5:strongly trust

[14] worry
Categories: 1:Not at all worried, 2:Slightly worried, 3:Worried, 4:Very worried, 5:Extremely worried

[15] hh_decsion_maker
Categories: 1:Husband only, 2:Husband> Wife(Husband dominates), 3:Both equally husband and wife, 4:Wife > Husband (Wife dominates), 5:Wife only, 6:Son/Son-in-law, 7:Daughter/Daughter-in-law, 8:Father/Father-in-law, 9:Mother/Mother-in-law, 10:Brother/Brother-in-law, 11:Sister/Sister-in-law, 12:Grandson, 13:Granddaughter, 14:Grandfather, 15:Grandmother, 16:Other male members, 17:Other female members

[16] rec_ch
Categories: 1:Massive increase, 2:Slight increase, 3:The same, 4:Slight decrease, 5:Massive decrease

[17] ht_sympt
Categories: 1:Never, 2:Less than once a month, 3:More than once per month, 4:More then once per week, 5:Every day

[18] ethinc_group
Categories: 1:Ilchamus, 2:Pokot, 3:Tugen, 4:Bena, 5:Hehe, 6:Lozi, 7:Lozi, 8:Mafwe, 9:Subia, 96:Other, 96:Other, 96:Other, 96:Other

[19] contr_type
Categories: 1:Long term permanent contract, 2:Fixed term permanent contract, 3:Part-time contract, 4:Daily wage labourer, 5:No contract (informal), 6:Self-employed/ own firm, 7:Volunteering, 8:Apprenticeship / internship, 96:Other (specify), -88:Do not know, -99:Refuse to answer

[20] cook
Categories: 1:Electric cookers, 2:Gas (incl. biogas), 3:Charcoal, 4:Firewood, 5:Other biomass burning, 96:Any other energy for cooking

[21] disp_reslv
Categories: 1:Nowhere, 2:Clan / Elder, 3:Village headman / chairperson, 4:Neighbours, 5:LC Court, 6:Magistrate, 7:Tried to sort out ourselves, 96:Other (please specify)

[22] dispute
Categories: 1:Within family, 2:Other individuals, 3:Government, 96:Other➡ Please specify

[23] fert_type
Categories: 1:UREA, 2:DAP, 3:SA, 4:CAN, 5:NPK, 6:Mijingu, 7:Agr. Lime, 8:Foliar fertilizer, 9:Yara Vera Amidas, 10:YaraMila Otesha, 11:Yara Bela Can, 12:YaraBela Sulfan, 13:Yara Mila Unik17, 14:Yara Mila Cereal, 15:Yara Mila Winner, 16:Yara Liva Nitrabor, 17:Kynoch +, 96:Other➡ Please specify

[24] floor
Categories: 1:Sand, 2:Smooth earth (soil), 3:Cement screed, 4:Wood, 5:Ceramic or other tiles, 96:Other➡ Please specify

[25] frt_source
Categories: 1:Bought from agrovet shop, 2:Bought from mobile agro dealer, 3:Bought from warehouse/godown, 4:Bought from large private company or farm, 5:Bought from government, 6:Bought from NGO, 7:Provided free of charge from NGO, 8:Bought from farmer association, 96:Other➡ Please specify, -88:I don't know the brand(s), -99:Refuse to answer

[26] ft_dispute
Categories: 1:Very unlikely, 2:unlikely, 3:Maybe, maybe not, 4:Likely, 5:Very likely

[27] grazing_area_codes
Categories: 1:Within vicinity of own house (e.g. ranch, feedlot system), 2:Within village, 3:In other village within the region, 4:In other village outside the region, 5:In town/cities, 96:Other➡ Please specify

[28] grazing_provider
Categories: 1:Other farmer, 2:Government, 3:Producer/Farmers/Pastoralists Groups and Cooperatives, -88:Don't know

[29] herb_typ
Categories: 1:Pre-planting herbicide, 2:Post-planting herbicide, 3:Insecticides, 4:Fungicides, 5:Botanicals (eg neem), 6:Nematicide, 96:Other pecticide➡ Please specify, -88:I don't know the brand(s), -99:Refuse to answer

[30] hwcdamg
Categories: 1:Crop damage, 2:Loss of livestock, 3:Destruction of property, 96:Other damage➡ Please specify

[31] income_use
Categories: 1:Food expenditures, 2:Clothing and footwear, 3:House furnishings and appliances, construction and reconstruction, 4:Health related expenses, 5:House expenses like water, electricity, gas, fuel, 6:Transportation, 7:Communication, 8:Recreation and culture like vacation, weddings, festivals, celebrations, 9:Education, 10:Savings, 11:Loan repayment, 12:Buying agricultural inputs, 13:Hiring farm labourers, 14:Buying/renting farm equipment, 15:Buying livestock, 16:Buying agricultural land, 17:Buying residential house/lot, 18:Establishing non-farm business like kiosk, stores, 96:Other➡ Please specify

[32] invasive_mgmt
Categories: 1:Use of natural enemies/sugars and soups that attracts natural enemies, 2:Early planting, resistant varieties, 3:Intercropping, 4:Crop rotation, 5:Use of pesticides, 6:Crop diversification, 7:Hand-picking and crushing egg masses/caterpillas, 8:Sand and ash, 9:Other, please mention, 1:Weeding, 2:Use of herbicides, 3:Intensive cultivation, 4:Other, 1:Cutting the trees, 2:Burning, 3:Uprooting seedlings and trees, 4:Pruning the trees

[33] ld_cl_pps
Categories: 1:Crops, 2:Grazing, 3:Buildings, 96:Other➡ Please specify

[34] light
Categories: 1:Electricity, 2:Solar, 3:Gas (biogas), 4:Lamp oil, 5:Candle, 6:Firewood, 7:Private generator, 8:Torch, 96:Any other energy for lighting

[35] lnd_mes_c
Categories: 1:Acres, 2:Hectares, 96:Other➡ Please specify

[36] loan_purpose_codes
Categories: 1:Food expenditures, 2:Clothing and footwear, 3:House furnishings, construction and reconstruction, 4:Health and related expenses, 5:House expenses like water, electricity, gas, fuel, 6:Recreation and culture like vacation, weddings, festivals, celebrations, 7:Education of children, 8:Repayment of other loans, 9:Buying agricultural inputs, 10:Hiring farm labourers, 11:Buying/renting farm equipment, 12:Buying livestock, 13:Buying agricultural land, 14:Buying residential house/lot, 15:Establishing non-farm business, 96:Other➡ Please specify

[37] market_buyer_codes
Categories: 1:Direct buyers, open-air market, 2:Brokers, middlemen, traders, 3:Cooperatives, farmers associations, groups, 4:Large-

scale/commercial farmers, 5:Lodges, hostels, restaurants, tourist enterprises, 6:Government, 96:Other➡️ Please specify

[38] mgrt
Categories: 1:From another village in this district (sub-county), 2:From another district (sub-county) in this region, 3:From another region in Kenya, 4:From another country, -88:Don't know, -99:Refuse to answer

[39] rc_culbar
Categories: 1:Lack of cash/credit, 2:limited availability of labor, 96:Other➡️ Please specify

[40] rice_cul2
Categories: 1:Bunding only, 2:Bunding and levelling

[41] roof
Categories: 1:Iron sheets, 2:Tiles, 3:Asbestos, 4:Concrete, 5:Tin, 6:Thatched grass, 96:Other➡️ Please specify

[42] toilet
Categories: 1:Flush toilet, 2:VIP latrine, 3:Covered pit patrine with slab, 4:Covered pit latrine without a slab, 5:Uncovered pit latrine, 6:Ecosan toilet, 7:No facility/Bush/polythene, 96:Other➡️ Please specify

[43] wall
Categories: 1:Grass, 2:Mud with poles, 3:Unburnt bricks with mud, 4:Bricks with cement, 5:Concrete, 6:Wood, 7:Tin/iron sheets/mabaati, 96:Other➡️ Please specify

[44] wk
Categories: 1:First week, 2:Second week, 3:Third week, 4:Fourth week

[45] water
Categories: 1:Piped water (house or public), 2:Protected (borehole protected well public taps rain water), 3:Unprotected source (well spring river lake tank truck), 96:Other, Specify

[46] eco_mgmt_tech
Categories: 1:Use of natural enemies/ sugars and soups that attracts natural enemies, 2:Early planting, resistant varieties, 3:Intercropping, 4:Crop rotation, 5:Weeding, 6:Use of pesticides or chemical agents, 7:Crop diversification, 8:Intensive cultivation, 9:Handpicking and crushing egg masses/ catterpillars, 10:Sand and ash, 11:Cutting the trees, 12:Burning, 13:Uprooting seedlings and trees, 14:Pruning, 15:Do nothing, 96:Others, specify

[47] effect
Categories: 1:Very negative effect, 2:Negative effect, 3:Neutral (or no effect), 4:Positive effect, 5:Very positive effect

[48] mgrt_des
Categories: 1:Town in region, 2:Town outside region, 3:Capital city, 4:Outside the country, 5:Village in region, 6:village outside region, 96:Other, Specify, -88:Don't know, -99:Refuse to answer

[49] sd_typ
Categories: 1:Tradtional seeds, 2:Improved seeds, 3:Hybrid seeds

[50] market_buyer_loc
Categories: 1:Market in this village, 2:Rural market in neighbouring other village, 3:Urban market (town) in this region, 4:Large city market in this or other region, 5:Directly at the farm, 6:Directly at the homestead

[51] seed_source
Categories: 1:Farm saved seed (own), 2:Farm-produced seed (own), 3:Contract grower (e.g. Kenya seeds, etc.), 4:Agri input shop, 5:Neighbour farmers in village, 6:Neighbour farmers outside village, 7:Grain millers, 8:Grain, seed, paddy traders, 9:Department, government, 10:NGOs, research institutions, 11:Cooperatives, self-help groups (SHGs), 96:Others, specify

[52] seed_obtain_way
Categories: 1:Given for free, 2:Bought, 3:Exchanged with labour, 4:Exchanged with harvest, 5:Exchanged with other item, 96:Others, specify

[53] units_seed
Categories: 1:Grams, 2:Kilograms, 96:Others, specify

[54] liv_products_contract
Categories: 1:Live animal, 2:Slaughter animal or meat, 3:Milk, 4:Cheese, 5:Yogurt, 6:Wool, 7:Honey, beeswax, 8:Honeybrew, 9:Eggs, 96:Others, specify

[55] func
Categories: 1:Government worker, 2:Private extension work (e.g. Kenya seed extensionist, dealers, traders), 3:Religious leader, 4:Village/ Traditional/ Cultural leader, 5:Village elder, 6:Teacher or health worker, 7:Agricultural innovator / model farmer, 8:NGO worker, 9:Friend, 10:Relative, 11:Neighbour, 96:Others, specify

[56] infosource
Categories: 1:Government extension (in person), 2:Private extension (e.g. Kenya seed extensionist, dealers, traders) (in-person), 3:Religious leader, 4:Village leader, 5:Village elder, 6:NGO (in person), 7:Other farmers (e.g. progressive farmers), 8:Radio, 9:Television, 10:Phone/mobile phone, 96:Others, specify

[57] group_compose
Categories: 1:None, 2:Less than half, 3:About half, 4:More than half, 5:All

[58] meeting_loc
Categories: 1:My house, 2:Farm parcel/plot, 3:Other neighboring farmers' house, 4:In Village, 5:Outside village, 6:Main market, 96:Others,

specify

[59] info_type
Categories: 1:Contract farming, 2:Seeds (e.g. new and improved seeds), 3:Farming or crop cultivation techniques, 4:Charcoal making, 5:Prosopis management, 6:Fertilizer: Type /Application, 7:Pest and Disease Management, 8:Land management (e.g. erosion control, crop rotation), 9:Post-Harvest (storage, drying, processing), 10:Sales / Marketing (e.g. prices), 11:Livestock care and practices (e.g. vaccination), 12:Poultry management, 13:Weather information, 14:Business oppotunities, 15:Job fair, free training, 96:Others, specify

[60] training_provider
Categories: 1:Government office/Department, 2:Private institution or extension (e.g. Kenya seeds, other companies), 3:Cooperative-led, 4:NGO, 5:Universities, 6:International org, 96:Others, specify

[61] training_loc
Categories: 1:Other neighbouring farmer's house, 2:Within the village, 3:Main market, 4:Outside the village but same sub-location, 5:Outside the village (different sublocation) but same ward, 6:Other ward, 96:Others, specify

[62] time_use
Categories: 1:Sleeping, napping, resting, 2:Eating and drinking, 3:Personal care, 4:Leisure (e.g. watching TV, listening radio, reading, exercising, hobbies), 5:Attending school, training or studying, school meetings, 6:Work as employed, 7:Own business work, 8:Land preparation, tilling, prosopis removal, 9:Weeding and pest/disease management, 10:Harvesting, 11:Drying, processing farm product, and post-harvest tasks, 12:Large livestock caring, grazing (e.g. cattle, camel), 13:Small livestock (e.g. sheep, goat, pig) caring, grazing, 14:Poultry (e.g. chicken, duck, eggs, turkey) caring, grazing, 15:Fishing, fishpond culture, 16:Beekeeping-related activities, 17:Brewing, winemaking and selling, 18:Marketing crops and crop products, 19:Marketing milk, eggs, and livestock / meat products, 20:Charcoal burning, 21:Construction making furniture, repairing, 22:Driving, 23:Other farming/livestock activities, 24:Other non-farming income-generating activities, 25:Washing drying, clothes ironing, mending clothes, sewing, 26:Cooking food and drink preparation, doing the dishes, 27:Cleaning the house/dwelling, 28:Fuel collection (e.g. firewood, charcoal), 29:Water collection, 30:Caring for children (incl teaching/tutoring/training children), 31:Caring for adults including disabled, ill, elderly, community, 32:Shopping household supplies (incl. food), getting service (e.g. health services), 33:Attending group/committee meetings, 34:Community work (e.g. infrastructure projects or community events, Prosopis removal), 35:Attending community functions (e.g. weddings, funerals), 36:Religious activities, 96:Others, specify

[63] livstock
Categories: 1:Bulls/Oxens/Steers, 2:Cows/Heifer, 3:Calves - (young female or male cow), 4:Goats, 5:Sheep, 6:Camels, 7:Donkey/Mules, 8:Poultry (chicken, ducks, others), 9:Beehives and other insects (bees, crickets, etc.), 10:Horses, 96:Other livestock or animals for productive uses

[64] likely
Categories: 1:Very unlikely, 2:Unlikely, 3:Maybe, maybe not, 4:Likely, 5:Very likely

[65] busi_types
Categories: 1:Crop selling, 2:Livestock selling (including meat, eggs, milk), 3:Fodder/Forage/Grass selling, 4:Running small or grocery shop/kiosk, 5:Honey selling, 6:Wine brewing and selling, 7:Beauty salons (hair, skin, massage), 8:Charcoal production and selling, 9:Weaving basket, 10:Making mats, 11:Making brooms, 12:Gaming hunting, 96:Others, specify

[66] obtain_how
Categories: 1:They will be allocated land not previously cultivated (virgin land or pasture), 2:They will be allocated family land now under fallow, 3:They will inherit land already under cultivation, 4:They will rent or borrow land, 5:They will purchase land, 96:Others, specify

[67] sat
Categories: 1:Very dissatisfied, 2:Dissatisfied, 3:Neither, 4:Satisfied, 5:Very satisfied

[68] invest_acts
Categories: 1:Education of children, 2:Buying agricultural inputs, 3:Hiring farm labourers, 4:Buying/renting farm equipment, 5:Buying livestock, 6:Buying agricultural land, 7:Establishing non-farm business, 8:Bank deposits, savings, 9:Mutual funds, 10:Insurance products, 11:Food expenditures, 12:Clothing and footwear, 13:House furnishings, construction, and reconstruction, 14:Health and related expenses, 15:House expenses like water, electricity, gas, fuel, 16:Recreation and culture like vacation, weddings, festivals, celebrations, 17:Repayment of other loans, 18:Buying residential house/lot, 96:Others, specify

[69] cope
Categories: 1:Sale of livestock, 2:Sale of land, 3:Sale of other household assets, 4:Sent children to live with relatives, friends, 5:Withdraw children from school, 6:Engaged in additional income-generating activities, 7:Received unconditional help from friends, relatives, family, 8:Borrowed from friends or family, 9:Took a loan or credit, 10:Members of household migrated from work, 11:Put purchases on credit, delayed payments, 12:Sold harvest in advance, 13:Reduced food consumption/ expenses, 14:Reduced non-food consumption/ expenses, 15:Relied more on collecting/ foraging food items from forest/ wild areas, 16:Relied on savings, 17:Took advance payments from employer, 18:Received assistance from government, 19:Received assistance from NGO, 20:Use insurance, 21:Did nothing, 96:Others, specify

[70] religion_c
Categories: 1:Catholic, 2:Protestant demoninantions (incl all non-catholic denominations), 3:Muslim, 4:African Inland Church (AIC), 10:African Traditional religion, 11:Non-religious, 96:Other➡ Please specify, -88:Does not know, -99:Refuse to answer

[71] group_service_codes
Categories: 1:Access to material inputs (free or non-free seeds, fertilizer, seed, pesticides, etc.), 2:Access to labour (shared labour, pest management, etc.), 3:Output markets (collective buying and selling), 4:Financial or credit services, 5:Advisory or extension services, 6:Training provision, 96:Others, specify

[72] internet_freq_code
Categories: 1:Daily, 2:At least once or few times a week, 3:At least once or few times a month, 4:Never

[73] educ_ch
Categories: 0:No formal education, 1:Nursery/ Kindergarten/ECD, 2:Primary 1, 3:Primary 2, 4:Primary 3, 5:Primary 4, 6:Primary 5, 7:Primary 6, 8:Primary 7, 9:Primary 8, 10:Secondary school Year 1, 11:Secondary school Year 2, 12:Secondary school Year 3, 13:Secondary school Year 4, 14:University 1, 15:University 2, 16:University 3, 17:University 4, 18:Post-graduation and higher, 96:Other educational training

[74] location_codes
Categories: 1:Ilchamus, 2:Ilngarua, 3:Ewalel soi, 4:Kapkuikui, 5:Kimalel, 6:Kimondis, 7:Loboi, 8:Marigat, 9:Ngambo, 10:Salabani, 11:Sandai

[75] training_info

Categories: 1:Contract farming, 2:Time and labor-saving machines, 3:Imrproved or new seeds, 4:New contacts/networks, 5:Crop care practices, 6:Livestock and animal keeping practices, 7:Post-harvest, 8:Prosopis management, 9:Business opportunities, 96:Others, specify

[76] liv_products

Categories: 8:Meat, 1:Milk, 2:Cheese, 3:Yogurt, 4:Wool, 5:Honey, beeswax, 6:Honeybrew, 7:Eggs, 96:Others, specify

[77] irrig

Categories: 1:Rainfed, 2:Well/ borehole, 3:River, canal, stream, 4:Public water service, 96:Others, specify

[78] lnd_use_code

Categories: 1:Cropland, 2:Fallow, 3:Agroforestry, forestry, beehives, 4:Pasture (natural), 5:Pasture (planted), 6:Forest (natural), 7:Forest (planted), 96:Other agricultural land uses(e.g. wetland, fish pond)

[79] lndten

Categories: 1:State owned, 2:Private owned with land title, 3:Private owned with no land title, 4:Leased/rented, 5:Contract farming land, 6:Communally or community owned, 7:Co-share/ co-farming, 96:Others, specify

[80] crops

Categories: 1:African foxtail grass / Cenchrus ciliaris, 2:Massai love grass / Erasgrotis superba, 3:Other forage grass, 4:Banana, 5:Barley, 6:Beans, 7:Butternuts, 8:Cabbage, 9:Coffee, 10:Flowers, 11:Garlic, 12:Green gram, 13:Groundnuts, 14:Maize, 15:Mango, 16:Millet, 17:Onions, 18:Papaya, 19:Potato, 20:Sorghum, 21:Sugarcane / Sugar, 22:Sukuma wiki, 23:Sweet potato, 24:Tee, 25:Tomato, 26:Watermelon, 27:Wheat, 96:Others, specify

[81] agree

Categories: 1:Strongly disagree, 2:Disagree, 3:Indifferent (neither nor), 4:Agree, 5:Strongly agree

[82] shocks

Categories: 21:COVID-19 lockdown measures, 22:Fallen sick of COVID-19, 23:Household member died of COVID-19 (report number of persons), 1:Chronic or severe illness or accident of a household member, 2:Death of a household member, 3:Household member jailed, 4:Fire on property, 5:Robbery/burglary, 6:Dwelling damaged, 7:Drought or extended period of no rain, 8:Floods, 9:Crop failure, crop diseases or pest infestation, 10:Livestock disease/death, 11:Livestock theft (including raids), 12:Household business failure (non-agricultural), 13:Loss of employment, 14:Large fall in sale prices for crops, 15:Large fall in sale prices for livestock, 16:Large rise in prices of food, 17:Large rise in prices of agricultural inputs (e.g. agrochemicals, machinery, hired labour), 18:Loss of land, 19:End of regular assistance (e.g. Pension, cash transfer, remittances) from outside the household, 20:Ethnic or clan clashes, 96:Other shocks, specify

[83] ward_codes

Categories: 1:Ilchamus, 2:Marigat, 3:Mochongoi

[84] village_codes

Categories: 1:Barsemoi, 2:Bogoria, 3:Chepkech, 4:Chemeron upper, 5:Eldebe, 6:Ilkateeyo, 7:Ilngeriyoi, 8:Kabikoki, 9:Kaptich, 10:Keper, 11:Korget, 12:Lamargweny, 13:Leseki, 14:Masai, 15:Ntepes, 16:Parleleru, 17:Saruni, 18:Siriangoti, 19:Sokonin, 20:Kamaech, 21:Kamuga, 22:Kapchekendi, 23:Kapchereren, 24:Kapchumo, 25:Kesumonin, 26:Kipkunyangi, 27:Koibokirwok, 28:Maji Ndege, 29:Mokobe, 30:Ngolbelon, 31:Ngosonoik, 32:Sirinyo, 33:Sokoteiwo, 34:Toborwo, 35:Tongururwonin

[85] treatment_grp

Categories: 1:Treatment 1 (Only HH head watches video and plays game), 2:Treatment 2 (Both HH head and spouse watch video and play game), 3:Control group (No video, Only HH head plays game)

[86] reln_head

Categories: 1:Self/HH head, 2:Spouse, 3:Son, 4:Daughter, 5:Brother, 6:Sister, 7:Father, 8:Mother, 9:Grandson, 10:Granddaughter, 11:Son-in-law, 12:Daughter-in-law, 13:Brother-in-law, 14:Sister-in-law, 15:Grandfather, 16:Grandmother, 17:Nephew, 18:Niece, 19:Other male relative, 20:Other female relative, 21:Other male member, 22:Other female member

[87] gender

Categories: 1:Men, 0:Women, 96:Others

[88] units

Categories: 1:Grams, 2:Kilograms, 3:Liters, 4:Numbers, 5:Basins, 6:2kg packet, 7:10kg bag, 8:25kg bag, 9:50 kg bag, 10:90 kg bag, 11:100 kg bag, 12:Crates, 13:Bunches, 14:Debe, 15:Wheelbarrow, 16:Bale / Bundle, 17:Tonnes, 18:Canter, 19:Packet (e.g salt, cigarattes), 20:Tins (eg milk tins), 21:Oxcart, 22:Probox, 96:Other (please specify)

[89] occup

Categories: 1:Large-scale crop cultivation, 2:Small-scale crop cultivation, 3:Livestock keeping/raising, 4:Pasture farming, 5:Fishing, 6:Agricultural wage labour (hired agricultural labour), 7:Self-employed agribusiness/agrienterprise, 8:Self-employed non-farm business (wholesale/retail trade, etc.), 9:Food industry (e.g. restaurants waiter, cashier), 10:Health (nurse, doctor, etc.), 11:Education/Teacher, 12:Government officers/employees/ civil servant, 13:Other public sector jobs, specify, 14:Factory worker/manufacturing jobs, 15:Construction labour, 16:Transport/Driver, 17:Travel/Tourism, 18:Hospitality (e.g. accommodation, lodging, motels, hotels), 19:Recreation and events, 20:Beauty industry (salons, hair, skin), 21:Security services (security guards), 22:Domestic/household helper, 23:Charcoal burning, production, and selling, 24:Retired/Pensioner, 25:Pastor, religious leaders, 96:Others, specify

[90] training

Categories: 1:Crop production, 2:Livestock production, 3:Human nutrition, 4:Prosopis management, 5:Charcoal production, 6:Honeybee production, 7:Brewing, wine/beer making, 8:Entrepreneurship/ business training, 96:Others, specify

[91] grazing_change_reason_codes

Categories: 1:Limited or little grass on the land, 2:Invasion of prosopis/parthenium or other invasive species, 3:Many other pastoralists graze there, 4:Ethnic conflicts, 5:Tensions or conflicts with others, 6:Livestock theft, 7:Livestock raiding, 8:No water available, 9:Too far from my home, 10:Expensive permit/rent, 11:None, 13:Does not apply, grazing place same before, 96:Other➡️ Please specify

[92] groups

Categories: 1:Agricultural / livestock / fisheries producer's group, 2:Contract growers group, 3:Water users' group or irrigator's association,

4:Forest users' group, 5:Credit or microfinance group or loan, 6:Savings group, self or mutual -help groups (e.g. merry-go-round, table banking), 7:Trade / marketing / business association and groups, 8:Religious group, 9:Men's group, 10:Women's group, 11:Youth group, 13:Parent/ Teacher's / School association, 14:Political party, 96:Other, specify

[93] emp_offfarm_code

Categories: 1:Large-scale crop cultivation, 2:Small-scale crop cultivation, 3:Livestock keeping, 4:Pasture farming, 5:Food industry (e.g. restaurants waiter, cashier), 6:Health (nurse, doctor, etc.), 7:Education (teacher, etc.), 8:Government officers/employees, 9:Other public sector, specify, 10:Agricultural retail trade/enterprise, 11:Non-farm wholesale or retail trade/enterprise, 12:Factory worker/manufacturing jobs, 13:Construction labour, 14:Transport (driver), 15:Travel/tourism, 16:Hospitality (e.g. accommodation, logding, motels, hotels), 17:Recreation and events, 18:Beauty industry (salons, hair, skin), 19:Security services (security guards), 20:Domestic/ household helper, 21:Others, specify

[94] absence_res: If %s1_member_name% has not stayed for 12 months, what is the MAIN reason for absence?

Categories: 1:New arrivals - New born, 2:New arrivals - Returned home from abduction/displacement, 3:New arrivals - To escape insecurity from home area, 4:New arrivals - Bad living conditions at home, 5:New arrivals - To look for work, 6:New arrivals - Other economic reasons, 7:New arrivals - Education, 8:New arrivals - Marriage, 9:New arrivals - Divorce, 10:Members that left - Deceased, 11:Members that left - To escape insecurity from this area, 12:Members that left - Looking for work elsewhere, 13:Members that left - Other economic reasons, 14:Members that left - Illness, 15:Members that left - Education, 16:Members that left - Marriage, 17:Members that left - Divorce, 18:Members that left - Started own household, 19:Members that left - Abducted/disappeared, 96:Members that left - Other (Specify)

[95] ha0: Does your household own any of these items?

Categories: 1:Smart phones (touch screen), 2:Simple mobile phones (keypad), 3:Cars, vans, 4:Motorcycles /Scooter/ Boda-boda, 5:Bicycle, 6:Buildings (house, motels/hotels, other buildings), 7:Electric Stoves, 8:Gas or Paraffin Stove, 9:Microwave, 10:Refrigerator, 11:Freezer, 12:Washing Machine, 13:Radio, 14:Television, 15:Computer- laptop or desktop, 16:Tablet/Ipads, 17:Living room furniture sets (e.g. sofa), 18:Bedroom furniture sets (e.g. mattress, bed), 19:Donkey cart/ ox cart/ sledges, 20:Farm tractor / machinery, 21:Ploughs, 22:Wheelbarrow, 23:Hoes, 24:Grinding mills, 25:Machetes, 26:Irrigation pump (private deepwell, tubewell, hand or lift pumps, diesel pumps), 27:Farm house, warehouse, 28:Solar panel, 29:Electric generator, 30:Battery bank, 31:Boats, 96:Others, specify

APPENDIX C — VARIABLES

[1] part_inst:
country==1? "Kenyatta University" : country==2? "Mzumbe University": country==3 ? "University of Zambia": country==4? "University of Namibia"
: country==5? "he Botswana University of Agriculture and Natural Resources (BUAN)":"_"

Legend and structure of information in this file

Name of section

Enabling condition for this section

Type of question, scope

Variable name

Question title

Answer options

SECTION 5: OTHER INCOME SOURCES

E s4_other_sources_which.Contains(98)

Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur?

MULTI-SELECT
SCOPE: PREFILLED

s4_rel_leaders_other

I **This refers to family relations**
E s3_time_other > 0
V1 s4_rel_leaders_which.Contains(98)
M1 **Can not be itself**
V2 (s3_time_other_breeding_advice <= (50 - s3_time_art_in-sem_advice)) ||s3_time_other_breeding_advice == 0
M2 **This person is not in the list**
F optioncode != s5_ignored_option_code

01 ☐ **Community animal health workers**

02 ☐ **Private**

03 ☐ **Government**

04 ☐ **Livestock keepers association**

05 ☐ **NGO**

And 5 other [13]

Additional information:
"I" — Question instruction
"E" — Enabling condition
"V1" — Validation condition №1
"M1" — Message for validation №1
"F" — Filter in Categorical questions

Link to full set in appendix

Breadcrumbs

Type or roster

Roster Title

CHAPTER 3 IDENTIFICATION /
Roster: **LEADER RELATION DETAILS**
generated by fixed list:

01 **Ward Livestock Officer**

02 **Village Livestock Officer**

99 **Other (specify)**

List items