Survey Solutions

Copy of Field_MTF_Energy_Survey_HH_07252017

SURVEY IDENTIFICATION INFORMATION
QUESTIONNAIRE DESCRIPTION

HOUSEHOLD IDENTIFICATION
No sub-sections, No rosters, Questions: 15.

INTERVIEW DETAILS
Sub-sections: 1, No rosters, Questions: 7, Static texts: 2.

A. HOUSEHOLD ROSTER
No sub-sections, Rosters: 1, Questions: 21.

B.HOUSEHOLD CHARACTERISTICS
No sub-sections, No rosters, Questions: 34.

C. SUPPLY AND DEMAND OF ELECTRICITY
Sub-sections: 15, Rosters: 2, Questions: 244, Static texts: 8.

D. WILLINGNESS TO PAY FOR A GRID CONNECTION
No sub-sections, No rosters, Questions: 15, Static texts: 2, Variables: 3.

E. WILLINGNESS TO PAY FOR IMPROVED ELECTRICITY SUPPLY
No sub-sections, No rosters, Questions: 6.

F. WILLINGNESS TO PAY FOR SOLAR DEVICE
No sub-sections, No rosters, Questions: 8, Static texts: 2, Variables: 3.

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING
Sub-sections: 3, Rosters: 1, Questions: 22.

H.DRY-CELL BATTERIES
No sub-sections, Rosters: 1, Questions: 10, Static texts: 1.

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
Sub-sections: 13, No rosters, Questions: 78.

J. USE OF COOKING SOLUTIONS
Sub-sections: 1, Rosters: 1, Questions: 56, Static texts: 4.

K. SPACE AND WATER HEATING
No sub-sections, No rosters, Questions: 8.

L. WILLINGNESS TO PAY FOR AN IMPROVED COOKSTOVE
No sub-sections, No rosters, Questions: 13, Static texts: 6.

N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPMENT OWNERSHIP AND TOTAL
No sub-sections, Rosters: 2, Questions: 7, Static texts: 1.

P. HOUSEHOLD ECONOMIC SHOCKS
Sub-sections: 2, No rosters, Questions: 4, Static texts: 1.

Q. STREET LIGHTING
No sub-sections, No rosters, Questions: 7, Static texts: 1.

R.TIME USE
No sub-sections, Rosters: 1, Questions: 26.

S. HEALTH IMPACTS
No sub-sections, Rosters: 1, Questions: 23.

T. ATTITUDES
Sub-sections: 1, No rosters, Questions: 36, Static texts: 2.

U. WOMEN'S EMPOWERMENT
No sub-sections, No rosters, Questions: 13, Static texts: 3.

M. CONSUMPTION / EXPENDITURE
Sub-sections: 3, Rosters: 1, Questions: 26, Static texts: 1.

O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS
Sub-sections: 1, No rosters, Questions: 5, Static texts: 1.

CONTROL SHEET - INTERVIEW STATUS
Sub-sections: 3, No rosters, Questions: 17, Static texts: 1.

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

APPENDIX B — OPTIONS

LEGEND

SURVEY IDENTIFICATION INFORMATION
QUESTIONNAIRE DESCRIPTION

Basic information

Title   Copy of Field_MTF_Energy_Survey_HH_07252017

HOUSEHOLD IDENTIFICATION

Questionnaire Number	NUMERIC: INTEGER Q_N SCOPE: IDENTIFYING
	- -

Quality Control (For Supervisors)	MULTI-SELECT QC SCOPE: SUPERVISOR
	01 ☐ Offsite check completed
	02 ☐ Observational visit completed
	03 ☐ Back check completed

Location Name	TEXT Location_Name SCOPE: IDENTIFYING
	....

GPS Tracking

GPS   GPS
SCOPE: IDENTIFYING

- -
N

- -
W

- -
A

Date of Household Visit	DATE Date_HH_Visit
	....

Ecological Region

SINGLE-SELECT   Eco_Reg

- 01 ○ Mountain/High Hills
- 02 ○ Hills
- 03 ○ Terai

Province

SINGLE-SELECT   Province

- 01 ○ Province 1
- 02 ○ Province 2
- 03 ○ Province 3
- 04 ○ Province 4
- 05 ○ Province 5
- 06 ○ Province 6
- 07 ○ Province 7

Development Region

SINGLE-SELECT   Dev_Region

- 01 ○ Eastern
- 02 ○ Central
- 03 ○ Western
- 04 ○ Mid-western
- 05 ○ Far-western

Zone

SINGLE-SELECT: CASCADING   Zone

- 01 ○ Mechi
- 02 ○ Koshi
- 03 ○ Sagarmatha
- 04 ○ Janakpur
- 05 ○ Bagmati

	06 ○ Narayani	
	07 ○ Gandaki	
	08 ○ Dhaulagiri	
	09 ○ Lumbini	
	10 ○ Rapti	
	11 ○ Bheri	
	12 ○ Karnali	
	13 ○ Seti	
	14 ○ Mahakali	

VDC/Municipality	SINGLE-SELECT	VDC_MUN
	01 ○ VDC	
	02 ○ Municipality	

VDC/Municipality Name	TEXT	VDC_MUN_NAME
	··	

3.District	SINGLE-SELECT: CASCADING	District

01 ○ Taplejung
02 ○ Panchthar
03 ○ Ilam
04 ○ Jhapa
05 ○ Morang
06 ○ Sunsari
07 ○ Dhankuta
08 ○ Tehrathum
09 ○ Sankhuwasabha
10 ○ Bhojpur
11 ○ Solukhumbu
12 ○ Okhaldhunga
13 ○ Khotang
14 ○ Udayapur
15 ○ Saptari
16 ○ Siraha

And 59 other symbols [1]

4. EA	NUMERIC: INTEGER	EA
	- .	

5. LOCALITY	SINGLE-SELECT	LOCALITY
	01 ○ Urban	
	02 ○ Rural	

6. Household ID	NUMERIC: INTEGER	HH_ID
	- .	

INTERVIEW DETAILS

INTERVIEW DETAILS
INITIAL MEET AND GREET / HOUSEHOLD CONSENT

STATIC TEXT

Namastey My name is .... and I am from Solutions Consultant- a market research consulting firm based at Kathmandu (Uttardhoka, Lazimpat). Currently, we are conducting a national survey all over Nepal in collaboration with World Bank in which we are gathering information regarding your electricity consumption and coping activities when power is not available in your community. Your response is very important to give the policy makers the information to make informed decisions in order to improve electricity services that can help people like you. We would like to assure you that all the responses will be analyzed in an aggregate form; used only for this survey and kept highly confidential. If you have any queries regarding this survey, please do not hesitate to contact██████████ So, would you please spare some time to participate in this survey?

Are you willing to Proceed with the survey?	SINGLE-SELECT CONSENT 01 ◯ Yes 02 ◯ No
7. Name of Household Head E `CONSENT == 1`	TEXT HH_HEAD_NAME ....
8. Language of interview E `CONSENT == 1`	SINGLE-SELECT LANGUAGE 01 ◯ English 02 ◯ Nepali
11. Enumerator ID E `CONSENT == 1`	NUMERIC: INTEGER ENUM_ID _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .
Supervisor ID E `CONSENT == 1`	NUMERIC: INTEGER SCOPE: SUPERVISOR SUP_ID _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .
Date of Interview DD/MM/YY E `CONSENT == 1`	DATE DATE_INTERVIEW ....
Start Time E `CONSENT == 1`	DATE: CURRENT TIME START_TIME ....

STATIC TEXT

E `CONSENT == 1`

IN ORDER TO MAKE A COMPREHENSIVE 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 for the last 6 months. WRITE DOWN NAMES, SEX, AND RELATIONSHIP TO HH HEAD (Q2 – Q4). LIST HOUSEHOLD HEAD ON LINE 1. Then, give me the names of any other persons related to you or other household members who normally live and eat their meals together here. FILL IN Q2 – Q4. Are there any other persons not here now who normally live and eat their meals here? For example, household members studying elsewhere or traveling. FILL IN Q2 – Q4. Then, 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 other who are not relatives. FILL IN Q2 – Q4. DO NOT LIST HOUSEHELP WHO HAVE A HOUSEHOLD ELSEWHERE, AND GUESTS WHO ARE VISITING TEMPORARILY AND HAVE A HOUSEHOLD ELSEWHERE. IF MORE THAN 20 INDIVIDUALS, USE SECOND QUESTIONNAIRE.

A. HOUSEHOLD ROSTER

Please tell us the number of household member in your family. I Make a complete list of all individuals who normally live and eat their meals together in this household, starting with the head of household.	NUMERIC: INTEGER HH_MEMBER_NUMBER _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .

A. HOUSEHOLD ROSTER
Roster: A. HOUSEHOLD ROSTER PERSON:
generated by numeric question HH MEMBER NUMBER   HH_ROSTER

| A1. Individual ID | NUMERIC: INTEGER | A1 |

A1. Individual ID — NUMERIC: INTEGER — A1

_ .

A2. Name — TEXT — A2

I Enumerator: First then Last Name

....-

A3. %A2% male or female? — SINGLE-SELECT — A3

01 ○ Male
02 ○ Female

A4. What is the relationship of %A2% to household head? — SINGLE-SELECT — A4

V1 `(self==1&&HH_ROSTER.Count(x=>x.A4==1)==1)|| self!=1`
M1 There can only be one household head! Please check!

01 ○ Head
02 ○ Wife/Spouse
03 ○ Child/adopted child
04 ○ Grandchild
05 ○ Niece/Nephew
06 ○ Father/Mother
07 ○ Sister/Brother
08 ○ Son/Daughter-in-law
09 ○ Brother/Sister-in-law
10 ○ Father/Mother-in-law
11 ○ Grandfather/mother
12 ○ Other relative
13 ○ Servant/servant's relative
14 ○ Other non-relative

A5. How old is %A2%? — NUMERIC: INTEGER — A5

I YEARS, Enumerator: Record "0" if infant below 1 year old.
V1 `self <= 100`
M1 Please enter less than or equal to 100.

_ .

A6. ENUMERATOR: Is %A2% 5 years old or older? — SINGLE-SELECT — A6

E `A5 >= 5`

01 ○ Yes
02 ○ No

A7. Has %A2% ever attended school? — SINGLE-SELECT — A7

E `A6 == 1`

01 ○ Yes
02 ○ No

A8. Is %A2% currently attending school? — SINGLE-SELECT — A8

E `A7 == 1`

01 ○ Yes
02 ○ No

A9. What is the highest educational qualification acquired by %A2%? — SINGLE-SELECT — A9

E `A7 == 1`

02 ○ Primary
03 ○ Secondary
04 ○ Higher Secondary
05 ○ Vocational/ Technical School
06 ○ Graduate
07 ○ Post-Grad

A9A. How many years of %A9% has %A2% completed? -YEARS — NUMERIC: INTEGER — A9A

I Class
E `A7 == 1`
V1 `self < A5`

_ .

M1	Please enter less than age.	

A10. ENUMERATOR: Is %A2% 12 years or older?	SINGLE-SELECT	A10
E `A6 == 1`	01 ⚪ Yes 02 ⚪ No	

A11. What is %A2%'s marital status?	SINGLE-SELECT	A11
E `A10 == 1` V1 `A4 ==1 && HH_ROSTER.Any(x=>x.A4==2)? self == 1: true` M1 Marital status of head of household with spouse must be married. V2 `A4==2 && self == 1 || A4!=2` M2 Spouse to to the head of household must be married	01 ⚪ Married 02 ⚪ Cohabitating 03 ⚪ Never Married 04 ⚪ Divorced 05 ⚪ Separated 06 ⚪ Widowed	

A12. How frequently does %A2% cook food for the household?	SINGLE-SELECT	A12
E `A10 == 1`	01 ⚪ Everyday 02 ⚪ A few times in a week 03 ⚪ Once a week 04 ⚪ A few times in a month 05 ⚪ Once a month 06 ⚪ Never	

A13. Is %A2%15 years or older?	SINGLE-SELECT	A13
E `A10 == 1`	01 ⚪ Yes 02 ⚪ No	

A14. What was %A2%'s main occupation for the last 12 months?	SINGLE-SELECT	A14
E `A13 == 1`	001 ⚪ Wage/Salaried Employee, Non-Farm 002 ⚪ Wage/Salaried Employee, Farm 003 ⚪ Self-Employed Non-Farm-Business enterprise 004 ⚪ Self-Employed Non-Farm-Independent contractor, technician, professional, etc 005 ⚪ Self-Employed Agriculture/Livestock 006 ⚪ Assistance in family enterprise 007 ⚪ Casual/Day Laborer 008 ⚪ Intern/free labor/voluntary work 009 ⚪ Student 010 ⚪ Retired/pensioner 011 ⚪ Too old to work 012 ⚪ Disabled 013 ⚪ Job Seeker 014 ⚪ Unemployed 015 ⚪ House wife/husband 555 ⚪ Other	

A14. Specify Others	TEXT	A14_SO
E `A14 == 555`	....	

A16. Out of the last 12 months,how many months were you engaged in this activity?	NUMERIC: INTEGER	A16
E `A14.InList(1,2,3,4,5,6,7,8,555)` V1 `self < 13` M1 Enter less than or equal to 12.	– –	

A17. How many days per month does %A2% work in this activity?	NUMERIC: INTEGER	A17

E `A14.InList(1,2,3,4,5,6,7,8,555)`
V1 `self < 33`
M1 Enter below or equal to 32.

A18. Does %A2% operate any non-agricultural/ business/ enterprise within this household or compound?	SINGLE-SELECT	A18

E `A14.InList(1,2,3,4,5,6,7,8,555)`

01 ◯ Yes
02 ◯ No

A19. How many employees does this business/ enterprise have?	NUMERIC: INTEGER	A19

I Number of employees including full time and Part time
E `A18 == 1`

B.HOUSEHOLD CHARACTERISTICS

B1. Enumerator: Record name of respondent for this section	SINGLE-SELECT: LINKED	B1

I Individual name from Household Roster

B2. Does your household live in this dwelling for the entire year?	SINGLE-SELECT	B2

01 ◯ Yes
02 ◯ No

B3. Is this your main dwelling?	SINGLE-SELECT	B3

I The dwelling that you live in for most of the year.
E `B2 == 2`

01 ◯ Yes
02 ◯ No

B4. How many years have you been living in this community?	NUMERIC: INTEGER	B4

I Record 1 if less than 1.
V1 `self <= 100`
M1 Too Large. Please Check

B5. What is the type of dwelling?	SINGLE-SELECT	B5

I (Enumerator, check with observation)

001 ◯ A single house occupied by one household dwelling
002 ◯ A house occupied by multiple households
003 ◯ Multi-storied building with one household
004 ◯ Multi-storied building with more households
005 ◯ Group of enclosed dwellings: multiple households
006 ◯ Group of enclosed dwellings occupied by a single household
555 ◯ Other, specify

B5. Others Specify	TEXT	B5_SO

E `B5 == 555`

....

B6. How many households share your dwelling?	NUMERIC: INTEGER	B6

I Number of households E `B5.InList(2,4,5,555)`	

B7. Do you own this dwelling?

SINGLE-SELECT   B7

01 ◯ Yes
02 ◯ No

B8. Do you use it for free or rent it?

E `B7 == 2`

SINGLE-SELECT   B8

01 ◯ Free
02 ◯ Rented

B9. How many rooms (excluding the kitchen, toilet, and bathroom) does the household occupy?

I Record number of rooms
E `B8 == 2`

NUMERIC: INTEGER   B9

– –

B10.The walls of the dwelling are mainly made of what material?

I Check with observation

SINGLE-SELECT   B10

001 ◯ Wood and mud
002 ◯ Wood and thatch
003 ◯ Wood only
004 ◯ Stone only
005 ◯ Stone and mud
006 ◯ Stone and cement
007 ◯ Blocks, plastered with cement
008 ◯ Blocks, unplastered
009 ◯ Bricks and Cement
010 ◯ Mud bricks (traditional)
011 ◯ Steel
012 ◯ Cargo container
013 ◯ Parquet or polished wood
014 ◯ Chip wood
015 ◯ Corrugated iron sheet
016 ◯ Asbestos

And 2 other symbols [2]

B10. Others Specify

E `B10 == 555`

TEXT   B10_SO

···

B11. The roof of the dwelling is mainly made of what material?

I Check with observation

SINGLE-SELECT   B11

001 ◯ Wood and mud
002 ◯ Wood and thatch
003 ◯ Stone
004 ◯ Brick/Roof tiles
005 ◯ Corrugated iron sheet
006 ◯ Asbestos
007 ◯ Reed/bamboo
008 ◯ Plastic/ canvas
009 ◯ Concrete
555 ◯ Other, specify

B11. Others Specify

E `B11 == 555`

TEXT   B11_SO

···

B12. The floor of the dwelling is mainly made of what material?

SINGLE-SELECT   B12

I Check with observation	001 ◯ Mud/Dung 002 ◯ Reed/bamboo 003 ◯ Wood planks 004 ◯ Parquet or polished wood 005 ◯ Cement screed 006 ◯ Plastic tiles 007 ◯ Cement tiles 008 ◯ Brick tiles 009 ◯ Ceramic/Marble tiles 555 ◯ Other, specify

B12. Specify Others

E B12 == 555

TEXT   B12_SO

···

B13. What type of toilet facility does your household use?

I Multiple responses possible.

MULTI-SELECT   B13
001 ☐ None (open field)
002 ☐ Flush to sewage
003 ☐ Flush to septic tank
004 ☐ Pail/Bucket
005 ☐ Covered pit latrine
006 ☐ Uncovered pit latrine
007 ☐ Community latrine
555 ☐ Other, specify

B13. Specify Others

E B13.Contains(555)

TEXT   B13_SO

···

B14. What is your household's main source of drinking water?

SINGLE-SELECT   B14
001 ◯ Pipe borne water treated
002 ◯ Pipe borne water untreated
003 ◯ Bore hole/ hand pump
005 ◯ Well/spring protected
006 ◯ Well/spring unprotected
007 ◯ River/spring
008 ◯ Lake/reservoir
009 ◯ Rain water
010 ◯ Tanker/truck/vendor
011 ◯ Bottle/Jar water
555 ◯ Other, specify

B14. Specify Others

E B14 == 555

TEXT   B14_SO

···

B15. Do you treat water for drinking purpose (chemical treatment)?

SINGLE-SELECT   B15
001 ◯ Yes
002 ◯ No
888 ◯ Don't know

B16. Does anyone in the household have an account at a financial institution?

SINGLE-SELECT   B16
01 ◯ Yes
02 ◯ No

B17. At which institution is this account or savings?

E B16 == 1

MULTI-SELECT   B17
001 ☐ Commercial bank (including Development Banks and finance companies)

	002 ☐ Cooperative (saving and credit cooperative)
	003 ☐ Microfinance institution
	555 ☐ Other, specify

| B17. Specify Others | TEXT | B17_SO |
| | | |

E `B17.Contains(555)`

·······································

| B18. Does anyone in the household have an account at an informal institution? | SINGLE-SELECT | B18 |

01 ◯ Yes
02 ◯ No

| B19. At which informal institution is this account? | MULTI-SELECT | B19 |

001 ☐ Group savings (rotational)
002 ☐ Group savings (one-time disbursement)
555 ☐ Other, specify

I Multiple responses possible
E `B18 == 1`

| Specify Others | TEXT | B19_SO |

E `B19.Contains(555)`

·······································

| B20. If you can get a loan/credit, what are the sources of credit/loans? | MULTI-SELECT | B20 |

001 ☐ Commercial/government bank
002 ☐ Saving and Credit Cooperative
003 ☐ Microfinance institution
004 ☐ Rural bank
006 ☐ NGO
007 ☐ Business firm
008 ☐ Employer
009 ☐ Moneylender
010 ☐ Shop
011 ☐ Relative/friend/neighbor
012 ☐ Mobile money services
013 ☐ Cannot get a loan/credit
555 ☐ Other, specify

I Multiple responses possible

| B20. Specify Others | TEXT | B20_SO |

E `B20.Contains(555)`

·······································

| B21. Do you have a mobile money account? | SINGLE-SELECT | B21 |

01 ◯ Yes
02 ◯ No

| B22. Do you use mobile money to make payments over the mobile phone? | SINGLE-SELECT | B22 |

01 ◯ Yes
02 ◯ No

E `B21 == 1`

| B23. Have you used the account in the past 90 days? | SINGLE-SELECT | B23 |

01 ◯ Yes
02 ◯ No

E `B21 == 1`

| B24.How do you use the mobile money services? | MULTI-SELECT | B24 |

001 ☐ Receive money from family/friends/other
002 ☐ Transfer credit to family/relatives
003 ☐ Top up credit

I Multiple responses possible
E `B21 == 1`

	004 ☐ Receive NGO/State support
	005 ☐ Pay for Electricity
	006 ☐ Pay for Water
	007 ☐ Internet top-up/credit
	008 ☐ Commercial purchases
	009 ☐ Insurance
	010 ☐ Loan payments
	011 ☐ Savings
	012 ☐ Get small loans from mobile provider
	555 ☐ Other, specify

B24. Specify Others	TEXT B24_SO
E B24.Contains(555)	·································

C. SUPPLY AND DEMAND OF ELECTRICITY

STATIC TEXT

Instructions: This module should be completed by the most knowledgeable member on household electricity. Concerted answers should be allowed.

Enumerator: Now, we would need to talk to the most knowledgeable member on household electricity. Who would that person be?	SINGLE-SELECT: LINKED C_WHO
F HH_ROSTER.Any(x=>x.A5>=2)	

Is %C_WHO% available now?	SINGLE-SELECT C_AVAILABLE
	01 ◯ Yes
	02 ◯ No

Enumerator: Record Date and Time for next meeting if the respondent is not currently available.	TEXT C_DATE_TIME
E C_AVAILABLE == 2	·································

C. SUPPLY AND DEMAND OF ELECTRICITY
ELECTRICITY FROM NATIONAL GRID
E C_AVAILABLE == 1

C2. Is the household connected to the national grid?	SINGLE-SELECT C2
	01 ◯ Yes
	02 ◯ No

C3.How far is your house from the nearest national grid line?	NUMERIC: INTEGER C3
I Meters,Do not know... 888	
E C2 == 2	
V1 self <= 150000 || self == 888	
M1 Entered number is too far. Check again.	

C4. What is the MAIN reason why your household is not connected to the grid?	SINGLE-SELECT C4
I Record the MAIN reason.	001 ◯ Grid is too far from household/not available
E C2 == 2	002 ◯ Cost of initial connection is too expensive

	003 ⭕ Monthly fee is too expensive
	004 ⭕ Satisfied with current energy solution
	005 ⭕ Renting, Landlord decision
	006 ⭕ Service Unreliable
	007 ⭕ Administrative procedure is too complicated
	008 ⭕ Submitted application and waiting for connection
	009 ⭕ Company refused to connect the household
	555 ⭕ Other, specify

C4. Specify Others

E `C4 == 555`

TEXT   C4_SO

··-

C5. Do you expect to get grid connection?

E `C2 == 2`

SINGLE-SELECT   C5

001 ⭕ Yes
999 ⭕ Don't expect to get grid connection
888 ⭕ Don't know

C6.When do you expect to get grid connection?

E `C5 == 1`

SINGLE-SELECT   C6

001 ⭕ Upto 6 months
002 ⭕ 6 months to 1 year
003 ⭕ 1 year to 2 years
004 ⭕ More than 2 years
888 ⭕ Don't know

C7.Who is the service provider of the grid connection?

E `C2 == 1`

SINGLE-SELECT   C7

01 ⭕ Nepal Electricity Authority (NEA)
02 ⭕ Other Private Electricity Providers

C8.How many years have you had this grid connection?

I Record in years, if less than 1 year record 1 . .Dont know=888
E `C2 == 1`
V1 `C8 < 101 || self == 888`
M1 Too much. Please check.

NUMERIC: DECIMAL   C8

C9. How much did your household pay for the grid connection fee?

I Don't know.........................888 Household was already connected........111 , ,Refer to connection fee ONLY.
E `C2 == 1`
V1 `self < 10000000 || self == 888`
M1 Too much. Please check or if don't know enter 888.

NUMERIC: INTEGER   C9

C9.A. How much did your household pay for any additional connection costs (external wiring, poles etc.)?

I Do not include the connection fee from C.9 here, NPR Don't know.........................888
E `C9 != 111 && C2 == 1`

NUMERIC: INTEGER   C9_A

C10. How much did your household pay for the internal wiring fee? - Local currency

I Don't know.........................888, Do not include the connection fee from % C9% here

NUMERIC: INTEGER   C10

E	`C9 != 111 && C2 == 1`

C11. How many weeks after you applied for the grid connection did your household get connected? (Insert 0 if immediate) -Number of weeks

I Don't know........................888
E `C9 != 111 && C2 == 1`
V1 `self < 53 || self == 888`
M1 Too many weeks. if don't know please enter 888.

NUMERIC: INTEGER   C11

` _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C12.How many days after you were connected were you able to use electricity in your home?

I Number of days,(Insert 0 if immediate), Don't know........................888
E `C9 != 111 && C2 == 1`
V1 `self < 101 || self == 888`
M1 Too long . Please check.

NUMERIC: INTEGER   C12

` _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C13. Who receives the payment for your electricity service?

E `C2 == 1`

SINGLE-SELECT   C13

001 ◯ Energy company for eg.: NEA, BPC
003 ◯ Community/village/municipality
004 ◯ Relative
005 ◯ Neighbor
006 ◯ Landlord
007 ◯ No one
555 ◯ Other, specify

C13. Specify Others

E `C13 == 555`

TEXT   C13_SO

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

C14.Does your household have an electric meter/sub-meter?

E `C13.InList(1,3,4,5,6,555) && C2 == 1`

SINGLE-SELECT   C14

01 ◯ Yes
02 ◯ No

C15.What is the capacity of the meter/sub-meter?

I Ampere, Please take reference from electricity bill or from meter-box.
E `C14 == 1 && C2 == 1`

NUMERIC: INTEGER   C15

` _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C17. Does your household share the electric meter/sub-meter?

E `C14 == 1 && C2 == 1`

SINGLE-SELECT   C17

01 ◯ Yes
02 ◯ No

C18. How many households are sharing the meter/sub meter?

I Number of Households
E `C17 == 1 && C2 == 1`
V1 `self < 31`
M1 Too many household. Please check.

NUMERIC: INTEGER   C18

` _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C19. How are you billed for electricity?

I Read options aloud
E `C13.InList(1,2,3,4,5,6,555) && C2 == 1`

SINGLE-SELECT   C19

001 ◯ Fixed monthly fee
002 ◯ Pay based on lights and appliances used
003 ◯ Utility estimates consumption
555 ◯ Other, specify
111 ◯ No bill for electricity

C19. Specify Others

E `C19 == 555`

TEXT   C19_SO

···

C20. How do you make your electricity bill payment?

E `C13.InList(1,2,3,4,5,6,555) && C2 == 1`

SINGLE-SELECT   C20

- 001 ◯ Cash
- 002 ◯ Credits using mobile money
- 003 ◯ Credit, using other ways
- 555 ◯ Other, specify

C20. Specify Others

E `C20 == 555`

TEXT   C20_SO

···

C21. Where do you make payments?

E `C13.InList(1,2,3,4,5,6,555) && C2 == 1`

SINGLE-SELECT   C21

- 001 ◯ Local store
- 002 ◯ Utility office
- 003 ◯ Bank
- 004 ◯ Post office
- 555 ◯ Other, specify

C21. Specify Other

E `C21 == 555`

TEXT   C21_SO

···

C22. Enumerator: If the respondent pays the energy company or has a record of the electricity payment, ask to see the electricity bill/invoice and use it for C.23 and C.24 .

E `C13.InList(1,2,3,4,5,6,555) && C2 == 1`

SINGLE-SELECT   C22

- 01 ◯ Respondent has energy bill and shows it
- 02 ◯ Respondent has energy bill but refuses to show it or could not locate it
- 03 ◯ Respondent does not have an energy bill

C23. In the last month, how much did you spend on the electric bill?

I Don't Know...888

E `C22 == 1`

V1 `self < 100000 || self == 888`

M1 Too much. Please check or if don't know enter 888.

NUMERIC: INTEGER   C23

– –

C24. In the last month how much electricity did your household consume?

I Quantity in Kilowatt Hour (kWh),Don't Know............888

E `C22 == 1`

V1 `self < 100000 || self == 888`

M1 Too much. Please check. or if don't know enter 888.

NUMERIC: INTEGER   C24

– –

C25. In a typical month, how much did you spend on electricity?

I Don't know............888,

E `C24 < 0 || C22 == 3 || C22 == 2 || C13 == 7`

V1 `self >= 30 || self < 100000 || self == 888`

M1 Amount iseither too small or too high. Please check again. or if don't know enter 888.

NUMERIC: INTEGER   C25

– –

C26. Are there certain months/seasons every year when the household experiences bad electricity service from the national grid?

E `C2 == 1`

SINGLE-SELECT   C26

- 01 ◯ Yes
- 02 ◯ No

C27. What are the worst months for service

MULTI-SELECT: YES/NO   C27

from the grid?

I Multiple responses are possible.
E C26 == 1
V1 `(self.Yes.Contains(888) && !self.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12)) || (!self.Yes.Contains(888) && self.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12))`
M1 Select either don't know or other options.

001	☐ / ☐	13th April-13th May
002	☐ / ☐	14th May-14th June
003	☐ / ☐	15th June-15th July
004	☐ / ☐	16th July-16th August
005	☐ / ☐	17th August-16th September
006	☐ / ☐	17th September-16th October
007	☐ / ☐	17th October-15th November
008	☐ / ☐	16th November-15th December
009	☐ / ☐	16th December-13th January
010	☐ / ☐	14th January-11th February
011	☐ / ☐	12th February-13th March
012	☐ / ☐	14th March-13th April
888	☐ / ☐	Don't Know

STATIC TEXT

E C2 == 1

Ask respondent first about the worst months and then about a typical month for C29 to C34 If no seasonal changes, ask only about a typical month. Ask questions by ROW.

C28. Do you receive information about a "load-shedding" schedule (load shedding is the set hours of electricity NOT available from the grid)?

E C2 == 1

SINGLE-SELECT   C28
01 ◯ Yes
02 ◯ No

C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRICITY FROM NATIONAL GRID
A.WORST MONTHS

E C26 == 1

C29. How many hours of electricity are available each day and night from the grid? (max 24 hours) -hours

I Don't know............888
V1 `self < 25 || self == 888`
M1 Please enter less than or equal to 24 or 888.

NUMERIC: DECIMAL   C29_A
- .

C30.How many hours of electricity are available each evening, from 6:00 pm to 10:00 pm from the grid? (max 4 hours)-hours

I Don't know............888
V1 `self < 5 || self == 888`
M1 Pelase enter less than or equal to 4 or 888.

NUMERIC: DECIMAL   C30_A
- .

C31.How many hours of electricity do you use each day and night from the grid?

I Don't know............888
V1 `self <= C29_A || self == 888`
M1 Please enter less than or equal to %C29_A%. or 888 for don't know

NUMERIC: DECIMAL   C31_A
- .

C32.How many outages/blackouts occur in a week?

I No outages/blackouts.....111 Don't know............888

NUMERIC: DECIMAL   C32_A
- .

C33. What is the total duration of all the outages/blackouts in a week?:Hour

I Hour, Don't know...........888
E C32_A != 111

NUMERIC: INTEGER   C33_A_HOUR
- .

V1	`self <= 168 || self == 888`	
M1	Please enter less than or equal to 24 or 888.	

C33. What is the total duration of all the outages/blackouts in a week?:Minutes	NUMERIC: INTEGER	C33_A_MINUTES
I Minute, Don't know...........888	------------------------------------.	
E `C32_A != 111`		
V1 `self < 60 || self == 888`		
M1 Please enter less than 59 or 888.		

C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRICITY FROM NATIONAL GRID

B. TYPICAL MONTH

E `C2 == 1`

C29. How many hours of electricity are available each day and night from the grid? (max 24 hours)	NUMERIC: INTEGER	C29_B
I Don't know............888	------------------------------------.	
V1 `self < 25 || self == 888`		
M1 Please enter less than or equal to 24 or 888.		

C30. How many hours of electricity are available each evening, from 6:00 pm to 10:00 pm from the grid? (max 4 hours)	NUMERIC: INTEGER	C30_B
I Don't know............888	------------------------------------.	
V1 `self < 5 || self == 888`		
M1 Pelase enter less than or equal to 4 or if don't know enter 888.		

C31. How many hours of electricity do you use each day and night from the grid? Cannot exceed number of available hours in C.29	NUMERIC: INTEGER	C31_B
I Don't know............888	------------------------------------.	
V1 `self <= C29_B || self == 888`		
M1 Please enter less than or equal to %C29_B%. or 888 for don't know		

C32. How many outages/blackouts occur in a week?	NUMERIC: INTEGER	C32_B
I No outages/blackouts.....111 Don't know............888	------------------------------------.	

C33.What is the total duration of all the outages/blackouts in a week?:Hour	NUMERIC: INTEGER	C33_B_HOUR
I Hour, Don't know...........888	------------------------------------.	
E `C32_B != 111`		
V1 `self <= 168 || self == 888`		
M1 Please enter less than or equal to 24 or 888.		

C33.What is the total duration of all the outages/blackouts in a week?:Minutes	NUMERIC: INTEGER	C33_B_MINUTES
I Minute, Don't know...........888	------------------------------------.	
E `C32_B != 111`		
V1 `self < 60 || self == 888`		
M1 Please enter less than 59 or 888.		

C34.What is your main back-up source of lighting during outages/blackouts of the grid?	SINGLE-SELECT	C34
E `C2 == 1`	001 ◯ Electric generator	
	002 ◯ Rechargeable battery and storage devices (e.g.: car battery)	
	003 ◯ Solar Lantern (single light)	

	004 ○ Solar -Lighting System (2+ lights with cell phone charging and/or radio)
	005 ○ Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)
	006 ○ Pico-hydro
	007 ○ Kerosene lamp
	008 ○ Fuel-based lighting
	009 ○ Dry-cell (non-rechargeable) battery/ Torch/ Flashlight
	010 ○ Candle
	555 ○ Other, specify
	111 ○ No back-up source

C34. Specify Others

E C34 == 555

TEXT   C34_SO

....

C35. What is your main back-up source of electricity for appliances (including mobile phone charging) during outages/blackouts of the grid?

E C2 == 1

SINGLE-SELECT   C35

002 ○ Electric Generator

003 ○ Rechargeable battery and storage devices (e.g.: car battery)

004 ○ Solar Lantern (single light)

005 ○ Solar -Lighting System (2+ lights with cell phone charging and/or radio)

006 ○ Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)

007 ○ Pico-hydro

555 ○ Other, specify

111 ○ No back-up source

C35. Specify Others

E C35 == 555

TEXT   C35_SO

....

C36. How do you request for repairs in electricity service or file a complaint?

E C2 == 1

SINGLE-SELECT   C36

001 ○ Call utility company

002 ○ Call a local technician

003 ○ Send a letter/email

004 ○ Social media

005 ○ Talk to community representative

006 ○ No system to request repairs/file complaint

555 ○ Other, specify

C36. Specify Others

E C36 == 555

TEXT   C36_SO

....

C37.When there is a blackout in your community, who do you usually approach for assistance?

E C2 == 1

SINGLE-SELECT   C37

01 ○ The power company

02 ○ Someone not from power company

03 ○ No-one: we wait until power returns

C38. The last time you asked for assistance, how many days after you contacted %C37% did they come to fix the problem?

NUMERIC: DECIMAL   C38

- -

I .....Number of Days Enumerator: If under 24 hours record 0. if "Have not encountered any problem yet enter 111"	
E `(C37 == 2 || C37 == 1) && C2 == 1`	
V1 `self < 100 || self==111`	
M1 Too many. Please check.	

C39.Do you experience voltage fluctuations from the grid?

E `(C37 == 2 || C37 == 1) && C2 == 1`

- 01 ◯ Yes
- 02 ◯ No

C40. Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?

E `C39 == 1 && C2 == 1`

- 01 ◯ Yes
- 02 ◯ No

C41. In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the grid?

E `(C39 == 1 && C2 == 1) || C37 == 3`

- 001 ◯ Yes
- 002 ◯ No
- 888 ◯ Don't know

C42. What are the most serious problems you experience with your grid electricity?

I 2 options only, Order matters.
E `C2 == 1`

- 001 ☐ Supply shortage/not enough hours of electricity
- 002 ☐ Low/high voltage problems or voltage fluctuations
- 003 ☐ Unpredictable interruptions
- 004 ☐ Unexpectedly high bills
- 005 ☐ High cost of electricity
- 006 ☐ Do not trust the supplier
- 007 ☐ Cannot power large appliances
- 008 ☐ Maintenance/service problems
- 009 ☐ Unpredictable bills
- 555 ☐ Other, specify
- 111 ☐ No problems

C42. Specify Others

E `C42.Contains(555)`

....

C43.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the grid electricity (for example, serious bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?

E `C2 == 1`

- 01 ◯ Yes
- 02 ◯ No

C43.A. What was the reasons for this injury?

E `C43 == 1`

- 001 ◯ Carelessness or error
- 002 ◯ Lack of knowledge about the use of the appliance
- 003 ◯ Faulty wiring or wiring with exposed wires
- 555 ◯ Other, specify

C43.A. Specify Others

E `C43_A == 555`

....

C44. Is this household connected to a?

E `C_AVAILABLE == 1 && C2 == 2`

- 01 ◯ Pico hydro

	02 ○ Micro/Mini-hydro grid
	03 ○ Neither pico-hydro nor mini/micro-hydro grid
	04 ○ Both pico-hydro and mini/micro-hydro grid

C. SUPPLY AND DEMAND OF ELECTRICITY

%C44%

E `C44.InList(1,2,4)`

C45. What is the name of the pico hydro/ mini/micro company?

I If both please ask about mini/micro hydro grid.

TEXT   C45

···

C46. Is there a limit for the load and/or appliances you are allowed to power from this %C45%?

SINGLE-SELECT   C46

001 ○ Yes

002 ○ No

888 ○ Don't Know

C47. How many years have you had this %C45%?

I Record in years, if less than 1 year record 1

V1 `self < 101`

M1 Too many. Please check.

NUMERIC: INTEGER   C47

– –

C48. How much did your household pay for the %C45% fee?

I Refer to connection cost ONLY, Don't know...................................888 Household was already connected........111

NUMERIC: INTEGER   C48

– –

C48.A. How much did your household pay for any additional connection costs (external wiring, poles etc.)?

I Do not include the connection fee from C.48 here Local currency Don't know........................888

E `C48 != 111`

TEXT   C48_A

···

C49. How much did your household pay for the internal wiring?

I Don't know........................888 Do not include the connection fee from C.48 here

E `C48 != 111`

NUMERIC: INTEGER   C49

– –

C50. How many weeks after you applied for the %C45% did your household get connected?

I (Insert 0 if immediate)

E `C48 != 111`

V1 `self < 21`

M1 Too many. Please check.

NUMERIC: INTEGER   C50

– –

C51. How many days after you were connected were you able to use electricity in your home? (Insert 0 if immediate)

E `C48 != 111`

NUMERIC: INTEGER   C51

– –

C52. Have you applied for an upgrade of service since you connected to the %C45%?

SINGLE-SELECT   C52

01 ○ Yes

02 ○ No

C53. Who receives the payment for your electricity service?

SINGLE-SELECT   C53

- 001 ◯ Energy company
- 002 ◯ Private entity
- 003 ◯ Community/village/municipality
- 004 ◯ Relative
- 005 ◯ Neighbor
- 006 ◯ Landlord
- 007 ◯ No one
- 008 ◯ Cooperative
- 009 ◯ Respondent is the owner (No one)
- 555 ◯ Other, specify

C53. Specify Others

TEXT   C53_SO

E `C53 == 555`

∙∙∙

C54. Does your household have an electric meter?

SINGLE-SELECT   C54

E `C53 != 7 && C53 != 9`

- 01 ◯ Yes
- 02 ◯ No

C56. Does your household share the electric meter?

SINGLE-SELECT   C56

E `C54 == 1`

- 01 ◯ Yes
- 02 ◯ No

C57. How many households are sharing the meter?

NUMERIC: INTEGER   C57

E `C56 == 1`
V1 `self < 31`
M1 Too many household.

– –

C58. How are you billed for electricity?

SINGLE-SELECT   C58

I Read options aloud
E `C54 == 2`

- 001 ◯ Fixed monthly fee
- 002 ◯ Pay based on lights and appliances used
- 003 ◯ Utility estimates consumption
- 555 ◯ Other, specify
- 111 ◯ No bill for electricity

C58. Specify Others

TEXT   C58_SO

E `C58 == 555`

∙∙∙

C59. How do you make your electricity bill payment?

SINGLE-SELECT   C59

E `C53 != 7 && C53 != 9`

- 001 ◯ Cash
- 002 ◯ Credits using mobile money
- 003 ◯ Credit, using other ways
- 555 ◯ Other, specify

C59. Specify Others

TEXT   C59_SO

E `C59 == 555`

∙∙∙

C60. Were you involved in setting the tariff for the %C45%?

SINGLE-SELECT   C60

E `C53 != 7 && C53 != 9`

- 01 ◯ Yes
- 02 ◯ No

C61. How were you involved in the tariff setting?

SINGLE-SELECT   C61

- 001 ◯ Community meeting

E `C60 == 1`	002 ◯ Contacted by mini-grid/pico hydro company
	003 ◯ Member of electricity committee
	004 ◯ Member of cooperative
	555 ◯ Other, specify

C61. Specify Others

E `C61 == 555`

TEXT   C61_SO

....

C62. Enumerator: If the respondent pays the energy company or has a record of the electricity payment, ask to see the electricity bill/invoice and use it for C63 and C64.

E `C53 != 7 && C53 != 9`

SINGLE-SELECT   C62

01 ◯ Respondent has energy bill and shows it

02 ◯ Respondent has energy bill but refuses to show it or could not locate it

03 ◯ Respondent does not have an energy bill

C63. In the last month, how much did you spend on the electric bill?

I   Calculate amount paid from the last bill. Don't Know...888, Local Currency

E   `C62 == 1`

V1 `self < 100000 || self == 888`

M1 Too large. Please check. or if don't know enter 888.

NUMERIC: INTEGER   C63

‗ .

C64. In the last month how much electricity did your household use?

I   Don't Know......888, KWH

E   `C62 == 1 || C53 == 7`

NUMERIC: INTEGER   C64

‗ .

C65. In a typical month, how much did you spend on electricity?

I   Don't Know............................888

E   `(C64 < 1 && C62 == 1) || (C62 == 2 || C62 == 3)`

V1 `self < 100000 || self == 888`

M1 Too Large, Please check or if don't know enter 888

NUMERIC: INTEGER   C65

‗ .

C66. Are there certain months/seasons every year when the household experiences bad electricity service from this mini-grid/pico-grid?

SINGLE-SELECT   C66

01 ◯ Yes

02 ◯ No

C67. What are the worst months for service from the mini-grid?

I   Multiple responses are possible. Record all months when household has the lowest number of hours of electricity supply.

E   `C66 == 1`

MULTI-SELECT: YES/NO   C67

001 ☐ / ☐ 13th April-13th May

002 ☐ / ☐ 14th May-14th June

003 ☐ / ☐ 15th June-15th July

004 ☐ / ☐ 16th July-16th August

005 ☐ / ☐ 17th August-16th September

006 ☐ / ☐ 17th September-16th October

007 ☐ / ☐ 17th October-15th November

008 ☐ / ☐ 16th November-15th December

009 ☐ / ☐ 16th December-13th January

010 ☐ / ☐ 14th January-11th February

011 ☐ / ☐ 12th February-13th March

012 ☐ / ☐ 14th March-13th April

888 ☐ / ☐ Don't Know

C68. Do you receive information about a "load-shedding" schedule (load shedding is the set

SINGLE-SELECT   C68

| hours of electricity available from the mini grid)? | 01 ⦿ Yes |
| | 02 ⦿ No |

E `C44.InList(1,4)`

STATIC TEXT

Ask respondent first about the worst months and then about a typical month for C.69- C.73 If no seasonal changes, ask only about a typical month. Ask questions by ROW.

C. SUPPLY AND DEMAND OF ELECTRICITY / %C44%
A. WORST MONTHS

E `C66 == 1`

| C69. How many hours of electricity are available each day and night from the mini-grid? (max 24 hours) | NUMERIC: INTEGER C69_A |
| | -------------------------------. |

I Don't know............888
V1 `self <= 24 || self == 888`
M1 Please enter less than or equal to 24 or 888.

| C70. How many hours of electricity are available each evening, from 6:00 pm to 10:00 pm from the mini-grid? (max 4 hours) | NUMERIC: INTEGER C70_A |
| | -------------------------------. |

I Don't know............888
V1 `self <= 4 || self == 888`
M1 Please enter less than or equal to 4 or 888.

| C71. How many hours of electricity do you use each day from the mini-grid? | NUMERIC: INTEGER C71_A |
| | -------------------------------. |

I Don't know............888
V1 `self <= C69_A || self == 888`
M1 Please enter less than %C69_A% or if don't konw enter 888.

| C72. How many outages/blackouts occur in a week? | NUMERIC: INTEGER C72_A |
| | -------------------------------. |

I No outages/blackouts.....111,Dont know ...888

| C73A.1.What is the total duration of all the outages/blackouts in a week?:Hours | NUMERIC: INTEGER C73_A_1 |
| | -------------------------------. |

I Don't know...........888, Hours
E `C72_A != 111`
V1 `self < 169 || self == 888`
M1 Error! Please check. or if don't know enter 888.

| C73.A.2.What is the total duration of all the outages/blackouts in a week? | NUMERIC: INTEGER C73_A_2 |
| | -------------------------------. |

I Don't know...........888
E `C72_A != 111`
V1 `self < 60 || self == 888`
M1 Error! Please check. or if don't know enter 888.

C. SUPPLY AND DEMAND OF ELECTRICITY / %C44%
B.TYPICAL MONTH

| C69. How many hours of electricity are available each day and night from the mini-grid? (max 24 hours) | NUMERIC: INTEGER C69_B |
| | -------------------------------. |

I Don't know............888

V1 `self <= 24 || self == 888`
M1 Please enter less than or equal to 24 or 888.

C70. How many hours of electricity are available each evening, from 6:00 pm to 10:00 pm from the mini-grid? (max 4 hours)

I Don't know............888
V1 `self <= 4 || self == 888`
M1 Please enter less than or equal to 4 or 888

NUMERIC: INTEGER   C70_B

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

C71. How many hours of electricity do you use each day from the mini-grid?

I Don't know............888
V1 `self <= C69_B || self == 888`
M1 Please enter less than or equal to %C69_B% or 888

NUMERIC: INTEGER   C71_B

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

C72. How many outages/blackouts occur in a week?

I No outages/blackouts.....111, Dont know ...888

NUMERIC: INTEGER   C72_B

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

C73.B.1.What is the total duration of all the outages/blackouts in a week?: Hours

I Don't know...........888
E `C72_B != 111`
V1 `self < 169 || self == 888`
M1 Error! Please check or enter 888 for don't know.

NUMERIC: INTEGER   C73_B_1

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

C73.B.2.What is the total duration of all the outages/blackouts in a week?

I Don't know...........888
E `C72_B != 111`
V1 `self < 60 || self == 888`
M1 Error! Please check. or if don't know enter 888.

NUMERIC: INTEGER   C73_B_2

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

C74.What is your main back-up source of lighting during outages/blackouts of the grid?

SINGLE-SELECT   C74

- 001 ○ Electric generator
- 002 ○ Rechargeable battery and storage devices (e.g.: car battery)
- 003 ○ Solar Lantern
- 004 ○ Solar -Lighting System (2+ lights with cell phone charging and/or radio)
- 005 ○ Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)
- 006 ○ Pico-hydro
- 007 ○ Kerosene lamp
- 008 ○ Fuel-based lighting
- 009 ○ Dry-cell (non-rechargeable) battery/ Torch/ Flashlight
- 010 ○ Candle
- 555 ○ Other, specify
- 111 ○ No back-up source

C74. Specify Others

E `C74 == 555`

TEXT   C74_SO

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

C75.What is your main back-up source of electricity for appliances during

SINGLE-SELECT   C75

- 001 ○ Electric generator

outages/blackouts of the mini-grid?	002 ⭕ Rechargeable battery and storage devices (e.g.: car battery)
	003 ⭕ Solar Lantern
	004 ⭕ Solar -Lighting System (2+ lights with cell phone charging and/or radio)
	005 ⭕ Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)
	006 ⭕ Pico-hydro
	555 ⭕ Other, specify
	111 ⭕ No back-up source

C75. Specify Others

E C75 == 555

TEXT   C75_SO

....

C76.How do you request for repairs in electricity service or file a complaint?

SINGLE-SELECT   C76

001 ⭕ Call mini-grid /pico hydro operator
002 ⭕ Call a local technician
003 ⭕ Send a letter/email
004 ⭕ Social media
005 ⭕ Talk to community representative
006 ⭕ No system to request repairs/file complaint
555 ⭕ Other, specify

C76. Specify Others

E C76 == 555

TEXT   C76_SO

....

C77. When there is a blackout in your community, who do you usually approach for assistance?

SINGLE-SELECT   C77

01 ⭕ The power company
02 ⭕ Someone not from power company
03 ⭕ No-one: we wait until power returns

C78.The last time you asked for assistance, how many days after you contacted %C77% did they come to fix the problem?

NUMERIC: INTEGER   C78

I Number of days Don't know...888
E C77.InList(1,2)
V1 self < 100 || self == 888
M1 Too large. Please check or enter 888 don't knwo

C79. Do you experience voltage fluctuations from the grid?

SINGLE-SELECT   C79

01 ⭕ Yes
02 ⭕ No

C80.Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?

E C79 == 1

SINGLE-SELECT   C80

01 ⭕ Yes
02 ⭕ No

C81. In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the mini grid?

E C79 == 1

SINGLE-SELECT   C81

001 ⭕ Yes
002 ⭕ No
888 ⭕ Don't know

C82. What are the most serious problems you experience with your mini grid electricity?

I 2 options only, Order matters.

001 ☐ Supply shortage/not enough hours of electricity
002 ☐ Low/high voltage problems or voltage fluctuations
003 ☐ Unpredictable interruptions
004 ☐ Unexpectedly high bills
005 ☐ Too expensive
006 ☐ Do not trust the supplier
007 ☐ Cannot power large appliances
008 ☐ Maintenance/service problems
009 ☐ Unpredictable bills
555 ☐ Other, specify
111 ☐ No problems

C82. Specify Others

E C82.Contains(555)

TEXT   C82_SO

....

C83.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the mini grid electricity (for example, bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?

SINGLE-SELECT   C83

01 ◯ Yes
02 ◯ No

C83.A. What was the reasons for this injury?

E C83 == 1

SINGLE-SELECT   C83_A

001 ◯ Carelessness or error
002 ◯ Lack of knowledge about the use of the appliance
003 ◯ Faulty wiring or wiring with exposed wires
555 ◯ Other, specify

C83.A. Specify Others

E C83_A == 555

TEXT   C83_A_SO

....

C84. In the last 12 months, did the household use a generator to supply electricity?

E C_AVAILABLE == 1

SINGLE-SELECT   C84

01 ◯ Yes
02 ◯ No

C. SUPPLY AND DEMAND OF ELECTRICITY
ELECTRIC GENERATOR SET

E C84 == 1

C85.How many generators does your household use to supply electricity?

I Don't know...888, If multiple generators, ask following questions about main generator.
V1 self < 6 || self==888
M1 Too many. Please check again.

NUMERIC: INTEGER   C85

- -

C86.Do you share this generator with other households?

SINGLE-SELECT   C86

01 ◯ Yes
02 ◯ No

C87.How many households are sharing electricity from this generator?

NUMERIC: INTEGER   C87

- -

I Don't know...............................888
E `C86 == 1`

C88.Enumerator Observation: What is the capacity of the generator?

I Volt Amps (kVA) Don't know...888

TEXT   C88

....

C89. In the last 12 months, in which months did you use this generator or did you use it all year?

V1 `(self.Contains(111) && !self.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12)) || (!self.Contains(111) && self.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12))`

M1 Error! . Please used all year or other months only.

MULTI-SELECT   C89
- 111 ☐ Used all year
- 001 ☐ 13th April-13th May
- 002 ☐ 14th May-14th June
- 003 ☐ 15th June-15th July
- 004 ☐ 16th July-16th August
- 005 ☐ 17th August-16th September
- 006 ☐ 17th September-16th October
- 007 ☐ 17th October-15th November
- 008 ☐ 16th November-15th December
- 009 ☐ 16th December-13th January
- 010 ☐ 14th January-11th February
- 011 ☐ 12th February-13th March
- 012 ☐ 14th March-13th April
- 888 ☐ Don't Know

C90.How many days per month did you typically use this generator?

I Number of days Don't know...888
V1 `self < 33 || self==888`
M1 Please enter less than or equal to 32.

NUMERIC: INTEGER   C90

- -

C91.In the last 12 months, what did your household use this generator for?

MULTI-SELECT   C91
- 001 ☐ Lighting
- 002 ☐ Appliances
- 003 ☐ Home-based income activity
- 555 ☐ Other, specify
- 888 ☐ Don't know

C91. Specify Others

E `C91.Contains(555)`

TEXT   C91_SO

....

C92. How many years have you used this generator?

I Don't know...888

NUMERIC: INTEGER   C92

- -

C93.Does your household own the generator?

SINGLE-SELECT   C93
- 01 ○ Yes
- 02 ○ No

C94.Who owns the generator?

E `C93 == 2`

SINGLE-SELECT   C94
- 001 ○ Other Household
- 002 ○ Community organization
- 003 ○ Private person/entity
- 555 ○ Other, specify
- 888 ○ Don't know

C94. Specify Others

TEXT   C94_SO

E `C94 == 555`

C95.Do you rent the generator or use it for free?

E `C93 == 2`

SINGLE-SELECT   C95

01 ◯ Rent
02 ◯ Use for free

C96.How do you pay for electricity services from the generator?

E `C95 == 1`

SINGLE-SELECT   C96

001 ◯ Fixed payment (per month or week)
002 ◯ Charge by number of lights/appliances
003 ◯ Charge per kWh
004 ◯ Pay for fuel only
555 ◯ Other, specify

C96. Specify Others

E `C96 == 555`

TEXT   C96_SO

C97.In the months that you use it, how much did you pay to use the generator each month?

I Don't know...............................888
E `C96.InList(1,2,3,555)`

NUMERIC: INTEGER   C97

C98.How much did you pay to purchase the generator?

I Don't know...............................888
E `(C97 < 0 || C93 == 1) && (C95 == 2 || C93 == 1)`

NUMERIC: INTEGER   C98

C99. In the last 12 months, how much did you pay for repairs/parts/maintenance of the generator?

I Don't know...............................888
E `(C97 < 0 || C93 == 1) && (C95 == 2 || C93 == 1)`

NUMERIC: INTEGER   C99

C100.What fuel is used to power the generator?

SINGLE-SELECT   C100

001 ◯ Diesel
002 ◯ Petrol
003 ◯ Kerosene
555 ◯ Other, specify
888 ◯ Don't know

C100. Specify Others

E `C100 == 555`

TEXT   C100_SO

C101.In the last 30 days, what was the total quantity of fuel used to power the generator?

I Don't know...............................888

NUMERIC: INTEGER   C101

C102.Do you pay for the fuel used to power the generator?

SINGLE-SELECT   C102

01 ◯ Yes
02 ◯ No

C103. In the last 30 days, how much did your household spend on fuel for this generator?

I Don't know....888, NPR
E `C102 == 1`

NUMERIC: INTEGER   C103

C104. Is the generator the household's main source of electricity?

E `C102 == 1`

SINGLE-SELECT   C104
01 ○ Yes
02 ○ No

C105. Are there certain months/seasons of the year when less fuel is available to power the generator?

E `C104 == 1 || C102 == 2`

SINGLE-SELECT   C105
01 ○ Yes
02 ○ No

C106. What are the worst months of fuel availability for the generator?

E `C105 == 1`

MULTI-SELECT   C106
001 ☐ 13th April-13th May
002 ☐ 14th May-14th June
003 ☐ 15th June-15th July
004 ☐ 16th July-16th August
005 ☐ 17th August-16th September
006 ☐ 17th September-16th October
007 ☐ 17th October-15th November
008 ☐ 16th November-15th December
009 ☐ 16th December-13th January
010 ☐ 14th January-11th February
011 ☐ 12th February-13th March
012 ☐ 14th March-13th April
888 ☐ Don't Know

STATIC TEXT

Ask respondent first about the worst months and then about a typical month for C107-C109 If no seasonal changes C105 or not the main source C104 ask only about a typical month. Ask questions by ROW.

C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRIC GENERATOR SET
A. WORST MONTHS

E `C105 == 1`

C107. How many hours could you use this generator each day and night if you wanted to? (max 24 hours)

I Don't know...........888
V1 `self < 25 || self == 888`
M1 Please enter less than or equal to 24 or 888

NUMERIC: INTEGER   C107_A

– .

C108. How many hours could you use this generator each evening, from 6:00 pm to 10:00 pm if you wanted to? (max 4 hours)

I Max 4 hrs., Don't know...........888
V1 `self < 5 || self == 888`
M1 Please enter less than or equal to 4 or 888.

NUMERIC: INTEGER   C108_A

– .

C109. How many hours do you actually use this generator each day?

I Don't know...........888
V1 `self < C107_A || self == 888`
M1 Error! Please enter less than %C107_A% or 888

NUMERIC: INTEGER   C109_A

– .

C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRIC GENERATOR SET
B. TYPICAL MONTH

C107. How many hours could you use this generator each day and night if you wanted to? (max 24 hours)

NUMERIC: INTEGER   C107_B

I   Don't know............888
V1   `self < 25 || self == 888`
M1   Please enter less than or equal to 24 or 888.

C108. How many hours could you use this generator each evening, from 6:00 pm to 10:00 pm if you wanted to?

NUMERIC: INTEGER   C108_B

I   Max 4 hrs., Don't know............888
V1   `self < 5 || self == 888`
M1   Please enter less than or equal to 4 or 888

C109. How many hours do you actually use this generator each day?

NUMERIC: INTEGER   C109_B

I   Don't know............888
V1   `self <= C107_B || self == 888`
M1   Please enter less than or equal to %C107_B% or 888.

C110. Do you experience voltage fluctuations from the generator?

SINGLE-SELECT   C110
01 ◯ Yes
02 ◯ No

E   `C84 == 1`

C111. Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?

SINGLE-SELECT   C111
01 ◯ Yes
02 ◯ No

E   `C110 == 1`

C112. In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the generator?

SINGLE-SELECT   C112
001 ◯ Yes
002 ◯ No
888 ◯ Don't know

E   `C110 == 1`

C113. What are the most serious problems you experience with the generator?

MULTI-SELECT: ORDERED   C113
001 ☐ Limited power supply
002 ☐ Cannot power large appliances
003 ☐ Too expensive to use (including high cost of fuel/rent)
004 ☐ Availability of the fuel
005 ☐ Hard to maintain/service
006 ☐ Loud/Noisy
007 ☐ Unpredictable interruptions
555 ☐ Other, specify
111 ☐ No problems

E   `C84 == 1`

C113. Specify Others

TEXT   C113_SO

E   `C113.Contains(555)`

C114. In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the generator? ?(for example, serious bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?

SINGLE-SELECT   C114
01 ◯ Yes
02 ◯ No

E   `C84 == 1`

C114.A. What was the reasons for this injury?

SINGLE-SELECT   C114_A

E C114 == 1	001 ○ Carelessness or error
	002 ○ Lack of knowledge about the use of the appliance
	003 ○ Faulty wiring or wiring with exposed wires
	555 ○ Other, specify

C114.A. Specify Others

E C114_A == 555

TEXT   C114_A_SO

....

C115. In the last 12 months, did the household use any rechargeable batteries, such as car batteries, for electricity AS THE MAIN SOURCE OF ELECTRICITY?

SINGLE-SELECT   C115

01 ○ Yes

02 ○ No

E C_AVAILABLE == 1 && (C35 != 3 || C75 != 2)

C. SUPPLY AND DEMAND OF ELECTRICITY
EXTERNALLY RECHARGED BATTERY (CAR BATTERY, ETC) – SKIP IF THIS IS FOR BACKUP SOLUTIONS

E C115 == 1

C116.In the last 12 months, in which months did you use rechargeable batteries or did you use it all year? Multiple responses possible

V1 (self.Yes.Contains(111) && !self.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12)) || (!self.Yes.Contains(111) && self.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12))

M1 Error! Either select use all or select months only.

MULTI-SELECT: YES/NO   C116

111 ☐ / ☐ Used all year
001 ☐ / ☐ 13th April-13th May
002 ☐ / ☐ 14th May-14th June
003 ☐ / ☐ 15th June-15th July
004 ☐ / ☐ 16th July-16th August
005 ☐ / ☐ 17th August-16th September
006 ☐ / ☐ 17th September-16th October
007 ☐ / ☐ 17th October-15th November
008 ☐ / ☐ 16th November-15th December
009 ☐ / ☐ 16th December-13th January
010 ☐ / ☐ 14th January-11th February
011 ☐ / ☐ 12th February-13th March
012 ☐ / ☐ 14th March-13th April
888 ☐ / ☐ Don't Know

C117.In the last 12 months, what did your household use rechargeable batteries for?

MULTI-SELECT   C117

001 ☐ Lighting
002 ☐ Appliances
003 ☐ Home-based income activity
555 ☐ Other, specify

C117. Specify Others

E C117.Contains(555)

TEXT   C117_SO

....

C118.Does your household have an inverter that allows you to use AC appliances?

SINGLE-SELECT   C118

01 ○ Yes

02 ○ No

C119.What is the capacity of the inverter?

I Watts (W)
E C118 == 1

NUMERIC: INTEGER   C119

- .

C120.What is the total number of rechargeable batteries that you use in a typical month?

NUMERIC: INTEGER   C120

- .

I Total number of rechargeable batteries. Don't know............................... ....888 E `C118.InList(1,2)` V1 `self < 20` M1 Too many.	

C. SUPPLY AND DEMAND OF ELECTRICITY / EXTERNALLY RECHARGED BATTERY (CAR BATTERY, ETC) – SKIP IF THIS IS FOR BACKUP SOLUTIONS

Roster: BATTERY ROSTER

generated by numeric question C120   R_C120

C121. What is the capacity of the rechargeable batteriery %rostertitle%? I Don't know...888 E `C118 == 2`	NUMERIC: INTEGER C121 ‑ ·
C122. What is the voltage of the rechargeable batteriery %rostertitle%? I Don't know...888 E `C118 == 2`	NUMERIC: INTEGER C122 ‑ ·
C123. How much did you pay for the rechargeable battery(ies) %rostertitle%? I Don't know...888 E `C118 == 2`	NUMERIC: INTEGER C123 ‑ ·
C124. How many recharges for all battery %rostertitle% does your household have in a typical month? I Don't know...888	NUMERIC: INTEGER C124 ‑ ·
C125. Do you pay someone/some entity outside the household to recharge the battery on a regular basis?	SINGLE-SELECT C125 01 ◯ Yes 02 ◯ No
C126. How much does your household spend in a typical month to recharge the batteries (in total)? I Local currency Don't Know..888 E `C125 == 1`	NUMERIC: INTEGER C126 ‑ ·
C127. What is the electricity source used to recharge the battery?	SINGLE-SELECT C127 001 ◯ National grid 002 ◯ Local mini-grid 003 ◯ Electric generator 004 ◯ Solar 555 ◯ Other, specify
C127. Specify Others E `C127 == 555`	TEXT C127_SO ··
C128. Is battery recharging limited by availability of electricity from %C127%?	SINGLE-SELECT C128 001 ◯ Yes 002 ◯ No 888 ◯ Don't know
C129. How many hours can you use rechargeable batteries for electricity supply each day when fully charged if you wanted to?	NUMERIC: INTEGER C129 ‑ ·

(max 24 hours)

I Hours Don't Know.......................................888
V1 `self < 25 || self == 888`
M1 Please enter less than or equal to 24 or 888

C130.How many hours can you use rechargeable batteries for electricity supply each evening, from 6:00 pm to 10:00 pm if you wanted to?

I Don't..888, Max 4 Hrs
V1 `self < 5 || self == 888`
M1 Please enter less than or equal to 4 or 888

NUMERIC: INTEGER   C130

`_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C131. How many hours do you actually use rechargeable batteries for electricity supply each day?

I Don't Know.......................................888
V1 `self <= C129|| self == 888`
M1 Error ! Please enter less than or equal to %C129% or 888

NUMERIC: INTEGER   C131

`_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C132.How many hours do you actually use rechargeable batteries for electricity supply each evening, from 6:00 pm to 10:00 pm?

I Don't Know.......................................888
V1 `self <= C130 || self == 888`
M1 Please enter less than or equal than %C130% or 888

NUMERIC: INTEGER   C132

`_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ .`

C133.What are the most serious problems you experience with the rechargeable batteries?

I Record up to 2 responses.

MULTI-SELECT: ORDERED   C133

- 001 ☐ Supply shortage/not enough hours of electricity
- 002 ☐ Too expensive
- 003 ☐ Cannot power large appliances
- 004 ☐ Recharging is not convenient
- 005 ☐ Maintenance & repair is difficult
- 006 ☐ Cannot recharge battery to full capacity
- 555 ☐ Other, specify
- 111 ☐ No problems

C133. Specify Others

E `C133.Contains(555)`

TEXT   C133_SO

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

134.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the rechargeable batteries (for example, serious bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?

E `C115 == 1`

SINGLE-SELECT   C134

- 01 ⚪ Yes
- 02 ⚪ No

C134.A. What was the reasons for this injury?

E `C134 == 1`

SINGLE-SELECT   C134_A

- 001 ⚪ Carelessness or error
- 002 ⚪ Lack of knowledge about the use of the appliance
- 003 ⚪ Faulty wiring or wiring with exposed wires
- 555 ⚪ Other, specify

C134.A. Specify Others

TEXT   C134_A_SO

....

C135.Interviewer/CAPI check: In the last 12 months, did the household use any of the following solar based devices? Multiple responses possible.

I Ask about all devices in order of importance (Example: Main Solar System is Device 1)

E `C_AVAILABLE == 1`

MULTI-SELECT   C135

01 ☐ Solar lanterns
02 ☐ Solar lighting system
03 ☐ Solar home system
04 ☐ None

STATIC TEXT

E `C_AVAILABLE == 1 && C135.Contains(1)`

Solar Lanterns

STATIC TEXT

E `C_AVAILABLE == 1 && C135.Contains(2)`

Solar Lighting System

STATIC TEXT

E `C_AVAILABLE == 1 && C135.Contains(3)`

Solar Home System

C136.How many solar lanterns do you have?

NUMERIC: INTEGER   C136

I Number of solar lanterns E `C135.Contains(1)`	- .

C137. How many solar lighting systems (2+lights with cell phone charger and/or radio) do you have? I Number of solar lighting system E `C135.Contains(2)`	NUMERIC: INTEGER C137 - .

C138. How many solar home systems (2+ lights with cell phone charger and TV/fan/fridge) do you have? I Number of solar home system E `C135.Contains(3)`	NUMERIC: INTEGER C138 - .

C. SUPPLY AND DEMAND OF ELECTRICITY
Roster: SOLAR BASED DEVICE
generated by multi-select question C135   R_SD

E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`

C141.What is the manufacturer and model of the %rostertitle% ? I Don't Know ..888	TEXT C141 ....

C142.Does this %rostertitle% have a mobile charger?	SINGLE-SELECT C142 01 ◯ Yes 02 ◯ No

C142.B Does this %rostertitle% have a radio?	SINGLE-SELECT C142_B 01 ◯ Yes 02 ◯ No

C143.Is this %rostertitle%your MAIN solar device?	SINGLE-SELECT C143 01 ◯ Yes 02 ◯ No

C144. What is the type of solar device? V1 `(self == 1 && C135.Contains(1)) || (self == 2 && C135.Contains(2)) || (self == 3 && C135.Contains(3))` M1 Error! Please select the valid response.	SINGLE-SELECT C144 01 ◯ Solar Lantern 02 ◯ Solar lighting system 03 ◯ Solar Home System

C145.How many light bulbs are there (that can be separated from each other)? I NUMBER OF LIGHT BULBS E `C144 != 1`	NUMERIC: INTEGER C145 - .

C146.What is the power rating of the solar panel? I If unknown, enter "888" , Read the name plate of the solar panel, Watt-Peak (Wp) E `C144 != 1`	NUMERIC: INTEGER C146 - .

C148.What is the capacity of the battery? I Don't Know ..888 E `C144 != 1 && C146 != 888`	NUMERIC: INTEGER C148 - .

C149.Do you have an inverter?	SINGLE-SELECT C149

| | 01 ⚪ Yes |
| | 02 ⚪ No |

C150. How many years have you had this %rostertitle%?	NUMERIC: DECIMAL C150
I Record in years, if less than 1, record 1	- .
V1 self < 100	
M1 Too many. Please check.	

C151. Who decided to purchase/ acquire this %rostertitle%?	SINGLE-SELECT: LINKED C151
I MEMBER ID	

C152. Did you buy this %rostertitle% paying upfront or under installment, do you rent it/pay a fee to use it, or did you receive it for free?	SINGLE-SELECT C152
	01 ⚪ Bought, fully paid
	02 ⚪ Bought, under installment
	03 ⚪ Rent/pay fee to use
	04 ⚪ Received for free

C153. Who gave you this %rostertitle%?	SINGLE-SELECT C153
E C152 == 4	001 ⚪ Local private organizations (NGO)
	002 ⚪ Chief of village
	003 ⚪ Local government
	004 ⚪ Relative/Friend
	555 ⚪ Other, specify

C153. Specify Others	TEXT C153_SO
E C153 == 555	....

C154. How much did you pay for this %rostertitle% upfront? : Full amount	NUMERIC: INTEGER C154_FULL
E C152 == 1	- .

C154. How much did you pay for this %rostertitle% upfront? : PARTIAL	NUMERIC: INTEGER C154_PARTIAL
E C152 == 2	- .

C155. What payment system do you use?	SINGLE-SELECT C155
E C152 == 3	01 ⚪ Mobile Pay-as-you-go
	02 ⚪ Other Pay-as-you go (scratch card, etc.)
	03 ⚪ Fixed fee

C156. What is the monthly payment for %rostertitle% (INSTALLMENT/ FEE TO RENT/USE)?	NUMERIC: INTEGER C156
E C154_PARTIAL >= 0 || C152 == 3	- .

C157. Did/do you borrow money to make your payement for %rostertitle%?	SINGLE-SELECT C157
E C152 <= 3 || C154_FULL >= 0	01 ⚪ Yes
	02 ⚪ No

C158. Did you receive information and training on this %rostertitle%?	SINGLE-SELECT C158
	01 ⚪ Yes
	02 ⚪ No

C159. How many hours do you use %rostertitle% for lighting and other applications each day?

NUMERIC: INTEGER   C159

I Don't know......888
V1 `self <= 24 || self == 888`
M1 Please enter less than 25 or 888.

C160. What is the most serious problem you experience with %rostertitle%?

SINGLE-SELECT   C160

- 001 ○ Duration of service too short
- 002 ○ Too expensive
- 003 ○ Cannot power large appliances
- 004 ○ Breaks too often
- 005 ○ Maintenance and availability of spare parts
- 006 ○ Quality of light
- 007 ○ Battery problems
- 555 ○ Other, specify
- 111 ○ No problems

C160. Specify Others

TEXT   C160_SO

E `C160 == 555`

....-

C. SUPPLY AND DEMAND OF ELECTRICITY
MAIN SOLAR-BASED DEVICE

E `C135.ContainsAny(1,2,3)`

Enter the name of main solar-based device

SINGLE-SELECT   IMP_SOLAR_DEVICE

- 01 ○ Solar lanterns
- 02 ○ Solar lighting system
- 03 ○ Solar home system

V1 `(self == 1 && C135.Contains(1)) || (self == 2 && C135.Contains(2)) || (self == 3 && C135.Contains(3))`
M1 Error! Please select the valid response.

C161. Are there certain months/seasons every year when the service is not as strong from %IMP_SOLAR_DEVICE%?

SINGLE-SELECT   C161

- 01 ○ Yes
- 02 ○ No

C162. What are the worst months for service from %IMP_SOLAR_DEVICE%?

E `C161 == 1`

MULTI-SELECT   C162

- 001 ☐ 13th April-13th May
- 002 ☐ 14th May-14th June
- 003 ☐ 15th June-15th July
- 004 ☐ 16th July-16th August
- 005 ☐ 17th August-16th September
- 006 ☐ 17th September-16th October
- 007 ☐ 17th October-15th November
- 008 ☐ 16th November-15th December
- 009 ☐ 16th December-13th January
- 010 ☐ 14th January-11th February
- 011 ☐ 12th February-13th March
- 012 ☐ 14th March-13th April
- 888 ☐ Don't Know

STATIC TEXT

Ask respondent first about the worst months and then about a typical month for C163 - C165 If no seasonal changes, ask only about a typical month. Ask questions by ROW

A. WORST MONTHS

E `C161 == 1`

C163.How many hours do you receive service from this %IMP_SOLAR_DEVICE% each day and night?	NUMERIC: INTEGER
	C163_A
I Don't know............888	_ .
V1 `self <= 24 || self == 888`	
M1 Pelase enter less than 25 or 888.	

C164. How many hours is service available from this %IMP_SOLAR_DEVICE% each evening, from 6:00 pm to 10:00 pm?	NUMERIC: INTEGER
	C164_A
I Don't know............888	_ .
V1 `self <= 4 || self == 888`	
M1 Please enter less than 5 or 888.	

C165. How many hours do you actually use the %IMP_SOLAR_DEVICE% each day for lighting and other applications?	NUMERIC: INTEGER
	C165_A
I Don't know............888	_ .
V1 `self <= C163_A || self == 888`	
M1 Please enter less than or equal to %C163_A% or 888	

B. TYPICAL MONTH

C163.How many hours do you receive service from this %IMP_SOLAR_DEVICE% each day and night?	NUMERIC: INTEGER
	C163_B
I Don't know............888	_ .
V1 `self <= 24 || self == 888`	
M1 Please enter less than 25 or 888	

C164. How many hours is service available from this %IMP_SOLAR_DEVICE% each evening, from 6:00 pm to 10:00 pm?	NUMERIC: INTEGER
	C164_B
I Don't know............888	_ .
V1 `self <= 4 || self == 888`	
M1 Please enter less than 5 or 888	

C165. How many hours do you actually use the %IMP_SOLAR_DEVICE% each day for lighting and other applications?	NUMERIC: INTEGER
	C165_B
I Don't know............888	_ .
V1 `self <= C163_B || self == 888`	
M1 Please enter less than %C163_B% or 888	

166.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the %IMP_SOLAR_DEVICE% (for example, serious bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?	SINGLE-SELECT
	C166
	01 ◯ Yes
	02 ◯ No
E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`	

C166.A. What was the reasons for this injury?	SINGLE-SELECT
	C166_A
E `C166 == 1`	0001 ◯ Carelessness or error

	0002 ◯ Lack of knowledge about the use of the appliance
	0003 ◯ Faulty wiring or wiring with exposed wires
	5555 ◯ Other, specify

C167.Is there any device you do not have that you would like to have?

E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`

SINGLE-SELECT   C167
001 ◯ Yes
002 ◯ No
888 ◯ Don't know

C168.What devices would you most like to have?

I Multiple response (Up to three devices)
E `C167.InList(1) && C135.ContainsAny(1,2,3)`

MULTI-SELECT   C168
001 ☐ Television
002 ☐ Fan
003 ☐ Refrigerator
004 ☐ Radio
005 ☐ Tablet/laptop/computer
006 ☐ Mobile phone charger
555 ☐ Other, specify
888 ☐ Don't know/refuse to answer

C168. Specify Others

E `C168.Contains(555)`

TEXT   C168_SO
···

C169.Overall, how satisfied with the service provided by the main solar device?

E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`

SINGLE-SELECT   C169
01 ◯ Very satisfied
02 ◯ Somewhat satisfied
03 ◯ Neutral
04 ◯ Unsatisfied
05 ◯ Very unsatisfied

C170.In what year did you get your first solar device?

I Don't know...............888
E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`
V1 `self.InRange(1990,2074) || self == 888`
M1 Error! Please check.

NUMERIC: INTEGER   C170
– ·

C171.Has solar been your main source of lighting/electricity since %C170%?

E `C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)`

SINGLE-SELECT   C171
01 ◯ Yes
02 ◯ No

C172.What was your main source of lighting/electricity when it was not a solar device?

E `(C171 == 2 || C171 == 888) && C135.ContainsAny(1,2,3)`

SINGLE-SELECT   C172
001 ◯ National grid connection
002 ◯ Local mini grid connection
003 ◯ Electric generator
004 ◯ Rechargeable battery and storage devices (e.g.: car battery)
005 ◯ Pico-hydro
006 ◯ Kerosene lamp
007 ◯ Fuel-based lighting
008 ◯ Dry-cell (non-rechargeable) battery/ Torch/Flashlight
009 ◯ Candle
555 ◯ Other, specify

C172. Specify Others

TEXT   C172_SO

E C172 == 555

· ■

C173.Compared to the first time you used solar lighting, do you currently...

I Read aloud options
E C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)

SINGLE-SELECT   C173

01 ◯ Use more solar lighting
02 ◯ Use about the same solar lighting
03 ◯ Use less solar lighting

C174.What appliances do you use today that you did not use with your first solar lighting device?

E C173.InList(1,2,888) && C135.ContainsAny(1,2,3)

MULTI-SELECT   C174

001 ☐ Mobile phone charger
002 ☐ Radio
003 ☐ TV
004 ☐ Fan
005 ☐ Refrigerator
006 ☐ No change
555 ☐ Other, specify

C174. Speicify Others

E C174.Contains(555)

TEXT   C174_SO

· ■

C. SUPPLY AND DEMAND OF ELECTRICITY
MAIN SOURCE OF ELECTRICITY

E C_AVAILABLE == 1

C175.Of all the sources that you mentioned above, which is the source that you use the most in your household?

V1 (self == 1 && C2 == 1) || (self == 2 && C44 == 2) || (self == 3 && C84 == 1) || (self.InList(4,5,6) && C135.ContainsAny(1,2,3)) || (self == 7 && C115 == 1) || self.InList(8,9,111,555)
M1 Error! Please select valid options

SINGLE-SELECT   C175

001 ◯ National Grid Connection
002 ◯ Local Mini Grid connection
003 ◯ Electric generator
004 ◯ Solar Lantern
005 ◯ Solar Lighting System (2+ lights with cell phone charging and/or radio)
006 ◯ Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)
007 ◯ Rechargeable Battery
008 ◯ Pico-hydro
009 ◯ Dry-cell battery
111 ◯ No electricity
555 ◯ Other, specify

C175. Specify Others

E C175 == 555

TEXT   C175_SO

· ■

C. SUPPLY AND DEMAND OF ELECTRICITY / MAIN SOURCE OF ELECTRICITY
CHARGING MOBILE PHONE

C176.How many mobile phones do the household members own combined?

NUMERIC: INTEGER   C176

– ·

C177.Are members of your household able to charge all their mobile phones as often as they need inside your dwelling?

E C176 > 0

SINGLE-SELECT   C177

001 ◯ Yes
002 ◯ No
888 ◯ Don't know

C178. Can you charge at least one mobile phone to full charge everyday inside your dwelling? E C177.InList(2,888)	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	C178
C179.Can you charge at least one mobile phone to full charge in 3 days inside your dwelling? E C178 == 2	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	C179
C180.How many mobile phones of your household members do you charge outside your dwelling? E C178 == 2 V1 self <= C176 M1 Please enter less than or equal to %C176%.	NUMERIC: INTEGER – .	C180
C181.Do members of your household have to go more than 500 meters (walk more than 5 minutes) to charge your mobile phones outside your dwelling? E C180 > 0	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	C181
C182.How much does your household spend each month (in total) on charging the mobile phone(s) outside your dwelling? E C180 > 0	NUMERIC: INTEGER – .	C182

D. WILLINGNESS TO PAY FOR A GRID CONNECTION

STATIC TEXT

Respondent should be most knowledgeable member on household electricity. For each household, CAPI will randomly assign one of the six following amounts in the placeholder ${CF}: 0% of the connection fee in local currency and respectively 15%, 30%, 40%, 60%, 70%, 100%.

Random amount for new connection	NUMERIC: INTEGER SCOPE: IDENTIFYING – .	Rand_Amt_D
D2. Enumerator: Record Respondent name for this section E C2 == 2	SINGLE-SELECT: LINKED	D2

STATIC TEXT

E C2 == 2

Electricity requires several types of payments. There are three parts to the cost of electricity: connection, wiring, and monthly use. In other words, to use electricity you need to have a wire from a meter in your house to the pole first. That is the connection. You also need to have wires to connect appliances within your house to the meter. This is the wiring. Finally, to keep using electricity you must pay for what is used and measured by the meter, or it will be turned off, this is the cost of monthly use. I would like to ask you questions only about the first cost of connecting – getting a wire from the electricity poles to a meter on your house. If you could pay a "lump sum" price for an electricity connection, in other words, you are offered a price and a period of time to decide whether to take this price. If you decide to take the price, you have to pay all at once, after which you are immediately connected. As you answer the next few questions, assume that all other wiring fees and monthly service fees for using electricity, once you have the connection, remain the same as they are now.

D3.Would you be willing to pay NPR %Rand_Amt_D% for an electricity connection?	SINGLE-SELECT 01 ◯ Yes	D3

E C2 == 2	02 ◯ No
Please enter the amount displayed %Rand_Amt_D% **E** C2 == 2	NUMERIC: DECIMAL D3_Amount — .
VARIABLE (Rand_Amt_D/3)	DOUBLE Rand_Amt_D_3
D4.Would you be willing to pay NPR %Rand_Amt_D%for an electricity connection, if you were given 3 months to make the payment? **E** D3 == 2	SINGLE-SELECT D4 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know
Please enter the amount displayed %Rand_Amt_D% **E** D3 == 2	NUMERIC: INTEGER D4_Amount — .
VARIABLE Rand_Amt_D/6	DOUBLE Rand_Amt_D_6
D5.Would you be willing to pay NPR %Rand_Amt_D% for an electricity connection, if you were given 6 months to make the payment? **E** D4 == 2	SINGLE-SELECT D5 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know
Please enter the amount displayed %Rand_Amt_D% **E** D4 == 2	NUMERIC: DECIMAL D5_Amount — .
VARIABLE Rand_Amt_D/12	DOUBLE Rand_Amt_D_12
D6.Would you be willing to pay NPR %Rand_Amt_D% for an electricity connection, if you were given 12 months to make the payment? **E** D5 == 2	SINGLE-SELECT D6 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know
Please enter the amount displayed %Rand_Amt_D% **E** D5 == 2	NUMERIC: DECIMAL D6_Amount — .
D7.If the connection fee were waived, would you get a grid connection? **E** D6 == 2 || D6 == 888	SINGLE-SELECT D7 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know
D8.Why would you not accept the offer? **E** D7 == 2 || D7 == 888	SINGLE-SELECT D8 001 ◯ Cannot afford the payment 002 ◯ Do not need electricity 003 ◯ Electricity service is unreliable 004 ◯ Monthly fee is too expensive 555 ◯ Other, specify
D8. Specify Others	TEXT D8_SO

E D8 == 555	....	
D9.How much do you think it would cost to do all the internal electrical wiring in your house? **I** Don't Know...........................888 **E** D7 == 2 || D7 == 888 || D3 == 1 || D4 == 1 || D5 == 1 || D6 == 1	NUMERIC: INTEGER D9 -.	
D10.Think about the amount you would need to spend each month for electricity, not the connection fee. How much would you need to spend each month for electricity? **I** Don't Know...........................888 **E** D7 == 2 || D7 == 888	NUMERIC: INTEGER D10 -.	

E. WILLINGNESS TO PAY FOR IMPROVED ELECTRICITY SUPPLY

Enter the amount for improved electricity supply displayed above:	NUMERIC: INTEGER Amount_E SCOPE: IDENTIFYING -.
E2. Do you experience electricity outages? **E** C2 == 1	SINGLE-SELECT E2 01 ◯ Yes 02 ◯ No
E3.Did the household experience power outages 1 year ago? **E** E2 == 1	SINGLE-SELECT E3 01 ◯ Yes 02 ◯ No
E4.How many days of electricity outages one year ago did you experience on a typical month? **E** E3 == 1 **V1** self <33 **M1** Error! Please enter less than or equal to 32.	NUMERIC: INTEGER E4 -.
E5.Would you be willing to pay an additional %Amount_E% on your monthly electricity bill to avoid going back to the experience of the power outages from 1 year ago? **E** E3 == 1	SINGLE-SELECT E5 01 ◯ Yes 02 ◯ No
E6.How much would you be willing to pay additional, at the most, to avoid experiencing same level of electricity outages as one year ago? **I** In NPR. **E** E3 == 1 **V1** (self >= Amount_E && E5 == 1) || (self < Amount_E && E5 == 2) **M1** Error ! Please check.	NUMERIC: DECIMAL E6 -.

F. WILLINGNESS TO PAY FOR SOLAR DEVICE

STATIC TEXT

For each household, CAPI will 1) randomly assign a Tier 2 (high capacity: enough to power a television) or Tier 1 (low capacity: multiple lightbulbs and mobile charging) solar home system; and 2) randomly one of the three following amounts in the placeholder ${CF}: 33%, 66%, or 100% of the solar device in local currency. We will have the market price for the selected.

F2.Enumerator: Record Respondent name for this section	SINGLE-SELECT: LINKED F2

STATIC TEXT

We will ask you questions about a solar home system. Enumerator: show picture and describe what the solar home system can and can't do and the benefits of using a solar home system.[INSERT DESCRIPTION OF SOLAR DEVICE] If you could pay a "lump sum" price for this solar device; in other words, you are offered a price and if you decide to buy the device, you will have to pay it all at once. As you answer the next few questions, keep in mind the various benefits from this device as well as your household budget.

CF	NUMERIC: INTEGER CF_F SCOPE: IDENTIFYING

F3.Would you be willing to pay %CF_F% for this solar device?	SINGLE-SELECT F3 01 ◯ Yes 02 ◯ No

VARIABLE CF_F/6	DOUBLE CF_6

F4.Would you be willing to pay %CF_F% for this solar device, if you were given 6 months to make the payment? E F3 == 2	SINGLE-SELECT F4 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know

VARIABLE CF_F/12	DOUBLE CF_12

F5.Would you be willing to pay %CF_F% for this solar device, if you were given 12 months to make the payment? E F4 ==2 || F4 == 888	SINGLE-SELECT F5 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know

VARIABLE CF_F / 24	DOUBLE CF_24

F6.Would you be willing to pay %CF_F% for this solar device, if you were given 24 months to make the payment? This means that each month you will pay ${CF/24} per month for 24 months. E F5 == 2 || F5 == 888	SINGLE-SELECT F6 001 ◯ Yes 002 ◯ No 888 ◯ Don't Know

F7.Why would you not accept the offer? E F6 == 2 || F6 == 888	SINGLE-SELECT F7 001 ◯ Cannot afford the payment 002 ◯ Do not need electricity 003 ◯ Maintenance/servicing of device is not available 555 ◯ Other, specify

F7. Others Specify E F7 == 555	TEXT F7_SO

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING

G1. Enumerator: Record Respondent name for this section	SINGLE-SELECT: LINKED	G1

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING
FUEL LAMP/ CANDLE/ TASK LIGHT

G3. In the last 12 months, did you use [NAME FROM THE LIST]	MULTI-SELECT	FLCT
	001 ☐ Candle	
	002 ☐ Open wick lamp	
	003 ☐ Hurricane lamp with glass cover	
	004 ☐ Pressurized mantle lamp	
	005 ☐ None	
	555 ☐ Other Specify	

Specify Others	TEXT	G3_SO
E FLCT.Contains(555)	···-	

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING / FUEL LAMP/ CANDLE/ TASK LIGHT
Roster: FUEL LAMP/ CANDLE/ TASK LIGHT
generated by multi-select question FLCT   ROSTER_G

E FLCT.ContainsAny(1,2,3,4,555)

G2. Enter the name of respondent	SINGLE-SELECT: LINKED	G2

G4.What is the main fuel source for %rostertitle%?	SINGLE-SELECT	G4
	001 ◯ Kerosene	
	002 ◯ Biogas	
	003 ◯ Edible Oil	
E ((long?)@rowcode).InList(2,3,4,5,555)	555 ◯ Other, specify	

G4. Specify Others	TEXT	G4_SO
E G4 == 555	···-	

G5. How many of these lamps does your household have?	NUMERIC: INTEGER	G5
E ((long?)@rowcode).InList(2,3,4,5,555)		
V1 self < 6		
M1 Too many . Please check.		

G6.How much did you pay for each %rostertitle%?	TEXT	G6
	···-	
I If more than 1 device, input the average		
E ((long?)@rowcode).InList(2,3,4,5,555)		

G7.In the last 12 months, how many months did you use %rostertitle%?	NUMERIC: INTEGER	G7
I Don't know 888		
E FLCT.ContainsAny(1,2,3,4)		
V1 self <= 12 || self==888		

G8.In the last month, how many days did you use %rostertitle%?

E `FLCT.ContainsAny(1,2,3,4)`
V1 `self <= 32`
M1 Please enter less than or equalt to 32.

NUMERIC: INTEGER   G8

- .

G9.How many hours do you use %rostertitle% each day?

I If less than 1 hour, input 0
E `FLCT.ContainsAny(1,2,3,4)`
V1 `self <= 24`
M1 Please enter less than or equal to 24.

NUMERIC: DECIMAL   G9

- .

G13.What don't you like most about using the %rostertitle%?

I 2 Options.
E `FLCT.ContainsAny(1,2,3,4)`

MULTI-SELECT   G13

- 001 ☐ Lantern too expensive
- 002 ☐ Fuel too expensive
- 003 ☐ Fuel not available
- 004 ☐ Accidents can happen
- 005 ☐ Bad for health
- 006 ☐ Subsidies needed
- 007 ☐ Time spent to collect fuel
- 555 ☐ Other, specify
- 111 ☐ No problems

G13. Specify Others

E `G13.Contains(555)`

TEXT   G13_SO

....

G14.In the last 12 months, what type of harm/injury did any household members have from %rostertitle%?

E `FLCT.ContainsAny(1,2,3,4)`

MULTI-SELECT   G14

- 001 ☐ Death or permanent limb damage
- 002 ☐ Burns/fire
- 003 ☐ Poisoning
- 004 ☐ Eye problems
- 005 ☐ Respiratory problem
- 006 ☐ Other major injury
- 007 ☐ Minor injury
- 008 ☐ Fire with no injury
- 111 ☐ None

G15. What is the main source of lighting the children who are currently enrolled in school usually use for studying/doing homework?

I Single Response
E `FLCT.ContainsAny(1,2,3,4)`

SINGLE-SELECT   G15

- 001 ○ Electric lighting/lamp
- 002 ○ Solar powered light source
- 003 ○ Battery-operated light source
- 004 ○ Street lighting
- 005 ○ Kerosene lamp
- 006 ○ Candles
- 007 ○ Biogas lamps
- 008 ○ No school going children
- 555 ○ Other, specify
- 111 ○ Studying and homework only during daylight hours

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING
KEROSENE

G2.C. What is the total quantity of kerosene you purchase at a typical time? I LITERS OF FUEL	NUMERIC: INTEGER G2C ------------------------------------.
G2.D. How long does this quantity of kerosene typically last? I Days V1 `self < 366` M1 Please enter less than 365.	NUMERIC: INTEGER G2_D ------------------------------------.
G2.E. How much do you pay in total for the amount of fuel you purchased? I LOCAL CURRENCY	NUMERIC: INTEGER G2_E ------------------------------------.
G2.F. What is the percentage of this kerosene you use for lighting? V1 `self < 101` M1 Please enter in range 0-100.	NUMERIC: INTEGER G2_F ------------------------------------.

G. KEROSENE/FUEL-BASED /CANDLE LIGHTING
CANDLE

E `FLCT.Contains(1)`

G2.C.C. What is the total quantity of Candle you purchase at a typical time? I Number of Candles	NUMERIC: INTEGER G2C_C ------------------------------------.
G2.D.C. How long does this quantity of Candle typically last? I Days	NUMERIC: INTEGER G2_D_C ------------------------------------.
G2.E.C How much do you pay in total for the amount of fuel you purchased? I LOCAL CURRENCY	NUMERIC: INTEGER G2_E_C ------------------------------------.

H.DRY-CELL BATTERIES

H1.Enumerator: Record Respondent name for this section	SINGLE-SELECT: LINKED H1
H3.In the last 12 months, did you use dry cell batteries to power [NAME FROM THE LIST]	MULTI-SELECT: YES/NO H3 001 ☐ / ☐ Lanterns 002 ☐ / ☐ Flashlights 003 ☐ / ☐ Task lights 004 ☐ / ☐ Radio 111 ☐ / ☐ None 555 ☐ / ☐ Other, specify
H3.Specify Others	TEXT H3_SO ....

E `H3.Yes.Contains(555)`

H.DRY-CELL BATTERIES
Roster: LIGHT SOURCE
generated by multi-select question H3   R_LS

E `H3.Yes.ContainsAny(1,2,3,4,555)`

STATIC TEXT

LIGHT SOURCE

H4.How many of %rostertitle% does your household power with dry cell batteries?	NUMERIC: INTEGER H4
V1 `self < 6` M1 Too many. Please Check.	
H5.How much did you pay for each %rostertitle% on average?	NUMERIC: INTEGER H5
I If paying in installment, enter total value of payments,If more than 1 device, input the average.	
H6.In the last 12 months, how many months did you use %rostertitle%?	NUMERIC: INTEGER H6
I if less than 1 month write 0 V1 `self <= 12` M1 Please enter less than or equal to 12.	
H7.How many minutes do you use %rostertitle% each day on a typical day?	NUMERIC: INTEGER H7
V1 `self <= 1440` M1 Please enter less than or equal to 1440.	
H8.Do you use %rostertitle% as a regular source of lighting or only as a back-up source when the main source is not available?	SINGLE-SELECT H8 01 ◯ Regular source of lighting 02 ◯ Back-up source of lighting 03 ◯ No light available
E `((long?)@rowcode).InList(1,2,3,555)`	
H9.How many of dry cell batteries do you purchase each month?	NUMERIC: INTEGER H9
E `H3.Yes.ContainsAny(1,2,3,4,555)`	
H10.How much do you spend each month on dry cell batteries?	NUMERIC: INTEGER H10
I NPR E `H3.Yes.ContainsAny(1,2,3,4,555)` V1 `self < 100001` M1 Too much. Please check.	

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING

Chhose respondent who most frequently cooks food for the household.	SINGLE-SELECT: LINKED Respondent_ID_I
I2.Fuel Type	MULTI-SELECT I2 01 ☐ LPG/ cooking gas

02 ☐ Wood	
04 ☐ Charcoal	
05 ☐ Solar	
06 ☐ Kerosene	
09 ☐ Animal waste/ Dung	
10 ☐ Crop Residue/ Plant Biomass	
11 ☐ Sawdust	
13 ☐ Biomass Briquette	
14 ☐ Electric	
15 ☐ Pellets/ processed biomass/ wood chips	
16 ☐ Biogas	
18 ☐ Garbage	

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING

A. LPG/ COOKING GAS

E I2.Contains(1)

I3.In the last 12 months, did your house-hold use this LPG/Cooking gas?	SINGLE-SELECT I3_LC 01 ○ Yes 02 ○ No
I4.In the last 12 months, what did your household use LPG/Cooking gas for? E I3_LC == 1	MULTI-SELECT I4_I10_LC 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY
I11. In the last 12 months, in which months did you use this LPG/Cooking gas? E I3_LC == 1	MULTI-SELECT I11_LC 111 ☐ Used all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know
I12.In the last 12 months, in which months was this LPG/Cooking gas scarce and significantly more expensive? E I3_LC == 1	MULTI-SELECT I12_LC 111 ☐ Available all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October

007 ☐ 17th October-15th November	
008 ☐ 16th November-15th December	
009 ☐ 16th December-13th January	
010 ☐ 14th January-11th February	
011 ☐ 12th February-13th March	
012 ☐ 14th March-13th April	
888 ☐ Don't Know	

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
B. WOOD

E I2.Contains(2)

I3.In the last 12 months, did your house-hold use this Wood ?

SINGLE-SELECT   I3_WP

01 ◯ Yes

02 ◯ No

I4.In the last 12 months, what did your household use Wood for?

E I3_WP == 1

MULTI-SELECT   I4_I10_WP

01 ☐ LIGHTING

02 ☐ COOKING

03 ☐ HEATING

04 ☐ FIRE STARTER/ IGNITION

05 ☐ BOILING WATER

06 ☐ HOME-BASED INCOME ACTIVITY

I11. In the last 12 months, in which months did you use this Wood?

E I3_WP == 1

MULTI-SELECT   I11_WP

111 ☐ Used all year

001 ☐ 13th April-13th May

002 ☐ 14th May-14th June

003 ☐ 15th June-15th July

004 ☐ 16th July-16th August

005 ☐ 17th August-16th September

006 ☐ 17th September-16th October

007 ☐ 17th October-15th November

008 ☐ 16th November-15th December

009 ☐ 16th December-13th January

010 ☐ 14th January-11th February

011 ☐ 12th February-13th March

012 ☐ 14th March-13th April

888 ☐ Don't Know

I12.In the last 12 months, in which months was this Wood scarce and significantly more expensive?

E I3_WP == 1

MULTI-SELECT   I12_WP

111 ☐ Available all year

001 ☐ 13th April-13th May

002 ☐ 14th May-14th June

003 ☐ 15th June-15th July

004 ☐ 16th July-16th August

005 ☐ 17th August-16th September

006 ☐ 17th September-16th October

007 ☐ 17th October-15th November

008 ☐ 16th November-15th December

009 ☐ 16th December-13th January

010 ☐ 14th January-11th February

	011 ☐ 12th February-13th March
	012 ☐ 14th March-13th April
	888 ☐ Don't Know

I13.In the last 7 days, how much of this Wood did your household use?	NUMERIC: INTEGER	I13_WP
I kg	----------------------------------.	
E I3_WP == 1		

I15.How much of this Wood did you purchase?	NUMERIC: INTEGER	I15_WP
I kg,DO NOT PURCHASE....111	----------------------------------.	
E I13_WP > 0		

I16.How long does this quantity of Wood typically last?	NUMERIC: INTEGER	I16_WP
E I15_WP>0 && I15_WP != 111	----------------------------------.	

I17.How much did you pay for the amount of Wood that you purchased?	NUMERIC: INTEGER	I17_WP
E I15_WP>0 && I15_WP != 111	----------------------------------.	

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
D. CHARCOAL
E I2.Contains(4)

I3.In the last 12 months, did your house-hold use this Charcoal?	SINGLE-SELECT	I3_CC
	01 ◯ Yes	
	02 ◯ No	

I4.In the last 12 months, what did your household use Charcoal for?	MULTI-SELECT	I4_I10_CC
E I3_CC == 1	01 ☐ LIGHTING	
	02 ☐ COOKING	
	03 ☐ HEATING	
	04 ☐ FIRE STARTER/ IGNITION	
	05 ☐ BOILING WATER	
	06 ☐ HOME-BASED INCOME ACTIVITY	

I11. In the last 12 months, in which months did you use this Charcoal?	MULTI-SELECT	I11_CC
E I3_CC == 1	111 ☐ Used all year	
	001 ☐ 13th April-13th May	
	002 ☐ 14th May-14th June	
	003 ☐ 15th June-15th July	
	004 ☐ 16th July-16th August	
	005 ☐ 17th August-16th September	
	006 ☐ 17th September-16th October	
	007 ☐ 17th October-15th November	
	008 ☐ 16th November-15th December	
	009 ☐ 16th December-13th January	
	010 ☐ 14th January-11th February	
	011 ☐ 12th February-13th March	
	012 ☐ 14th March-13th April	
	888 ☐ Don't Know	

I12.In the last 12 months, in which months was	MULTI-SELECT	I12_CC

this Charcoal scarce and significantly more expensive? E `I3_CC == 1`	111 ☐ Available all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know
I13.In the last 7 days, how much of this Charcoal did your household use? I kg E `I3_CC == 1`	NUMERIC: INTEGER I13_CC -------------------------------
I15.How much of this Charcoal did you purchase? I kg,DO NOT PURCHASE....111 E `I13_CC > 0`	NUMERIC: INTEGER I15_CC -------------------------------
I16.How long does this quantity of Charcoal typically last? E `I15_CC > 0 && I15_CC != 111`	NUMERIC: INTEGER I16_CC -------------------------------
I17.How much did you pay for the amount of Charcoal that you purchased? E `I15_CC > 0 && I15_CC != 111`	NUMERIC: INTEGER I17_CC -------------------------------

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
E. SOLAR

E `I2.Contains(5)`

I3.In the last 12 months, did your house-hold use this Solar?	SINGLE-SELECT I3_SL 01 ○ Yes 02 ○ No
I4.In the last 12 months, what did your household use Solar for? E `I3_SL == 1`	MULTI-SELECT I4_I10_SL 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY
I11. In the last 12 months, in which months did you use this Solar? E `I3_SL == 1`	MULTI-SELECT I11_SL 111 ☐ Used all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July

	004 ☐ 16th July-16th August
	005 ☐ 17th August-16th September
	006 ☐ 17th September-16th October
	007 ☐ 17th October-15th November
	008 ☐ 16th November-15th December
	009 ☐ 16th December-13th January
	010 ☐ 14th January-11th February
	011 ☐ 12th February-13th March
	012 ☐ 14th March-13th April
	888 ☐ Don't Know

I12. In the last 12 months, in which months was this Solar scarce and significantly more expensive?

E `I3_SL == 1`

MULTI-SELECT   I12_SL

111 ☐ Available all year
001 ☐ 13th April-13th May
002 ☐ 14th May-14th June
003 ☐ 15th June-15th July
004 ☐ 16th July-16th August
005 ☐ 17th August-16th September
006 ☐ 17th September-16th October
007 ☐ 17th October-15th November
008 ☐ 16th November-15th December
009 ☐ 16th December-13th January
010 ☐ 14th January-11th February
011 ☐ 12th February-13th March
012 ☐ 14th March-13th April
888 ☐ Don't Know

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
F. KEROSENE

E `I2.Contains(6)`

I3. In the last 12 months, did your house-hold use this Kerosene?

SINGLE-SELECT   I3_KS

01 ◯ Yes
02 ◯ No

I4. In the last 12 months, what did your household use Kerosene for?

E `I3_KS == 1`

MULTI-SELECT   I4_I10_KS

01 ☐ LIGHTING
02 ☐ COOKING
03 ☐ HEATING
04 ☐ FIRE STARTER/ IGNITION
05 ☐ BOILING WATER
06 ☐ HOME-BASED INCOME ACTIVITY

I11. In the last 12 months, in which months did you use this Kerosene?

E `I3_KS == 1`

MULTI-SELECT   I11_KS

111 ☐ Used all year
001 ☐ 13th April-13th May
002 ☐ 14th May-14th June
003 ☐ 15th June-15th July
004 ☐ 16th July-16th August
005 ☐ 17th August-16th September
006 ☐ 17th September-16th October
007 ☐ 17th October-15th November

	008 ☐ 16th November-15th December
	009 ☐ 16th December-13th January
	010 ☐ 14th January-11th February
	011 ☐ 12th February-13th March
	012 ☐ 14th March-13th April
	888 ☐ Don't Know

I12.In the last 12 months, in which months was this Kerosene scarce and significantly more expensive?

E `I3_KS == 1`

MULTI-SELECT   I12_KS

- 111 ☐ Available all year
- 001 ☐ 13th April-13th May
- 002 ☐ 14th May-14th June
- 003 ☐ 15th June-15th July
- 004 ☐ 16th July-16th August
- 005 ☐ 17th August-16th September
- 006 ☐ 17th September-16th October
- 007 ☐ 17th October-15th November
- 008 ☐ 16th November-15th December
- 009 ☐ 16th December-13th January
- 010 ☐ 14th January-11th February
- 011 ☐ 12th February-13th March
- 012 ☐ 14th March-13th April
- 888 ☐ Don't Know

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
I. ANIMAL WASTE/DUNG

E `I2.Contains(9)`

I3.In the last 12 months, did your house-hold use this Animal waste/Dung?

SINGLE-SELECT   I3_AWD

- 01 ◯ Yes
- 02 ◯ No

I4.In the last 12 months, what did your household use Animal waste/Dung for?

E `I3_AWD == 1`

MULTI-SELECT   I4_I10_AWD

- 01 ☐ LIGHTING
- 02 ☐ COOKING
- 03 ☐ HEATING
- 04 ☐ FIRE STARTER/ IGNITION
- 05 ☐ BOILING WATER
- 06 ☐ HOME-BASED INCOME ACTIVITY

I11. In the last 12 months, in which months did you use this Animal waste/Dung?

E `I3_AWD == 1`

MULTI-SELECT   I11_AWD

- 111 ☐ Used all year
- 001 ☐ 13th April-13th May
- 002 ☐ 14th May-14th June
- 003 ☐ 15th June-15th July
- 004 ☐ 16th July-16th August
- 005 ☐ 17th August-16th September
- 006 ☐ 17th September-16th October
- 007 ☐ 17th October-15th November
- 008 ☐ 16th November-15th December
- 009 ☐ 16th December-13th January
- 010 ☐ 14th January-11th February
- 011 ☐ 12th February-13th March

| | 012 ☐ 14th March-13th April |
| | 888 ☐ Don't Know |

I12.In the last 12 months, in which months was this Animal waste/Dung scarce and significantly more expensive? E I3_AWD == 1	MULTI-SELECT I12_AWD 111 ☐ Available all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know
I13.In the last 7 days, how much of this Animal waste/Dung did your household use? I kg E I3_AWD == 1	NUMERIC: INTEGER I13_AWD ‑ .
I15.How much of this Animal waste/Dung did you purchase? I kg,DO NOT PURCHASE....111 E I13_AWD > 0	NUMERIC: INTEGER I15_AWS ‑ .
I16.How long does this quantity of Animal waste/Dung typically last? E I15_AWS > 0 && I15_AWS != 111	NUMERIC: INTEGER I16_AWS ‑ .
I17.How much did you pay for the amount of Animal waste/Dung that you purchased? E I15_AWS > 0 && I15_AWS != 111	NUMERIC: INTEGER I17_AWS ‑ .

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
J. CROP RESIDUE/ PLANT BIOMASS

E I2.Contains(10)

I3.In the last 12 months, did your house-hold use this Crop Residue/ Plant Biomass?	SINGLE-SELECT I3_CRPB 01 ◯ Yes 02 ◯ No
I4.In the last 12 months, what did your household use Crop Residue/ Plant Biomass for? E I3_CRPB == 1	MULTI-SELECT I4_I10_CRPB 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY
I11. In the last 12 months, in which months did	MULTI-SELECT I11_CRPB

you use this Crop Residue/ Plant Biomass?

E `I3_CRPB == 1`

111 ☐	Used all year
001 ☐	13th April-13th May
002 ☐	14th May-14th June
003 ☐	15th June-15th July
004 ☐	16th July-16th August
005 ☐	17th August-16th September
006 ☐	17th September-16th October
007 ☐	17th October-15th November
008 ☐	16th November-15th December
009 ☐	16th December-13th January
010 ☐	14th January-11th February
011 ☐	12th February-13th March
012 ☐	14th March-13th April
888 ☐	Don't Know

I12.In the last 12 months, in which months was this Crop Residue/ Plant Biomass scarce and significantly more expensive?

E `I3_CRPB == 1`

MULTI-SELECT   I12_CRPB

111 ☐	Available all year
001 ☐	13th April-13th May
002 ☐	14th May-14th June
003 ☐	15th June-15th July
004 ☐	16th July-16th August
005 ☐	17th August-16th September
006 ☐	17th September-16th October
007 ☐	17th October-15th November
008 ☐	16th November-15th December
009 ☐	16th December-13th January
010 ☐	14th January-11th February
011 ☐	12th February-13th March
012 ☐	14th March-13th April
888 ☐	Don't Know

I13.In the last 7 days, how much of this Crop Residue/ Plant Biomass did your household use?

I kg
E `I3_CRPB == 1`

NUMERIC: INTEGER   I13_CRPB

--.

I15.How much of this Crop Residue/ Plant Biomass did you purchase?

I kg,DO NOT PURCHASE....111
E `I13_CRPB > 0`

NUMERIC: INTEGER   I15_CRPB

--.

I16.How long does this quantity of Crop Residue/ Plant Biomass typically last?

E `I15_CRPB > 0 && I15_CRPB != 111`

NUMERIC: INTEGER   I16_CRPB

--.

I17.How much did you pay for the amount of Crop Residue/ Plant Biomass that you purchased?

E `I15_CRPB > 0 && I15_CRPB != 111`

NUMERIC: INTEGER   I17_CRPB

--.

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
K. SAWDUST

E `I2.Contains(11)`

I3.In the last 12 months, did your house-hold use this Sawdust?	SINGLE-SELECT I3_SD
	01 ◯ Yes
	02 ◯ No

I4.In the last 12 months, what did your household use Sawdust for? E I3_SD == 1	MULTI-SELECT I4_I10_SD
	01 ☐ LIGHTING
	02 ☐ COOKING
	03 ☐ HEATING
	04 ☐ FIRE STARTER/ IGNITION
	05 ☐ BOILING WATER
	06 ☐ HOME-BASED INCOME ACTIVITY

I11. In the last 12 months, in which months did you use this Sawdust? E I3_SD == 1	MULTI-SELECT I11_SD
	111 ☐ Used all year
	001 ☐ 13th April-13th May
	002 ☐ 14th May-14th June
	003 ☐ 15th June-15th July
	004 ☐ 16th July-16th August
	005 ☐ 17th August-16th September
	006 ☐ 17th September-16th October
	007 ☐ 17th October-15th November
	008 ☐ 16th November-15th December
	009 ☐ 16th December-13th January
	010 ☐ 14th January-11th February
	011 ☐ 12th February-13th March
	012 ☐ 14th March-13th April
	888 ☐ Don't Know

I12.In the last 12 months, in which months was this Sawdust scarce and significantly more expensive? E I3_SD == 1	MULTI-SELECT I12_SD
	111 ☐ Available all year
	001 ☐ 13th April-13th May
	002 ☐ 14th May-14th June
	003 ☐ 15th June-15th July
	004 ☐ 16th July-16th August
	005 ☐ 17th August-16th September
	006 ☐ 17th September-16th October
	007 ☐ 17th October-15th November
	008 ☐ 16th November-15th December
	009 ☐ 16th December-13th January
	010 ☐ 14th January-11th February
	011 ☐ 12th February-13th March
	012 ☐ 14th March-13th April
	888 ☐ Don't Know

I13.In the last 7 days, how much of this Sawdust did your household use? I kg E I3_SD == 1	NUMERIC: INTEGER I13_SD - ·

I15.How much of this Sawdust did you purchase? I kg,DO NOT PURCHASE....111 E I13_SD > 0	NUMERIC: INTEGER I15_SD - ·

I16.How long does this quantity of Sawdust typically last?	NUMERIC: INTEGER	I16_SD
E I15_SD > 0 && I15_SD != 111	- .	
I17.How much did you pay for the amount of Sawdust that you purchased?	NUMERIC: INTEGER	I17_SD
E I15_SD > 0 && I15_SD != 111	- .	

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING

M. BIOMASS BRIQUETTE

E I2.Contains(13)

I3.In the last 12 months, did your house-hold use this Biomass Briquette?	SINGLE-SELECT	I3_BB
	01 ◯ Yes 02 ◯ No	

I4.In the last 12 months, what did your household use Biomass Briquette for?	MULTI-SELECT	I4_I10_BB
	01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY	

I11. In the last 12 months, in which months did you use this Biomass Briquette?	MULTI-SELECT	I11_BB
	111 ☐ Used all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know	

I12.In the last 12 months, in which months was this Biomass Briquette scarce and significantly more expensive?	MULTI-SELECT	I12_BB
	111 ☐ Available all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March	

I13.In the last 7 days, how much of this Biomass Briquette did your household use? I kg	NUMERIC: INTEGER I13_BB ‐ .
I15.How much of this Biomass Briquette did you purchase? I kg,DO NOT PURCHASE....111 E I13_BB > 0	NUMERIC: INTEGER I15_BB ‐ .
I16.How long does this quantity of Biomass Briquette typically last? E I15_BB > 0 && I15_BB != 111	NUMERIC: INTEGER I16_BB ‐ .
I17.How much did you pay for the amount of Biomass Briquette that you purchased? E I15_BB > 0 && I15_BB != 111	NUMERIC: INTEGER I17_BB ‐ .

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
N. ELECTRIC

E I2.Contains(14)

I3.In the last 12 months, did your house-hold use this Electric?	SINGLE-SELECT I3_EC 01 ◯ Yes 02 ◯ No
I4.In the last 12 months, what did your household use Electric for? E I3_EC > 0	MULTI-SELECT I4_I10_EC 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
O. PELLETS/ PROCESSED BIOMASS/ WOOD CHIP

E I2.Contains(15)

I3.In the last 12 months, did your house-hold use this .Pellets/ processed biomass/ wood chips?	SINGLE-SELECT I3_PB 01 ◯ Yes 02 ◯ No
I4.In the last 12 months, what did your household use Pellets/processed biomass/wood chips for? E I3_PB == 1	MULTI-SELECT I4_I10_PB 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY
I11. In the last 12 months, in which months did	MULTI-SELECT I11_PB

you use this Pellets/processed biomass/wood chips?

E `I3_PB == 1`

111	☐ Used all year
001	☐ 13th April-13th May
002	☐ 14th May-14th June
003	☐ 15th June-15th July
004	☐ 16th July-16th August
005	☐ 17th August-16th September
006	☐ 17th September-16th October
007	☐ 17th October-15th November
008	☐ 16th November-15th December
009	☐ 16th December-13th January
010	☐ 14th January-11th February
011	☐ 12th February-13th March
012	☐ 14th March-13th April
888	☐ Don't Know

I12. In the last 12 months, in which months was this Pellets/processed biomass/wood chips scarce and significantly more expensive?

E `I3_PB == 1`

MULTI-SELECT: ORDERED   I12_PB

111	☐ Available all year
001	☐ 13th April-13th May
002	☐ 14th May-14th June
003	☐ 15th June-15th July
004	☐ 16th July-16th August
005	☐ 17th August-16th September
006	☐ 17th September-16th October
007	☐ 17th October-15th November
008	☐ 16th November-15th December
009	☐ 16th December-13th January
010	☐ 14th January-11th February
011	☐ 12th February-13th March
012	☐ 14th March-13th April
888	☐ Don't Know

I13. In the last 7 days, how much of this Pellets/processed biomass/wood chips did your household use?

I kg
E `I3_PB == 1`

NUMERIC: INTEGER   I13_PB

I15. How much of this Pellets/processed biomass/wood chips did you purchase?

I kg,DO NOT PURCHASE....111
E `I13_PB > 0`

NUMERIC: INTEGER   I15_PB

I16. How long does this quantity of Pellets/processed biomass/wood chips typically last?

E `I15_PB > 0 && I15_PB != 111`

NUMERIC: INTEGER   I16_PB

I17. How much did you pay for the amount of Pellets/processed biomass/wood chips that you purchased?

E `I15_PB > 0 && I15_PB != 111`

NUMERIC: INTEGER   I17_PB

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
P. BIOGAS

I3.In the last 12 months, did your house-hold use this Biogas?	SINGLE-SELECT I3_BG 01 ○ Yes 02 ○ No
I4.In the last 12 months, what did your household use Biogas for? E I3_BG == 1	MULTI-SELECT I4_I10_BG 01 ☐ LIGHTING 02 ☐ COOKING 03 ☐ HEATING 04 ☐ FIRE STARTER/ IGNITION 05 ☐ BOILING WATER 06 ☐ HOME-BASED INCOME ACTIVITY
I11. In the last 12 months, in which months did you use this Biogas? E I3_BG == 1	MULTI-SELECT I11_BG 111 ☐ Used all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know
I12.In the last 12 months, in which months was this Biogas scarce and significantly more expensive? E I3_BG == 1	MULTI-SELECT I12_BG 111 ☐ Available all year 001 ☐ 13th April-13th May 002 ☐ 14th May-14th June 003 ☐ 15th June-15th July 004 ☐ 16th July-16th August 005 ☐ 17th August-16th September 006 ☐ 17th September-16th October 007 ☐ 17th October-15th November 008 ☐ 16th November-15th December 009 ☐ 16th December-13th January 010 ☐ 14th January-11th February 011 ☐ 12th February-13th March 012 ☐ 14th March-13th April 888 ☐ Don't Know

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
R. GARBAGE

I3.In the last 12 months, did your house-hold use this Garbage?	SINGLE-SELECT I3_GP 01 ○ Yes 02 ○ No

I4.In the last 12 months, what did your household use Garbage for?	MULTI-SELECT	I4_GP
E `I3_GP == 1`	01 ☐ LIGHTING	
	02 ☐ COOKING	
	03 ☐ HEATING	
	04 ☐ FIRE STARTER/ IGNITION	
	05 ☐ BOILING WATER	
	06 ☐ HOME-BASED INCOME ACTIVITY	

J. USE OF COOKING SOLUTIONS

Enumerator: Record Respondent name for this section	SINGLE-SELECT: LINKED	J1

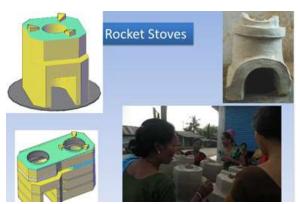| J1A.How many cookstoves does your household use?	NUMERIC: INTEGER	J1A
I Number of cookstoves V1 `self < 11` M1 Too many stoves. Please check.	-----------------------------	

STATIC TEXT

COOK Stove PHOTO

STATIC TEXT

Cook Stove Photo

J3.In the last 12 months, which cookstove(s) did your household use for only preparing meals?	MULTI-SELECT	J3
I List upto 5	01 ☐ 3-Stone/Open fire stove	
	02 ☐ Traditional stove	
	03 ☐ Improved stove	
	04 ☐ Biogas stove	

05 ☐	Kerosene stove
06 ☐	Solar Cooker
07 ☐	LPG/Natural gas stove
08 ☐	Electric/Induction/rice cooker

J. USE OF COOKING SOLUTIONS
Roster: COOKSTOVE ID
generated by multi-select question J3   CSID

Enter the ID	LIST J2
	....
J4. How did you obtain this %rostertitle%? E `((long?)@rowcode).InList(3,4,5,6,7,8)`	SINGLE-SELECT J4 01 ○ Purchased 02 ○ Receive for free
J5.Who decided to build/ purchase this %rostertitle%? E `J4 == 1`	SINGLE-SELECT: LINKED J5
J6.How much did you pay for %rostertitle%? E `J4 == 1`	NUMERIC: INTEGER J6 – .
J7.Who gave %rostertitle% to you? E `J6 < 0 || J4 == 2`	SINGLE-SELECT J7 001 ○ Local private organizations (NGO) 002 ○ Chief of village 003 ○ Local govt 004 ○ Friend/ relative 555 ○ Other, specify
J7. Specify Others E `J7 == 555`	TEXT J7_SO ....
J8.Did you receive training or information on %rostertitle%? E `J6 < 0`	SINGLE-SELECT J8 01 ○ Yes 02 ○ No
J9.Did you ever receive an after-sales training? E `J8 == 1`	SINGLE-SELECT J9 01 ○ Yes 02 ○ No
J10.What is the manufacturer and model of %rostertitle%? E `((long?)@rowcode).InList(3,4,5,6,7,8)`	TEXT J10 ....
J11.If you want to sell %rostertitle% in your community today, how much would you receive? I Don't know...888 E `((long?)@rowcode).InList(3,4,5,6,7,8)`	NUMERIC: INTEGER J11 – .
J12. Is %rostertitle% a metal stove? E `((long?)@rowcode).InList(3,4,5,6,7,8)`	SINGLE-SELECT J12 01 ○ Yes 02 ○ No

J13. How many working burners/ potholes does %rostertitle% have?

E `((long?)@rowcode).InList(2,3,4,5,6,7,8)`
V1 `self < 7`
M1 Too Many. Check

NUMERIC: INTEGER   J13

J14. How long have you been using %rostertitle% for?

I YEARS and MONTHS,Don't Know ...888

NUMERIC: DECIMAL   J14

J15. In the last 12 months, during which of the following months did you use %rostertitle%?

MULTI-SELECT   J15

- 111 ☐ Used all year
- 001 ☐ 13th April-13th May
- 002 ☐ 14th May-14th June
- 003 ☐ 15th June-15th July
- 004 ☐ 16th July-16th August
- 005 ☐ 17th August-16th September
- 006 ☐ 17th September-16th October
- 007 ☐ 17th October-15th November
- 008 ☐ 16th November-15th December
- 009 ☐ 16th December-13th January
- 010 ☐ 14th January-11th February
- 011 ☐ 12th February-13th March
- 012 ☐ 14th March-13th April
- 888 ☐ Don't Know

J16. Is the %rostertitle% fixed in one place or moveable?

SINGLE-SELECT   J16

- 01 ◯ Fixed
- 02 ◯ Moveable

J17. In the last 12 months, where did you normally cook with %rostertitle%?

SINGLE-SELECT   J17

- 001 ◯ In dwelling, NOT in sleeping area
- 002 ◯ In dwelling, in a sleeping area
- 003 ◯ In a separate dwelling
- 004 ◯ In a veranda (roofed platform with at least two open sides)
- 005 ◯ Outdoors
- 555 ◯ Other, specify

J17. Specify Others

E `J17 == 555`

TEXT   J17_SO

....

J17A. Do you use a grate with %rostertitle%?

E `J3.ContainsAny(2,3) && J17.InList(1,2,3,555)`

SINGLE-SELECT   J17A

- 01 ◯ Yes
- 02 ◯ No

J17B. Does %rostertitle% have a working fan attached to it?

E `J3.ContainsAny(2,3) && J17.InList(1,2,3,555)`

SINGLE-SELECT   J17B

- 01 ◯ Yes
- 02 ◯ No

J18. Do you use a chimney, hood, other exhaust system while using %rostertitle%?

E `J17.InList(1,2,3,555)`

SINGLE-SELECT   J18

- 01 ◯ Yes
- 02 ◯ No

J19. Do you regularly clean a chimney, hood or

SINGLE-SELECT   J19

other exhaust system?

E `J17.InList(1,2,3,555) && J18 == 1`

01 ⚪ Yes	
02 ⚪ No	

J20.A. In the last 12 months, what are the fuels you used on %rostertitle%?

V1 `self != 16`
M1 Please select one option.

SINGLE-SELECT   J20_A

- 001 ⚪ LPG/cooking gas
- 002 ⚪ Wood
- 004 ⚪ Charcoal
- 005 ⚪ Solar
- 006 ⚪ Kerosene
- 007 ⚪ Animal Waste/Dung
- 008 ⚪ Crop Residue/Plant Biomass
- 009 ⚪ Saw Dust
- 010 ⚪ Coal Briquette
- 011 ⚪ Biomass Briquette
- 012 ⚪ Electric
- 013 ⚪ Processed biomass (pellets)/ woodchips
- 014 ⚪ Biogas
- 015 ⚪ Garbage
- 016 ⚪ Not applicable
- 555 ⚪ Other, specify

J20. Specify Others

E `J20_A == 555`

TEXT   J20A_SO

....

J20.B. In the last 12 months, what are the fuels you used on %rostertitle%?:Second Most Used

E `I2.Length > 1`
V1 `self != J20_A`
M1 Error ! Please select different options.

SINGLE-SELECT   J20_B

- 001 ⚪ LPG/cooking gas
- 002 ⚪ Wood
- 004 ⚪ Charcoal
- 005 ⚪ Solar
- 006 ⚪ Kerosene
- 007 ⚪ Animal Waste/Dung
- 008 ⚪ Crop Residue/Plant Biomass
- 009 ⚪ Saw Dust
- 010 ⚪ Coal Briquette
- 011 ⚪ Biomass Briquette
- 012 ⚪ Electric
- 013 ⚪ Processed biomass (pellets)/ woodchips
- 014 ⚪ Biogas
- 015 ⚪ Garbage
- 016 ⚪ Not applicable
- 555 ⚪ Other, specify

J20. Specify Others

E `J20_B == 555`

TEXT   J20B_SO

....

J21.In the last 12 months, how often was the %J20_A% available?

I Read aloud options
E `J20_A != 16`

SINGLE-SELECT   J21_A

- 01 ⚪ Always available
- 02 ⚪ Mostly available
- 03 ⚪ Sometimes available
- 04 ⚪ Rarely available

J21.In the last 12 months, how often was the %J20_B% available?

SINGLE-SELECT   J21_B

- 01 ⚪ Always available

I	Read aloud options	02 ⭘ Mostly available
E	`J20_B != 16 && I2.Length > 1`	03 ⭘ Sometimes available
		04 ⭘ Rarely available

J22. How much time do household members spend preparing the %rostertitle% and fuel for each meal on average [including setting up the fuel and turning on the stove but not including gathering fuel or cooking time]?

		NUMERIC: INTEGER	J22

- .

I Minutes, per Meal
V1 `self < 500`
M1 Value too large. Please check.

J23.In the last 7 days, how many days did you use %rostertitle%?

NUMERIC: INTEGER   J23

- .

V1 `self < 8`
M1 Please enter less than 8.

J24.In the last 7 days, on average, how many times did you light %rostertitle% per day?

NUMERIC: INTEGER   J24

- .

J25.In the last 7 days, on average, how much time did your household use %rostertitle% per day to cook or reheat meals (do not include boiling water) in the Morning?

NUMERIC: INTEGER   J25

- .

I Minutes
V1 `self < 361`
M1 It took too long. Please check.

J26. In the last 7 days, on average, how much time did your household use %rostertitle% per day to cook or reheat meals (do not include boiling water) in the Afternoon

NUMERIC: INTEGER   J26

- .

I Minutes
V1 `self < 361`
M1 It took too long. Please check.

J27.In the last 7 days, on average, how much time did your household use %rostertitle% per day to cook or reheat meals (do not include boiling water) in the Evening?

NUMERIC: INTEGER   J27

- .

I Minutes
V1 `self < 361`
M1 It took too long. Please check.

J28. In the last 7 days, on average, how much time did your household use %rostertitle% per day to boil water (for cooking, washing, and drinking and bathing)?

NUMERIC: INTEGER   J28

- .

I Minutes
V1 `self < 1441`
M1 Value too large. Please check.

J29.In the last 7 days, on average, how much time did your household use this cookstove per day to cooking cattle fodder?

NUMERIC: INTEGER   J29

- .

I Minutes
V1 `self < 1441`
M1 Value too large. Please check.

SINGLE-SELECT   J30

J30. Do you also use %rostertitle% for space heating?

01 ⭘ Yes
02 ⭘ No

J31. In the last 12 months, during which of the following months did you use %rostertitle% for heating?

E `J30 == 1`
V1 `(self.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12) && !self.C ontains(111)) || (!self.ContainsAny(1,2,3,4,5,6,7,8,9,10 ,11,12) && self.Contains(111))`
M1 Error ! If response is used all year, don't select other options.

111 ☐ Used all year
001 ☐ 13th April-13th May
002 ☐ 14th May-14th June
003 ☐ 15th June-15th July
004 ☐ 16th July-16th August
005 ☐ 17th August-16th September
006 ☐ 17th September-16th October
007 ☐ 17th October-15th November
008 ☐ 16th November-15th December
009 ☐ 16th December-13th January
010 ☐ 14th January-11th February
011 ☐ 12th February-13th March
012 ☐ 14th March-13th April

J32. In a typical month, how many hours do you use %rostertitle% for heating each day?

I NUMBER OF HOURS
E `J30 == 1`
V1 `self < 25`
M1 Please enter less than 25.

NUMERIC: INTEGER   J32

- -

J33. In the last 12 months, what type of harm/injury did your household face from %rostertitle%?

MULTI-SELECT   J33

09 ☐ None
01 ☐ Death or permanent damage
02 ☐ Burns/fire
03 ☐ Severe cough/respiratory problem
04 ☐ Other major injury
05 ☐ Minor injury
06 ☐ Fire with no injury
07 ☐ Itchy/watery eyes
08 ☐ Light cough
10 ☐ Poisoning

J33A. What are the reasons for this injury?

E `J33.ContainsAny(1,2,3,4,5,6,7,8,10)`

SINGLE-SELECT   J33A

001 ⭘ Carelessness or human error
002 ⭘ Problem with the stove or malfunction
003 ⭘ Problem with fuel
555 ⭘ Other, specify

J33A. Specify Others

E `J33A == 555`

TEXT   J33A_SO

....

J34. Is this %rostertitle% is your main cookstove?

SINGLE-SELECT   J34

01 ⭘ Yes
02 ⭘ No

J35. Why do you not use %rostertitle% most of the time?

E `J34 == 2`

MULTI-SELECT   J35

001 ☐ Electricity/fuel for this stove unavailable

002	☐	Electricity/fuel for this stove too expensive
003	☐	Certain type of cooking is not possible with this stove
004	☐	Cookstove does not have enough burners
005	☐	Cookstove flame is too weak
006	☐	Stove takes a long time to cook food
007	☐	Electricity/fuel takes a long time to prepare
008	☐	Stove is difficult/inconvenient to use
009	☐	I prefer another energy source but the electricity/fuel is too expensive or often not available
010	☐	Certain type of meals taste better with another stove
555	☐	Other, specify

J35. Specify Others

E `J35.Contains(555)`

TEXT   J35_SO

....

STATIC TEXT

E `J34 == 1`

Ask each question for the most used and second most used fuel for this cookstove as identified in J.20 If no second fuel, only ask about the most used fuel. Skip for Electric stove.

J37_A. How much do you spend on the %J20_A% for %rostertitle% in the last month/in a typical month when you use the stove?-MOST USED

I   ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF THE FUEL.

E `J34 == 1 && J20_A != 16`

NUMERIC: INTEGER   J37_A

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

J37_B. How much do you spend on the %J20_B% for %rostertitle% in the last month/in a typical month when you use the stove?-B. Second most used

I   ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF THE FUEL.

E `J34 == 1 && I2.Length > 1 && J20_B != 16`
V1 `self != J37_A`
M1 The two amount cannot be same.

NUMERIC: INTEGER   J37_B

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

J. USE OF COOKING SOLUTIONS
COOKING AREA

STATIC TEXT

ENUMERATOR: FOR HOUSEHOLDS USING ANY SOLID FUEL, ESTIMATE THE SIZE OF THE COOKING SPACE BY FILLING THE FOLLOWING FIELDS.

J38.Enumerator: based on responses to I.16 and I.17 does the HH use any solid fuels indoors?

E `I2.ContainsAny(2,3,4,8,9,10,11,12,14)`

SINGLE-SELECT   J38
001 ◯ Yes
002 ◯ No
888 ◯ Don't Know

J39.Record the rough shape of the cooking space

E `J38 == 1`

SINGLE-SELECT   J39
01 ◯ Roughly square
02 ◯ Roughly rectangular

| | 03 ⭕ Roughly Circular |
| | 04 ⭕ None of the above |

J40.Record the dimensions of the cooking space in heel-to-toe paces. Square, record one side Rectangle, record both sides Circle, record diameter	NUMERIC: INTEGER J40
I Feet	- .
E J39.InList(1,2,3)	

J41.Record the dimensions of the cooking space Rectangle, record side 2	NUMERIC: INTEGER J41
I Feet	- .
E J39 == 2	

J42. Record the type of roof covering the cooking space	SINGLE-SELECT J42
	01 ⭕ Flat
E J39.InList(1,2,3)	02 ⭕ Roughly Conical
	03 ⭕ Gable (triangular cross-section)
	04 ⭕ None of the above

J43.Estimate the height of the highest point of the ceiling relative to your own height	NUMERIC: INTEGER J43
I Feet	- .
E J42.InList(1,2,3)	

J44.How many doors and windows (opening to the outside) does the cooking space have?	NUMERIC: INTEGER J44
	- .
E J42.InList(1,2,3)	

K. SPACE AND WATER HEATING

K1. Do you heat water for washing (either for washing dishes and clothes or for bathing)?	SINGLE-SELECT K1
	01 ⭕ Yes
	02 ⭕ No

K2. What is the main source you use to heat water?	SINGLE-SELECT K2
	01 ⭕ Electric heater/boiler
E K1 == 1	02 ⭕ Electric kettle/coil
	03 ⭕ Electric stove
	04 ⭕ Gas heater
	05 ⭕ Gas stove
	06 ⭕ Solar thermal system
	07 ⭕ Same solid fuel stove used for cooking
	08 ⭕ Separate solid fuel stove
	09 ⭕ Kerosene stove

K3.What is the MAIN fuel you use in this stove?	SINGLE-SELECT K3
	001 ⭕ LPG/cooking gas
F I2.Contains(@optioncode)	002 ⭕ Wood purchased
E K2.InList(8,9)	003 ⭕ Wood collected
	004 ⭕ Solar
	005 ⭕ Kerosene

	006 ⚪ Animal Waste/Dung
	007 ⚪ Crop Residue/Plants (with examples such as dried leaves, twigs, straw etc.)
	008 ⚪ Saw Dust
	009 ⚪ Coal/Charcoal
	010 ⚪ Briquette
	011 ⚪ Electric
	012 ⚪ Biogas
	555 ⚪ Other, specify

K3. Specify Others

E K3 == 555

TEXT   K3_SO

K4.Do you heat your house?

SINGLE-SELECT   K4

01 ⚪ Yes
02 ⚪ No

K5.What is the main source you use to heat your house?

E K4 == 1

SINGLE-SELECT   K5

01 ⚪ Electric heater
02 ⚪ Gas heater
03 ⚪ Solar thermal system
04 ⚪ Same solid fuel stove used for cooking
05 ⚪ Separate solid fuel stove
06 ⚪ Kerosene Heater/Spirit heater

K6.What is the MAIN fuel you use in this stove?

E K5.InList(5,6)

SINGLE-SELECT   K6

001 ⚪ LPG/cooking gas
002 ⚪ Wood purchased
003 ⚪ Wood collected
004 ⚪ Solar
005 ⚪ Kerosene
006 ⚪ Animal Waste/Dung
007 ⚪ Crop Residue/Plants (with examples such as dried leaves, twigs, straw etc.)
008 ⚪ Saw Dust
009 ⚪ Coal/Charcoal
010 ⚪ Briquette
011 ⚪ Electric
012 ⚪ Biogas
555 ⚪ Other, specify

K6. Specify Others

E K6 == 555

TEXT   K6_SO

L. WILLINGNESS TO PAY FOR AN IMPROVED COOKSTOVE

STATIC TEXT

This module should be asked to only households WITHOUT an improved cookstove (CAPI/enumerator check). The respondent should be the household member who most frequently cooks food for the household, as identified in A.12 OR the household member who decides to purchase the cookstove in I.4. For each household, determine whether the primary fuel is wood (or crop residues), (based on responses in Section H). Then randomly assign one of the following improved cookstoves: Fuelwood users – (1) Aspirational wood ICS available in country (2) Popular affordable wood ICS available in local market. (After a type of improved cookstove is randomly chosen, price of this type of cookstove will be

L1.CAPI/ Enumerator: Recall responses to Section H (HOUSEHOLD FUEL CONSUMPTION) and record the most frequently used fuel. If not sure, ask respondent.	SINGLE-SELECT L1 01 ○ HH uses more fuelwood or crop residues than charcoal 02 ○ HH uses more charcoal than fuelwood or crop residues 03 ○ HH does not use any solid biomass (no charcoal, fuelwood or crop residues)
L2.Enumerator: Record Respondent name for this section E `L1.InList(1,2)`	SINGLE-SELECT: LINKED L2

STATIC TEXT

E `L1.InList(1,2)`

Interview: [INSERT DESCRIPTION OF THE IMPROVED COOKSTOVE] Please, describe and explain the benefit of having ICS and the features of the assigned cookstove. If you could pay a "lump sum" price for this cookstove. This cookstove can reduce the smoke and fuel consumption significantly. Possibly, your cooking time per meal will be shortened since firepower of this cookstove is stronger than the traditional cookstove. As you answer the next few questions, keep in mind the various benefits from this device as well as your household budget.

Random Number L	NUMERIC: INTEGER Random_L SCOPE: IDENTIFYING — .

STATIC TEXT

E `(Eco_Reg.InList(1,2) && Random_L == 1)`

This 3 Pot Hole model with ash tray (without water tank) stove provides households with cooking as well as space heating options. As it has chimney to take smoke out of the kitchen, it can greatly reduce Indoor Air Pollution (IAP). If properly used, the stove also helps to reduce the amount of firewood used in the stove by about 50%. It is made of metal and is durable. The ash tray helps in easy removing of ash. Also, proper use of cookstove will surely reduce your cooking time per meal. This will also help raise room temperature to comfort level. As you answer the next few questions, keep in mind the various benefits from this device as well as your household budget.

Amount	NUMERIC: DECIMAL Prefilled_L1 SCOPE: IDENTIFYING — .

STATIC TEXT

E `Eco_Reg == 3 || (Eco_Reg.InList(1,2) && Random_L == 2)`

The Mini Moto stove has a single pot-hole/ burner. It can reduce Indoor Air Pollution (IAP) in your kitchen as it emits lesser pollutants compared to traditional cooking stove. If properly used, the stove also helps to reduce the amount of firewood used in the stove by about 50%. This stove performs best with processed fuel or pellets. Also, proper use of cookstove will surely reduce your cooking time per meal. It is easier to start a fire (because of a small combustion chamber) with this stove and the stove is suitable for light and moderate cooking needs. This stove can be easily carried from one place to another, as it is portable. The stove is manufactured in a factory and the supplier may provide you after sales service. As you answer the next few questions, keep in mind the various benefits from this device as well as your household budget.

Amount	NUMERIC: DECIMAL Prefilled_L2 SCOPE: IDENTIFYING — .

STATIC TEXT

E `(Eco_Reg.InList(1,2))`

%Prefilled_L1%

STATIC TEXT

E `Eco_Reg == 3`

%Prefilled_L2%

Enter the amount for cookstove displayed above.	NUMERIC: INTEGER	CF_Stove

E L1.InList(1,2)
V1 self == Prefilled_L1 || self == Prefilled_L2
M1 Error! Please enter the amount displayed above.

_ .

L3.Would you be willing to purchase this cookstove at %CF_Stove%?

E L1.InList(1,2)

SINGLE-SELECT   L3
01 ◯ Yes
02 ◯ No

L4.Would you be willing to pay %CF_Stove% for this stove, if you were given 6 months to make the payment?

E L1.InList(1,2) && L3 == 2

SINGLE-SELECT   L4
001 ◯ Yes
002 ◯ No
888 ◯ Don't Know

L5.Would you be willing to pay %CF_Stove% for this solar device, if you were given 12 months to make the payment?

E L4.InList(2,888) && L3 == 2

SINGLE-SELECT   L5
001 ◯ Yes
002 ◯ No
888 ◯ Don't Know

L6. Would you be willing to pay %CF_Stove% for this stove, if you were given 24 months to make the payment?

E L5.InList(2,888) && L3 == 2

SINGLE-SELECT   L6
001 ◯ Yes
002 ◯ No
888 ◯ Don't Know

L7.Why would you not accept the offer?

E L6.InList(2,888)

SINGLE-SELECT   L7
001 ◯ Cannot afford the payment
002 ◯ Do not need an improved cookstove
003 ◯ Fuel for this stove is unreliable
004 ◯ Do not have sufficient information about this stove
555 ◯ Other, specify

L7. Specify Others

E L7 == 555

TEXT   L7_SO

．．．

L8. What is the most important attribute for you in a cook stove?

E L6.InList(2,888)

SINGLE-SELECT   L8
01 ◯ Cleanliness (less emission)
02 ◯ Speed of cooking (time saving)
03 ◯ Fuel saving
04 ◯ Cost of stove
05 ◯ Aesthetic value
06 ◯ Ease of use
07 ◯ Durability
08 ◯ Multiple pot option
09 ◯ Ability to control fire power
10 ◯ Portability
11 ◯ Additional functions (mobile charging, lighting)
12 ◯ Space heating (for high hills and mountains)

N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPMENT OWNERSHIP AND TOTAL

Interviewer Instructions: The Respondent should be the head of household.

SELECT ITEMS	MULTI-SELECT: YES/NO	N_LIST1
	01 ☐ / ☐ Vehicle (Car, pickup truck, etc)	
	02 ☐ / ☐ Motorcycle	
	03 ☐ / ☐ Bicycle	
	05 ☐ / ☐ Boat	
	06 ☐ / ☐ Tractor	
	07 ☐ / ☐ Domestic water pump	
	08 ☐ / ☐ Cow/bull/calves	
	09 ☐ / ☐ Water buffalo	
	10 ☐ / ☐ Horse/donkey	
	11 ☐ / ☐ Sheep	
	12 ☐ / ☐ Goat	
	13 ☐ / ☐ Pig	
	14 ☐ / ☐ Rabbit	
	15 ☐ / ☐ Fish (Aquaculture)	
	17 ☐ / ☐ Chicken	
	18 ☐ / ☐ Duck	
	And 1 other symbols [3]	

Specify Others	TEXT	N_LIST1_SO
E N_LIST1.Yes.Contains(16)	....	

N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPMENT OWNERSHIP AND TOTAL

Roster: ROSTER-(N1-N16B)

generated by multi-select question N_LIST1   R_NLIST1

(N1-N16B) How many Vehicle %rostertitle% in (working condition or still healthy) does your household own?	NUMERIC: DECIMAL	N1_A
	_ .	

SELECT ITEMS	MULTI-SELECT: YES/NO	N_LIST2
	01 ☐ / ☐ Incandescent Light Bulb	
	02 ☐ / ☐ Fluorescent Tube	
	03 ☐ / ☐ Compact Fluorescent Light (CFL) Bulb	
	04 ☐ / ☐ LED Light Bulb	
	05 ☐ / ☐ Radio/CD Players/sound system	
	06 ☐ / ☐ VCD/DVD	
	07 ☐ / ☐ Fan	
	08 ☐ / ☐ Refrigerator	
	09 ☐ / ☐ Hair dryer	
	10 ☐ / ☐ Electric food processor/blende	
	11 ☐ / ☐ Electric rice cooker	
	12 ☐ / ☐ Microwave oven	
	13 ☐ / ☐ Electric Iron	
	14 ☐ / ☐ Washing machine	
	15 ☐ / ☐ Electric sewing machine	
	16 ☐ / ☐ Air cooler	
	And 13 other symbols [4]	

Specify Others	TEXT	N_LIST2_SO

N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPMENT OWNERSHIP AND TOTAL
Roster: ROSTER-(N17-N45)
generated by multi-select question N LIST2   R_LIST2

(N17-N45). a. How many %rostertitle% in working condition does your household own?	NUMERIC: DECIMAL N17_45_A - .
(N17-N45).b.How many hours does your household use %rostertitle% in a typical day? (Only for lights, fan, radio and TV)	NUMERIC: DECIMAL N17_45 - .

E ((long?)@rowcode).InList(5,7,25,26,27)

P. HOUSEHOLD ECONOMIC SHOCKS

STATIC TEXT

Only record information for events that negatively affected the economic situation of the household.

P. HOUSEHOLD ECONOMIC SHOCKS
A)INCOME LOSS FROM SELF-EMPLOYMENT (E.G. CROP DISEASE, LIVESTOCK DEATH, LOSS OF SALES, DEATH OF MAIN INCOME EARNER ETC.)

P1.In the last 12 months, have you been affected by (...)?	SINGLE-SELECT P1_A 01 ◯ Yes 02 ◯ No
P2.Who was affected by the event? E P1_A == 1	SINGLE-SELECT P2_A 01 ◯ Just this household 02 ◯ Family members outside HH 03 ◯ Several HHs in this village 04 ◯ Most or all HHs in this village 05 ◯ Several villages in this area

P. HOUSEHOLD ECONOMIC SHOCKS
A) INCOME LOSS IN WAGE OR SALARY EMPLOYMENT (E.G. SALARY CUT, JOB LOSS, DEATH OF MAIN INCOME EARNER ETC.)

P1.In the last 12 months, have you been affected by (...)?	SINGLE-SELECT P1_B 01 ◯ Yes 02 ◯ No
P2.Who was affected by the event? E P1_B == 1	SINGLE-SELECT P2_B 01 ◯ Just this household 02 ◯ Family members outside HH 03 ◯ Several HHs in this village 04 ◯ Most or all HHs in this village 05 ◯ Several villages in this area

Q. STREET LIGHTING

The respondent should be the most knowledgeable household member on household electricity, as identified in C.1

Q1.Respondent name	SINGLE-SELECT: LINKED Q1

Q2.Does your neighborhood have any form of street lighting? I "Neighborhood" means 0.5 KM from Household	SINGLE-SELECT Q2 01 ◯ Yes 02 ◯ No

Q3.How satisfied are you by the brightness of the street lighting service in your neighborhood? E Q2 == 1	SINGLE-SELECT Q3 01 ◯ Very unsatisfied 02 ◯ Somewhat unsatisfied 03 ◯ Somewhat satisfied 04 ◯ Very satisfied

Q4.What do you think are the risks/problems with street lighting in your neighborhood? E Q2 == 1	MULTI-SELECT Q4 001 ☐ Electrocution 002 ☐ Poor installation 003 ☐ Poor maintenance 004 ☐ Outages/blackouts of street lighting 005 ☐ Does not stay on all night 111 ☐ No risks/problems 555 ☐ Other specify

Q4. Specify, others E Q4.Contains(555)	TEXT Q4_SO ....

Q5.Do you have a light that you could turn on at night to provide light outside your home? I Instruction	SINGLE-SELECT Q5 01 ◯ Yes 02 ◯ No

Q6.How many hours do you turn it on each night after it becomes dark? E Q5 == 1 V1 self <= 13 M1 Error. Please enter less than or equal to 13.	NUMERIC: INTEGER Q6 -

R.TIME USE

Please select the household member group". E HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15) || HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15) || HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15) || HH_ROSTER.Any(x=>x.A3==1 && x.A5<=15) V1 (self.Contains(1) && HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15)) || (self.Contains(2) && HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15)) || (self.Contains(3) && HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15)) || (self.Co **And 52 other symbols [1]** M1 Error ! Please select member group by taking reference with household roster.	MULTI-SELECT MULTI_TIME_USE 01 ☐ Women (Age 15 yrs and older) 02 ☐ Girls(Under age 15 yrs) 03 ☐ Men(Age 15 yrs and older 04 ☐ Boys(Under age 15 yrs)

R.TIME USE
Roster: TIME USE
generated by multi-select question MULTI TIME USE   ROSTER_TIME_USE

R1.A. In a typical day, does anyone from your household spend time spend gathering, collecting or purchasing fuels including travel time?

SINGLE-SELECT   R1_A

01 ○ Yes

02 ○ No

R2.A. In a typical day, how many total minutes did %rostertitle% spend gathering, collecting or purchasing fuels including travel time?

I minutes
E `R1_A == 1`

NUMERIC: INTEGER   R2_A

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

R3.A. How often does your household collect or purchase fuel?

E `R1_A == 1`

SINGLE-SELECT   R3_A

001 ○ Daily

002 ○ Weekly

003 ○ Bi-Weekly

004 ○ Monthly

555 ○ Other, specify

R3.A Specify Others

E `R3_A == 555`

TEXT   R3_A_SO

....

R4.A. How many times do the household members go to collect/purchase fuels %R3_A%?

I Number of times
E `R1_A == 1`

NUMERIC: INTEGER   R4_A

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

R9.A. In a typical day, does anyone from your household spend time preparing fuel/energy source (chopping, making pellets)?

SINGLE-SELECT   R9_A

01 ○ Yes

02 ○ No

R10.A. In a typical day, how many total minutes did %rostertitle% spend preparing fuel/energy source (chopping, making pellets)?

I minutes
E `R9_A == 1`

NUMERIC: INTEGER   R10_A

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

R11.A. In a typical day, does anyone from your household spend time cooking (food, tea, boiling water)?

E `R9_A.InList(1,2)`

SINGLE-SELECT   R11_A

01 ○ Yes

02 ○ No

R12.A. In a typical day, how many total minutes did %rostertitle% spend cooking (food, tea, boiling water)?

I minutes
E `R11_A == 1`

NUMERIC: INTEGER   R12_A

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

R13.A. In a typical day, does anyone from your household spend other time in cooking area(s)?

E `R11_A.InList(1,2)`

SINGLE-SELECT   R13_A

01 ○ Yes

02 ○ No

R14.A. In a typical day, how many total minutes did %rostertitle% spend other time in cooking area(s)?

I Minutes
E `R13_A == 1`

NUMERIC: INTEGER   R14_A

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

R15.A. In a typical day, does anyone from your household spend time using space heaters (including time starting heater and spending time near it for warmth)? E `R13_A.InList(1,2)`	SINGLE-SELECT R15_A 01 ◯ Yes 02 ◯ No
R16.A.In a typical day, how many total minutes did %rostertitle% spend using space heaters (including time starting heater and spending time near it for warmth)? I Minutes E `R15_A == 1`	NUMERIC: INTEGER R16_A ------------------------------.
R17.A.In a typical day, does anyone from your household spend time using stove or space heaters for other purposes (ex: brewing beer, preparing fodder for animals)? E `R15_A.InList(1,2)`	SINGLE-SELECT R17_A 01 ◯ Yes 02 ◯ No
R18.A.In a typical day, how many total minutes did %rostertitle% spend using stove or space heaters for other purposes (ex: brewing beer, preparing fodder for animals)? I Minutes E `R17_A == 1`	NUMERIC: INTEGER R18_A ------------------------------.
R19.A.In a typical day, does anyone from your household spend time caring, attending, or playing with/for younger children? E `R17_A.InList(1,2)`	SINGLE-SELECT R19_A 01 ◯ Yes 02 ◯ No
R20.A.In a typical day, how many total minutes did %rostertitle% spend caring, attending, or playing with/for younger children? I Minutes E `R19_A == 1`	NUMERIC: INTEGER R20_A ------------------------------.
R21.A. In a typical day, does anyone from your household spend time studying or helping with school work? E `R19_A.InList(1,2)`	SINGLE-SELECT R21_A 01 ◯ Yes 02 ◯ No
R22.A.In a typical day, how many total minutes did %rostertitle% spend studying or helping with school work? I Minutes E `R21_A == 1`	NUMERIC: INTEGER R22_A ------------------------------.
R23.A.In a typical day, does anyone from your household spend time working for pay outside of the house (employed and self-employed)? E `R21_A.InList(1,2)`	SINGLE-SELECT R23_A 01 ◯ Yes 02 ◯ No
R24.A. In a typical day, how many total minutes did %rostertitle% spend working for pay outside of the house (employed and self-employed)? I Minutes E `R23_A == 1`	NUMERIC: INTEGER R24_A ------------------------------.

R25.A. In a typical day, does anyone from your household spend time on income generating activities inside the house? E `R23_A.InList(1,2)`	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	R25_A
R26.A. In a typical day, how many total minutes did %rostertitle% spend on income generating activities inside the house? I Minutes E `R25_A == 1`	NUMERIC: INTEGER - .	R26_A
R27.A. In a typical day, does anyone from your household spend time on entertainment and socializing? E `R25_A.InList(1,2)`	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	R27_A
R28.A. In a typical day, how many total minutes did %rostertitle% spend spent on entertainment and socializing? I Minutes E `R27_A == 1`	NUMERIC: INTEGER - .	R28_A

S. HEALTH IMPACTS

Please select the household member group". E `HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15) || HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15) || HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15) || HH_ROSTER.Any(x=>x.A3==1 && x.A5<=15) || HH_ROSTER.Any(x=>x.A5<= 4)` V1 `(self.Contains(1) && HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15) ) || (self.Contains(2) && HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15) ) || (self.Contains(3) && HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15) ) || (self.Co `And 105 other symbols [2] M1 Error ! Please select member group by taking reference with household roster.	MULTI-SELECT 01 ☐ Women (Age 15 yrs and older) 02 ☐ Girls(Under age 15 yrs) 03 ☐ Men(Age 15 yrs and older 04 ☐ Boys(Under age 15 yrs) 05 ☐ Young Children (0-4 years)	MULTI_HEALTH_IMPACTS

S. HEALTH IMPACTS
Roster: HEALTH IMPACTS
generated by multi-select question `MULTI HEALTH IMPACTS`   ROSTER_S_HEALTH_IMPACTS

S1.A. Has anyone from your household had an illness with a cough at any time in the last 14 days?	SINGLE-SELECT 01 ◯ Yes 02 ◯ No	S1_A
S2.A. Number of %rostertitle% with an illness with a cough at any time in the last 14 days? E `S1_A == 1`	NUMERIC: INTEGER - .	S2_A
S3.A. Of %rostertitle% who had an illness with a cough, how many went to see a doctor/clinic? E `S2_A > 0` V1 `self <= S2_A` M1 Please enter less than or equal to %S2_A%.	NUMERIC: INTEGER - .	S3_A
S4.A. Of the %rostertitle% who had an illness with a cough, how many breathed faster than usual with short, rapid breaths or had difficulty	NUMERIC: INTEGER - .	S4_A

breathing?

E S2_A > 0
V1 self <= S2_A
M1 Please enter less than or equal to %S2_A%.

S5.A. Please select the following for %rostertitle% suffering from short, rapid breaths or difficult breathing, experienced a problem in the chest or a blocked or runny nose?

E S4_A > 0

MULTI-SELECT   S5_A
01 ☐ Chest only
02 ☐ Nose
03 ☐ Both
04 ☐ Other
05 ☐ Don't know

S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in chest?

E S5_A.Contains(1)

NUMERIC: INTEGER   S5_A_CHEST

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

S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in nose?

E S5_A.Contains(2)

NUMERIC: INTEGER   S5_A_NOSE

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

S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in both nose and chest?

E S5_A.Contains(3)

NUMERIC: INTEGER   S5_A_BOTH

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

S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in other?

E S5_A.Contains(4)

NUMERIC: INTEGER   S5_A_OTHER

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

S6.A. Has anyone from your household had an eye irritation or eye problems in the last 14 days?

E S4_A > 0 || S1_A == 2

SINGLE-SELECT   S6_A
01 ◯ Yes
02 ◯ No

S7.A. Number of %rostertitle% with eye irritation or eye problems in the last 14 days?

E S6_A == 1

NUMERIC: INTEGER   S7_A

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

S8.A. Has anyone from your household had any poisoning from liquid fuel?

E S6_A.InList(1,2)

SINGLE-SELECT   S8_A
01 ◯ Yes
02 ◯ No

S9.A.In the last 12 months, how many %rostertitle% have experienced poisoning from liquid fuel?

E S8_A == 1

NUMERIC: INTEGER   S9_A

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

S10.A.Has anyone from your household had any burns related to cooking or heating or fuel?

E S8_A.InList(1,2)

SINGLE-SELECT   S10_A
01 ◯ Yes
02 ◯ No

S11.A. In the last 12 months, how many

NUMERIC: INTEGER   S11_A

%rostertitle% have experienced burns related to cooking or heating or fuel?

E S10_A == 1

S12.A.Of the burns related to fuel, in the last 12 months, how many %rostertitle% have experienced burns that required a visit to the clinic/hospital?

E S11_A > 0

NUMERIC: INTEGER   S12_A

S13.A.Has anyone from your household had any back or neck problems from carrying fuel for cooking/heating?

SINGLE-SELECT   S13_A

01 ◯ Yes

02 ◯ No

S14.A.In the last 12 months, how many %rostertitle% have experienced back or neck problems from carrying fuel for cooking/heating?

E S13_A == 1

NUMERIC: INTEGER   S14_A

S15.A.Has anyone from your household had any electrical injuries (e.g. shocks) that prevent attendance in school/work?

E S13_A.InList(1,2)

SINGLE-SELECT   S15_A

01 ◯ Yes

02 ◯ NO

S16.A.In the last 12 months, how many %rostertitle% have experienced electrical injuries (e.g. shocks) that prevent attendance in school/work?

E S15_A == 1

NUMERIC: INTEGER   S16_A

S17.A.Has anyone from your household had any other minor electrical injuries?

E S15_A.InList(1,2)

SINGLE-SELECT   S17_A

01 ◯ Yes

02 ◯ No

S18.A.In the last 12 months, how many %rostertitle% have experienced other minor electrical injuries?

E S17_A == 1

NUMERIC: INTEGER   S18_A

T. ATTITUDES

T2.How has the price of electricity changed over the last 12 months?

I Read options aloud (Do not read option Don't know aloud, type 888 if relevant.)

E C2 == 1

SINGLE-SELECT   T2

001 ◯ It has gotten much higher

002 ◯ Stayed about the same

003 ◯ It has gotten cheaper

888 ◯ Don't know

T3.How has the frequency of black out or brown out changed over the last 12 months?

I Read options aloud (Do not read option Don't know aloud, type 888 if relevant.)

E C2 == 1

SINGLE-SELECT   T3

001 ◯ It has gotten worse

002 ◯ Stayed the same

003 ◯ Better

888 ◯ Don't know

T4.What are the main reasons you experience

MULTI-SELECT   T4

power shortages? E `C2 == 1`	01 ☐ Demand for electricity exceeds supply 02 ☐ Damage to critical infrastructure due to conflict / fighting 03 ☐ Lack of investment in the sector (and/or new power generation assets) 04 ☐ Lack of general maintenance of critical infrastructure by the central government 05 ☐ Lack of general maintenance of critical infrastructure by the regional / local government 06 ☐ Electricity theft 07 ☐ Other (please specify)
Specify Others E `T4.Contains(7)`	TEXT T4_SO ┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅
T5.How has the duration of electricity supply at night changed over the last 12 months? I Read options aloud (Do not read option Don't know aloud, type 888 if relevant.) E `C2 == 1`	SINGLE-SELECT T5 001 ○ It has gotten worse 002 ○ Stayed the same 003 ○ Better 888 ○ Don't know
T6.Since you first received your electricity connection, how has the duration of electricity supply during the day changed? I Read options aloud (Do not read option Don't know aloud, type 888 if relevant.) E `C2 == 1`	SINGLE-SELECT T6 001 ○ It has gotten worse 002 ○ Stayed the same 003 ○ Better 888 ○ Don't know
T7.If you could use your %C175% to power an appliance that you do not currently own, what would it be? I Instruction E `C175 != 111 && C175 != 4`	MULTI-SELECT T7 001 ☐ Fan 002 ☐ Radio 003 ☐ Television 004 ☐ Refrigerator 005 ☐ Electronic Tablet 006 ☐ Computer 007 ☐ Hair clippers 008 ☐ Power Tools 009 ☐ Phone with internet (smartphone) 111 ☐ No additional appliances required 555 ☐ Other, specify
T7. Specify Others E `T7.Contains(555)`	TEXT T7_SO ┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅┅
T8.Why do you not yet own one of these appliances? E `!T7.Contains(111)`	MULTI-SELECT T8 001 ☐ Too expensive 002 ☐ No products available 003 ☐ Products require too much energy, cannot power them with my system 555 ☐ Other, specify
Specify Others	TEXT T8_SO

E `T8.Contains(555)`   ···-

T9.How satisfied are you with the service from %C175%?

SINGLE-SELECT   T9

01 ◯ Very satisfied
02 ◯ Somewhat satisfied
03 ◯ Neutral
04 ◯ Unsatisfied
05 ◯ Very unsatisfied

T. ATTITUDES
STATEMENT READ THE FOLLOWING STATEMENT AND ASK RESPONDENT WHETHER HE OR SHE AGREES (YES), DISAGREES (NO), OR HAS NO OPINION.

STATIC TEXT

Electricity

T10.It is important for my household to conserve electricity.

SINGLE-SELECT   T10

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T11.I am concerned with the reliability of public electricity supply (i.e., frequent power shortages)

SINGLE-SELECT   T11

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T12.I would be willing to pay more for public electricity if supply was more reliable

SINGLE-SELECT   T12

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T13.Higher public electricity prices would lead to a better service.

SINGLE-SELECT   T13

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T14.The current price for public electricity is fair.

SINGLE-SELECT   T14

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T15.The monthly electric bill is or would be a financial burden for my family.

SINGLE-SELECT   T15

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T16.The electricity makes it easy to have information and the news.

SINGLE-SELECT   T16

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T17.Watching TV provides my household with great entertainment.

SINGLE-SELECT   T17

01 ◯ Agrees
02 ◯ Disagrees
03 ◯ No Opinion

T18. News and information from radio and television provide good information relevant for conducting business and agricultural activities.

SINGLE-SELECT   T18
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T19. News and information from radio and television provide good knowledge on family health issues.

SINGLE-SELECT   T19
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T20. Electricity can benefit communities through economic and enterprise development.

SINGLE-SELECT   T20
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

STATIC TEXT

Energy Subsidies

T21. The current public electricity prices reflect the cost of production.

SINGLE-SELECT   T21
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T22. The amount I pay to {UTILITY} for electricity covers the real cost of providing me with electricity.

SINGLE-SELECT   T22
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T23. If the government used some of the money saved on electricity subsidies to compensate poor households, I would support higher prices.

SINGLE-SELECT   T23
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T24. The government of Nepal subsidizes the cost of electricity for all citizens because the cost of production for [UTILTIY] is higher than the prices charged to households.

SINGLE-SELECT   T24
- 01 ◯ Agrees
- 02 ◯ Disagrees
- 03 ◯ No Opinion

T25. Why is energy conservation important to your household? (Up to 3 options)

I Upto 3 responses.

MULTI-SELECT   T25
- 001 ☐ To save money for my family
- 002 ☐ To help the planet
- 003 ☐ To burn fewer fossil fuels so that our air is cleaner
- 004 ☐ Because my neighbors are working hard to conserve energy
- 005 ☐ To become a good example for my family members and others
- 006 ☐ Using less power has benefits for our society
- 007 ☐ If we conserve power we can stop power-outs in rural areas
- 555 ☐ Other (specify)

Specify Others

E T25.Contains(555)

TEXT   T25_SO

···

T26. How should public electricity tariffs be managed?

SINGLE-SELECT   T26

	001 ○ Tariffs should remain unchanged
	002 ○ Tariffs should be increased
	003 ○ Tariffs should be decreased
	888 ○ Don't know

T27.[Provide information on extent of subsidies.] Do you think that greater awareness of the extent of the cost of energy subsidies will make you more likely to support a reduction of these subsidies?

SINGLE-SELECT   T27

001 ○ Yes
002 ○ No
888 ○ Don't know

T28. How would you cope if electricity prices increase?

SINGLE-SELECT   T28

001 ○ Consume less electricity
002 ○ Cut down on other costs in your budget
003 ○ Do nothing, it will come out of savings or other monies
888 ○ Other, (specify)

T28. Specify Othes

E T28 == 888

TEXT   T28_SO

T29. If public electricity tariffs are to increase, who should pay higher prices?

SINGLE-SELECT   T29

01 ○ Wealthy households
02 ○ Middle income households
03 ○ Poor + near poor households
04 ○ Government agencies
05 ○ Industry
06 ○ Urban households
07 ○ Rural households
08 ○ Everyone

T30. If you had to pay increased tariffs for electricity, how would you like government to utilize this additional money?

SINGLE-SELECT   T30

001 ○ Healthcare schemes
002 ○ Education
003 ○ Jobs
004 ○ Pension plans
005 ○ Transport
006 ○ Urban/Rural development
007 ○ Electricity
888 ○ Other, please specify

T30. Specify Others

E T30 == 888

TEXT   T30_SO

T31. What do you think is the top concern for the country's energy sector? Single response.

SINGLE-SELECT   T31

01 ○ Corruption in the sector
02 ○ Investing in new infrastructure
03 ○ Energy security
04 ○ Energy theft (illegal connections)
05 ○ Tariffs

U. WOMEN'S EMPOWERMENT

Respondents should be a female headed household or female spouse of the household head/member in the household.

STATIC TEXT

MOBILITY STATEMENT Can you do the following activities alone or you have to go with your husband: Mark who decides about each of the activities below.

U1.Visiting parents/relatives/friends within or outside the village	SINGLE-SELECT U1
	01 ◯ Can do herself
	02 ◯ Can do with husband
	03 ◯ Can do with others
	04 ◯ Other Specify

U1. Specify Others E U1 == 4	TEXT U1_SO ---

U2. Going to markets/banks/commercial centers/places of work.	SINGLE-SELECT U2
	01 ◯ Can do herself
	02 ◯ Can do with husband
	03 ◯ Can do with others
	04 ◯ Other Specify

U2. Specify Others E U2 == 4	TEXT U2_SO ---

U3.Going outside the village	SINGLE-SELECT U3
	01 ◯ Can do herself
	02 ◯ Can do with husband
	03 ◯ Can do with others
	04 ◯ Other Specify

U3. Specify Others E U3 == 4	TEXT U3_SO ---

STATIC TEXT

ACCESS TO INFORMATION, ORGANIZATION MEMBERSHIP, VILLAGE ELECTRIFICATION COMMITTEE, CAPACITY BUILDING AND ACCESS TO FINANCE

U4.If you are a member of a women's group, which type of group are you a member of/do you belong to?	MULTI-SELECT U4
	001 ☐ Not a member
	002 ☐ Mother's Group
	003 ☐ Agricultural Cooperatives
	004 ☐ Producer Group
	005 ☐ Female Community Health Volunteers (FCHVs)
	006 ☐ Commodity/Community User Group (Forest, Water etc.)
	007 ☐ Single Women Group
	008 ☐ Saving/Saving and Credit Cooperatives
	009 ☐ Other Sef Help Groups
	555 ☐ Other specify

U4. Specify Others E U4.Contains(555)	TEXT U4_SO ---

U5. What do you think are the main constraints women face in participating in organizations or activities in the area?

SINGLE-SELECT   U5

- 01 ◯ Limited time
- 02 ◯ Lack of support from family or community
- 03 ◯ Limited confidence
- 04 ◯ Limited education
- 05 ◯ Other specify

U5. Specify Others

E   U5 == 5

TEXT   U5_SO

....

U6. Are you a member of the village electrification committee?

SINGLE-SELECT   U6

- 01 ◯ Yes
- 02 ◯ No

U7. How many times do you meet in a month?

E   U6 == 1

NUMERIC: INTEGER   U7

\- .

U8. Do you own an account in a bank or financial institution?

I   Read options aloud

SINGLE-SELECT   U8

- 01 ◯ No account
- 02 ◯ Own account
- 03 ◯ Joint account (with spouse)
- 04 ◯ Joint account (with group)

M. CONSUMPTION / EXPENDITURE

STATIC TEXT

Interviewer Instructions: The Respondent should be the head of household.

M. Please select items

MULTI-SELECT: YES/NO   M_ITEMS

- 01 ☐ / ☐ M1. Cereals & cereal products (e.g.: rice, maize, wheat, flour, millet) and starchy staples (e.g.: cassava, plantain, yam, cocoyam)
- 02 ☐ / ☐ M2. Pulses & nuts (e.g.: beans, groundnuts, palm nuts, soy beans)
- 03 ☐ / ☐ M3. Milk & milk products (e.g.: powder, tinned, fresh)
- 04 ☐ / ☐ M4.Edible oil (e.g.: mustard oil, soya bean oil, groundnut oil, coconut oil)
- 05 ☐ / ☐ M5. Vegetables (e.g.: okra, tomato, onion, carrot, cabbage, garden egg) and Fruits (e.g.: bananas, coconut, pineapple, mango, orange, pawpaw)
- 06 ☐ / ☐ M6. Egg, & poultry
- 07 ☐ / ☐ M6.A.fish (smoked/fresh)
- 08 ☐ / ☐ M6.B. Meat and meat products
- 09 ☐ / ☐ M7. Sugar
- 10 ☐ / ☐ M8. Other food items (e,g, pepper, salt, spices, butter, jam, bread, groundnut paste, processed foods, etc.)
- 11 ☐ / ☐ M9. Meals/food bought outside home
- 12 ☐ / ☐ M10. Beverages (e.g.: malt drinks, minerals, coffee/Lipton/Milo

M. CONSUMPTION / EXPENDITURE
Roster: ROSTER COMSUMPTION
generated by multi-select question M ITEMS   ROSTER_M

(M1-M11).A.Value of Consumption (local currency) during last 7 days: Purchased.	NUMERIC: INTEGER M_A
I 888=Don't know	- .
(M1_M11).B.Value of Consumption (local currency) during last 7 days Produced/Acquired.	NUMERIC: INTEGER M_B
I 888=Don't know	- .
(M1-M11).C. Value of Consumption (local currency) during last 7 days Received as a gift/ Donation.	NUMERIC: INTEGER M_C
I 888=Don't know	- .

M. CONSUMPTION / EXPENDITURE
EXPENDITURE-VALUE OF EXPENDITURE (LOCAL CURRENCY) DURING LAST 7 DAYS -888=DON'T KNOW

M. CONSUMPTION / EXPENDITURE / EXPENDITURE-VALUE OF EXPENDITURE (LOCAL CURRENCY) DURING LAST 7 DAYS -888=DON'T KNOW
GOODS AND SERVICES MONTHLY EXPENDITURE

M12.Medical/pharmacy expenses (e.g.: tablets/syrups, insecticide, condoms, pharmacy/chemist, traditional/herbal medicine)	NUMERIC: INTEGER M12 - .
M13.Soaps, disinfectants and cleaning supplies; cosmetics and toiletries	NUMERIC: INTEGER M13 - .
M14.Water supply for drinking and other uses (tanker services, pipe-borne, metered, bore-hole, well, purchased water)	NUMERIC: INTEGER M14 - .
M15.Mobile phone top-up	NUMERIC: INTEGER M15 - .
M16.Internet, land phone, dish, cable, and other household communication	NUMERIC: INTEGER M16 - .
M17.House Rent	NUMERIC: INTEGER M17 - .
M18.Transportation costs (fuel for own vehicles, cost of public transportation, buses, taxis)	NUMERIC: INTEGER M18 - .
M19.Other recurring monthly expenditure	NUMERIC: INTEGER M19

(wage of domestic workers, entertainment, etc.)	-------------------------------- .

GOODS AND SERVICES EXPENDITURE IN LAST 12 MONTHS

M20.School fees and other educational expenses Include uniform, PTA dues, books, tutor, school supplies, transport, food, etc. I NPR	NUMERIC: INTEGER M20 -------------------------------- .
M21.Clothing, shoes, and accessories I NPR	NUMERIC: INTEGER M21 -------------------------------- .
M22.Celebrations (e.g. funerals and expenses, weddings, festivals, naming ceremony, engagement) I NPR	NUMERIC: INTEGER M22 -------------------------------- .
M23.Gifts and donations (e.g.: donation to church made by the household, tithes) I Only include gifts and donations not already included in M.22,NPR	NUMERIC: INTEGER M23 -------------------------------- .
M24.Hospital/Doctor visits and Diagnostic tests (e.g.: consultations at private hospital, public hospital, traditional healer) I NPR	NUMERIC: INTEGER M24 -------------------------------- .
M25.Furniture (e.g.: mattresses, room furniture, furnishing items, floor mats, carpets) I NPR	NUMERIC: INTEGER M25 -------------------------------- .
M26.Purchase, Repair, maintenance, and building (e.g.: cement, roofing, paint, carpentry, labor for repairs, sewerage removal) I NPR	NUMERIC: INTEGER M26 -------------------------------- .
M27.Utensils & kitchen equipment (e.g.: cups, plates, cutleries, cooking pots, buckets) I NPR	NUMERIC: INTEGER M27 -------------------------------- .
M28.Electronics: TV, radio-cassette player, VCR/DVD, Cassettes, CDs, records, satellite TV, MP3 player, video game player, pen drives, other digital accessories Computer or laptop purchase I NPR	NUMERIC: INTEGER M28 -------------------------------- .
M29.Appliances & tools (e.g.: electric iron, electric fans, refrigerators, lanterns, brooms) I NPR	NUMERIC: INTEGER M29 -------------------------------- .
M30.Vehicles & motorcycle & bicycle (purchase or repair of own car/moto/ car battery) I NPR	NUMERIC: INTEGER M30 -------------------------------- .

M31.Remittance sent to family members and relatives	NUMERIC: INTEGER	M31
I NPR	_ .	
M32.Losses due to theft, robbery, accidents, natural disasters, etc.	NUMERIC: INTEGER	M32
I NPR	_ .	
M33.Other major expenses not yet covered (specify)	NUMERIC: INTEGER	M33
I NPR	_ .	

O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

STATIC TEXT

Instruction: Enter the total values of following assets owned by the household. If some assets are owned by members, report aggregate values for all members. The Respondent should be the head of household.

O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS
AGRICULTURAL LAND (INCLUDING CULTIVATED LAND, RESTING LAND, PREPARATION LAND AND OTHERS LIKE LAND FOR ANIMAL FOOD)

O1. Do you own agricultural land (including cultivated land, resting land, preparation land and others like land for animal food)?	SINGLE-SELECT 01 ○ Yes 00 ○ No	O1
O2.What unit is the land measured in? E O1 == 1	SINGLE-SELECT 001 ○ Ropani 002 ○ Bigha 003 ○ Ana 004 ○ Kattha 005 ○ Dhur 006 ○ Hectares 555 ○ Other, specify	O2
O2. Specify Others E O2 == 555	TEXT	O2_SO
O3. What is the total size of the land? I Area E O1 == 1	NUMERIC: INTEGER _ .	O3
O4. If you were to sell, what is the total value? I NPR E O1 == 1	NUMERIC: INTEGER _ .	O4

CONTROL SHEET - INTERVIEW STATUS

If we need any further information we might contact you.Would you please provide us your	TEXT	Phone_Number

mobile or landline number?	....

Thank You very much for your time.

CONTROL SHEET - INTERVIEW STATUS
VISIT 1 : STATUS

Gps Location	GPS LOCATION
	_ N _ W _ A
End time of Interview	DATE: CURRENT TIME TIME_END_VISIT1 ....
Disposition Code	SINGLE-SELECT DISP1 01 ◯ No Household Member at home or no competent respondent at home 02 ◯ Entire household absent for extended period 03 ◯ Dwelling vacant or address not a dwelling 04 ◯ Out of Scope (the household is not within the sample) 05 ◯ Completed (all modules are complete) 06 ◯ Postponed/Rescheduled (interview was postponed and a new time scheduled) 07 ◯ Partial Complete/Will Return (interview was stopped but will continue later) 08 ◯ Partial Complete/Interview Finished (interview was stopped and will not continue) 09 ◯ Final Refusal (interview was refused/no interview completed): 10 ◯ Temporary Refusal (interview was refused, FS will follow-up) 11 ◯ Other Non-Interview (specify)
Other Non-Interview (specify) E DISP1==11	TEXT OTHER1_SPECIFY ....
[ENUMERATOR : Record date on when respondent can be contacted E DISP1==1 || DISP1==6 || DISP1==7 || DISP1==10 || DISP1==11	TEXT RESCHD_2 ....
[ENUMERATOR : Record time on when respondent can be contacted E DISP1==1 || DISP1==6 || DISP1==7 || DISP1==10 || DISP1==11	TEXT RESCHD_2_T ....
	TEXT RESCHD_2_D

[ENUMERATOR : Record contact number of respondent	....
E DISP1==1 || DISP1==6 || DISP1==7 || DISP1==10 || DISP1==11	

E DISP1==1 \|\| DISP1==6 \|\| DISP1==7 \|\| DISP1==10 \|\| DISP1==11

Date of Visit 2 with respondent	DATE DATE_VISIT2
	....
Disposition Code	SINGLE-SELECT DISP2
	01 ◯ No Household Member at home or no competent respondent at home
	02 ◯ Entire household absent for extended period
	03 ◯ Dwelling vacant or address not a dwelling
	04 ◯ Out of Scope (the household is not within the sample)
	05 ◯ Completed (all modules are complete)
	06 ◯ Postponed/Rescheduled (interview was postponed and a new time scheduled)
	07 ◯ Partial Complete/Will Return (interview was stopped but will continue later)
	08 ◯ Partial Complete/Interview Finished (interview was stopped and will not continue)
	09 ◯ Final Refusal (interview was refused/no interview completed):
	10 ◯ Temporary Refusal (interview was refused, FS will follow-up)
	11 ◯ Other Non-Interview (specify)
Other Non-Interview (specify) E DISP2==11	TEXT OTHER2_SPECIFY ....
[ENUMERATOR : Record date on when respondent can be contacted E DISP2==1 || DISP2==6 || DISP2==7 || DISP2==10 || DISP2==11	TEXT RESCHD_3 ....
[ENUMERATOR : Record time on when respondent can be contacted E DISP2==1 || DISP2==6 || DISP2==7 || DISP2==10 || DISP2==11	TEXT RESCHD_3_T ....
[ENUMERATOR : Record contact number of respondent E DISP2==1 || DISP2==6 || DISP2==7 || DISP2==10 || DISP2==11	TEXT RESCHD_3_D ....

CONTROL SHEET - INTERVIEW STATUS
VISIT 3 : STATUS

Date of Visit 3 with respondent	DATE	DATE_VISIT3
	....	

Disposition Code	SINGLE-SELECT	DISP3
	01 ◯ No Household Member at home or no competent respondent at home	
	02 ◯ Entire household absent for extended period	
	03 ◯ Dwelling vacant or address not a dwelling	
	04 ◯ Out of Scope (the household is not within the sample)	
	05 ◯ Completed (all modules are complete)	
	06 ◯ Postponed/Rescheduled (interview was postponed and a new time scheduled)	
	07 ◯ Partial Complete/Will Return (interview was stopped but will continue later)	
	08 ◯ Partial Complete/Interview Finished (interview was stopped and will not continue)	
	09 ◯ Final Refusal (interview was refused/no interview completed):	
	10 ◯ Temporary Refusal (interview was refused, FS will follow-up)	
	11 ◯ Other Non-Interview (specify)	

Other Non-Interview Specify	TEXT	OTHER3_SPECIFY
E `DISP3==11`	....	

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

[1] MULTI_TIME_USE: Please select the household member group".
Validation Condition:

```
(self.Contains(1) && HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15) ) ||
(self.Contains(2) && HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15) ) ||
(self.Contains(3) && HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15) ) ||
(self.Contains(4) && HH_ROSTER.Any(x=>x.A3==1 && x.A5<=15) )
```

Validation Message: Error ! Please select member group by taking reference with household roster.

[2] MULTI_HEALTH_IMPACTS: Please select the household member group".
Validation Condition:

```
(self.Contains(1) && HH_ROSTER.Any(x=>x.A3==2 && x.A5>=15) ) ||
(self.Contains(2) && HH_ROSTER.Any(x=>x.A3==2 && x.A5<=15) ) ||
(self.Contains(3) && HH_ROSTER.Any(x=>x.A3==1 && x.A5>=15) ) ||
(self.Contains(4) && HH_ROSTER.Any(x=>x.A3==1 && x.A5<=15) ) ||
(self.Contains(5) && HH_ROSTER.Any(x=>x.A5<= 4) )
```

Validation Message: Error ! Please select member group by taking reference with household roster.

APPENDIX B — OPTIONS

[1] District: 3.District

Options: 1:Taplejung, 2:Panchthar, 3:Ilam, 4:Jhapa, 5:Morang, 6:Sunsari, 7:Dhankuta, 8:Tehrathum, 9:Sankhuwasabha, 10:Bhojpur, 11:Solukhumbu, 12:Okhaldhunga, 13:Khotang, 14:Udayapur, 15:Saptari, 16:Siraha, 17:Dhanusha, 18:Mahottari, 19:Sarlahi, 20:Sindhuli, 21:Ramechhap, 22:Dolakha, 23:Sindhupalchok, 24:Kavrepalanchok, 25:Lalitpur, 26:Bhaktapur, 27:Kathmandu, 28:Nuwakot, 29:Rasuwa, 30:Dhading, 31:Makwanpur, 32:Rautahat, 33:Bara, 34:Parsa, 35:Chitwan, 36:Gorkha, 37:Lamjung, 38:Tanahun, 39:Syangja, 40:Kaski, 41:Manang, 42:Mustang, 43:Myagdi, 44:Parbat, 45:Baglung, 46:Gulmi, 47:Palpa, 48:Nawalparasi, 49:Rupandehi, 50:Kapilbastu, 51:Arghakhachi, 52:Pyuthan, 53:Rolpa, 54:Rukum, 55:Salyan, 56:Dang, 57:Banke, 58:Bardiya, 59:Surkhet, 60:Dailekh, 61:Jajarkot, 62:Dolpa, 63:Jumla, 64:Kalikot, 65:Mugu, 66:Humla, 67:Bajura, 68:Bajhang, 69:Achham, 70:Doti, 71:Kailali, 72:Kanchanpur, 73:Dadeldhura, 74:Baitadi, 75:Darchula,

[2] B10: B10.The walls of the dwelling are mainly made of what material?

Options: 1:Wood and mud, 2:Wood and thatch, 3:Wood only, 4:Stone only, 5:Stone and mud, 6:Stone and cement, 7:Blocks, plastered with cement, 8:Blocks, unplastered, 9:Bricks and Cement, 10:Mud bricks (traditional), 11:Steel, 12:Cargo container, 13:Parquet or polished wood, 14:Chip wood, 15:Corrugated iron sheet, 16:Asbestos, 17:Reed/bamboo, 555:Other, specify,
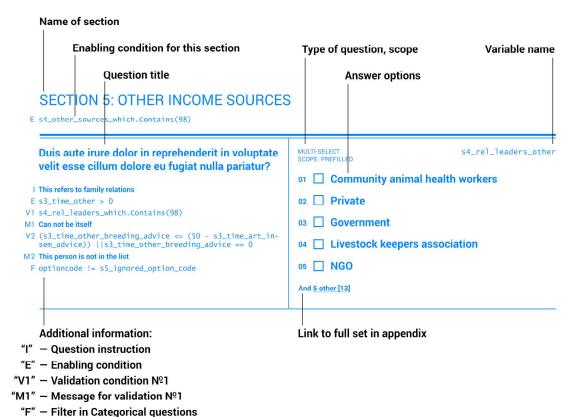
[3] N_LIST1: SELECT ITEMS

Options: 1:Vehicle (Car, pickup truck, etc), 2:Motorcycle, 3:Bicycle, 5:Boat, 6:Tractor, 7:Domestic water pump, 8:Cow/bull/calves, 9:Water buffalo, 10:Horse/donkey, 11:Sheep, 12:Goat, 13:Pig, 14:Rabbit, 15:Fish (Aquaculture), 17:Chicken, 18:Duck, 16:Other, specify,
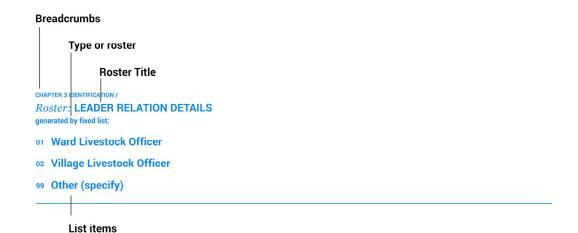
[4] N_LIST2: SELECT ITEMS

Options: 1:Incandescent Light Bulb, 2:Fluorescent Tube, 3:Compact Fluorescent Light (CFL) Bulb, 4:LED Light Bulb, 5:Radio/CD Players/sound system, 6:VCD/DVD, 7:Fan, 8:Refrigerator, 9:Hair dryer, 10:Electric food processor/blende, 11:Electric rice cooker, 12:Microwave oven, 13:Electric Iron, 14:Washing machine, 15:Electric sewing machine, 16:Air cooler, 17:Air conditioner, 18:Space Heater, 19:Electric water heater, 20:Solar based water heater, 21:Computer/ Laptop, 22:Electric hot water pot/kettle, 23:Smartphone (internet phone) charger, 24:Regular mobile phone charger, 25:Black & White TV, 26:Regular Color TV, 27:Flat color TV, 28:Electric Water Pump, 29:Other, specify,

LEGEND

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?

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

MULTI-SELECT
SCOPE: PREFILLED

s4_rel_leaders_other

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