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Sections: 24, Sub-sections: 43, Questions: 701. Questions with enabling conditions: 436 Questions with validation conditions:104 Rosters: 11 Variables: 6



# 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** 

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## 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 GPS SCOPE: IDENTIFYING
	N
	w
	A
Date of Household Visit	DATE Date_HH_Visit
Ecological Region	SINGLE-SELECT Eco_Reg 01 O Mountain/High Hills 02 O Hills 03 O Terai
Province	SINGLE-SELECT Province 01 O Province 1 02 O Province 2 03 O Province 3 04 O Province 4 05 O Province 5 06 O Province 6 07 O Province 7
Development Region	SINGLE-SELECT     Dev Region       01     O     Eastern       02     O     Central       03     O     Western       04     O     Mid-western       05     O     Far-western
Zone	SINGLE-SELECT: CASCADING Zone 01 O Mechi 02 O Koshi 03 O Sagarmatha 04 O Janakpur 05 O Bagmati

	<ul> <li>06 O Narayani</li> <li>07 O Gandaki</li> <li>08 O Dhaulagiri</li> <li>09 O Lumbini</li> <li>10 O Rapti</li> <li>11 O Bheri</li> <li>12 O Karnali</li> <li>13 O Seti</li> <li>14 O Mahaladii</li> </ul>
VDC/Municipality	14     O     Mahakali       SINGLE-SELECT     VDC_MUN       01     O     VDC       02     O     Municipality
VDC/Municipality Name	TEXT VDC MUN NAME
3.District	SINGLE-SELECT: CASCADING District 01 O Taplejung 02 O Panchthar 03 O Ilam 04 O Jhapa 05 O Morang 06 O Sunsari 07 O Dhankuta 08 O Tehrathum 09 O Sankhuwasabha 10 O Bhojpur 11 O Solukhumbu 12 O Okhaldhunga 13 O Khotang 14 O Udayapur 15 O Saptari 16 O Siraha And 59 other symbols [1]
4. EA	NUMERIC: INTEGER EA
5. LOCALITY	SINGLE-SELECT LOCALITY 01 O Urban 02 O Rural
6. Household ID	NUMERIC: INTEGER HH_ID
	1

### INTERVIEW DETAILS

## INTERVIEW DETAILS INITIAL MEET AND GREET / HOUSEHOLD CONSENT

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 Ms Dipa Shrestha (01-4001095). So, would you please spare some time to participate in this survey?

Are you willing to Proceed with the survey?	SINGLE-SELECT CONSENT 01 O Yes 02 O No
7. Name of Household Head E CONSENT == 1	TEXT HH_HEAD_NAME
8. Language of interview E CONSENT == 1	SINGLE-SELECT LANGUAGE 01 O English 02 O Nepali
11. Enumerator ID E CONSENT == 1	NUMERIC: INTEGER ENUM_ID
Supervisor ID E CONSENT == 1	NUMERIC: INTEGER SUP_ID SCOPE: SUPERVISOR
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.	NUMERIC: INTEGER	HH_MEMBER_NUMBER
Make a complete list of all individuals who normally live and eat their meals together in this household, starting with the head of household.		

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

	A1. Individual ID	NUMERIC: INTEGER	Al
	A2. Name	TEXT	A2
Ι	Enumerator: First then Last Name		<u>-</u>
	A3. %A2% male or female?	SINGLE-SELECT 01 O Male 02 O Female	A3
	A4. What is the relationship of %A2% to household head?	SINGLE-SELECT 01 O Head	Α4
V1 M1	<pre>(self==1&amp;&amp;HH_ROSTER.Count (x=&gt;x.A4==1)==1)    self!=1 There can only be one household head! Please check!</pre>	<ul> <li>02 O Wife/Spouse</li> <li>03 O Child/adopted child</li> <li>04 O Grandchild</li> <li>05 O Niece/Nephew</li> <li>06 O Father/Mother</li> <li>07 O Sister/Brother</li> <li>08 O Son/Daughter-in-law</li> <li>09 O Brother/Sister-in-law</li> <li>10 O Father/Mother-in-law</li> <li>11 O Grandfather/mother</li> <li>12 O Other relative</li> <li>13 O Servant/servant's relative</li> <li>14 O Other non-relative</li> </ul>	
	A5. How old is %A2%?	NUMERIC: INTEGER	A5
V1	YEARS, Enumerator: Record "0" if infant below 1 year old. self <= 100 Please enter less than or equal to 100.		
E	A6. ENUMERATOR: Is %A2% 5 years old or older?	SINGLE-SELECT 01 O Yes 02 O No	A6
E	A7. Has %A2% ever attended school?	SINGLE-SELECT 01 O Yes 02 O No	A7
E	A8. Is %A2% currently attending school?	SINGLE-SELECT 01 O Yes 02 O No	A8
E	A9. What is the highest educational qualification acquired by %A2%?	SINGLE-SELECT 02 O Primary 03 O Secondary 04 O Higher Secondary 05 O Vocational/ Technical School 06 O Graduate 07 O Post-Grad	P8
Ε	A9A. How many years of %A9% has %A2% completed? -YEARS Class A7 == 1 self < A5	NUMERIC: INTEGER	A9A

M1	Please enter less than age.		
E	A10. ENUMERATOR: Is %A2% 12 years or older?	SINGLE-SELECT 01 O Yes 02 O No	A10
V1 M1 V2	A11. What is %A2%'s marital status? A10 == 1 A4 ==1 && HH_ROSTER.Any(x=>x.A4==2)? self == 1: true Marital status of head of household with spouse must be married. A4==2 && self == 1    A4!=2 Spouse to to the head of household must be married	SINGLE-SELECT 01 O Married 02 O Cohabitating 03 O Never Married 04 O Divorced 05 O Separated 06 O Widowed	A11
E	A12. How frequently does %A2% cook food for the household? A10 = 1	SINGLE-SELECT01OEveryday02OA few times in a week03OOnce a week04OA few times in a month05OOnce a month06ONever	A12
E	A13. Is %A2%15 years or older?	SINGLE-SELECT 01 O Yes 02 O No	A13
E	A14. What was %A2%'s main occupation for the last 12 months? A13 = 1	SINGLE-SELECT         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
	A14. Specify Others	ТЕХТ	A14_SO
E	A14 == 555		
V1	A16. Out of the last 12 months, how many months were you engaged in this activity? A14.InList(1,2,3,4,5,6,7,8,555) self < 13 Enter less than or equal to 12.	NUMERIC: INTEGER	A16

T

	A17. How many days per month does %A2% work in this activity?	NUMERIC: INTEGER	A17
V1	A14.InList (1,2,3,4,5,6,7,8,555) self < 33 Enter below or equal to 32.		
E	A18. Does %A2% operate any non-agricultural/ business/ enterprise within this household or compound? A14.InList (1,2,3,4,5,6,7,8,555)	single-select 01 O Yes 02 O No	A18
	A19. How many employees does this business/ enterprise have?	NUMERIC: INTEGER	A19
	Number of employees including full time and Part time A18 $= 1$		•

## **B.HOUSEHOLD CHARACTERISTICS**

	B1. Enumerator: Record name of respondent for this section	SINGLE-SELECT: LINKED	Bl
Ι	Individual name from Household Roster		
	B2. Does your household live in this dwelling for the entire year?	SINGLE-SELECT 01 O Yes 02 O No	B2
	B3. Is this your main dwelling? The dwelling that you live in for most of the year. B2 == 2	SINGLE-SELECT 01 O Yes 02 O No	B3
	B4. How many years have you been living in this community?	NUMERIC: INTEGER	В4
V1	Record 1 if less than 1. self <= 100 Too Large. Please Check		
	B5. What is the type of dwelling?	SINGLE-SELECT	В5
Ι	(Enumerator, check with observation)	<ul> <li>001 O A single house occupied by one household dwelling</li> <li>002 O A house occupied by multiple households</li> <li>003 O Multi-storied building with one household</li> <li>004 O Multi-storied building with more households</li> <li>005 O Group of enclosed dwellings: multiple households</li> <li>006 O Group of enclosed dwellings occupied by a single household</li> <li>555 O Other, specify</li> </ul>	
	B5. Others Specify	ТЕХТ	B5 SO
E	B5 == 555		<u>-</u>
	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 В7 01 **O** Yes 02 **O** No B8. Do you use it for free or rent it? SINGLE-SELECT В8 01 O Free **Е** в7 == 2 02 O Rented B9. How many rooms (excluding the kitchen, NUMERIC: INTEGER В9 toilet, and bathroom) does the household occupy? I Record number of rooms E B8 == 2 SINGLE-SELECT B10.The walls of the dwelling are mainly made в10 of what material? 001 O Wood and mud 002 **O** Wood and thatch I Check with observation 003 O Wood only 004 O Stone only 005 O Stone and mud 006 O Stone and cement 007 O Blocks, plastered with cement 008 O Blocks, unplastered 009 O Bricks and Cement 010 O Mud bricks (traditional) 011 O Steel 012 O Cargo container 013 **O** Parquet or polished wood 014 **O** Chip wood 015 O Corrugated iron sheet 016 O Asbestos And 2 other symbols [2] B10. Others Specify TEXT B10 SO **E** B10 == 555 \_\_\_\_\_ SINGLE-SELECT B11. The roof of the dwelling is mainly made of B11 what material? 001 **O** Wood and mud 002 **O** Wood and thatch I Check with observation 003 O Stone 004 O Brick/Roof tiles 005 O Corrugated iron sheet 006 **O** Asbestos 007 O Reed/bamboo 008 O Plastic/ canvas 009 O Concrete 555 O Other, specify B11. Others Specify TEXT B11 SO **E** B11 == 555 \_\_\_\_\_ B12. The floor of the dwelling is mainly made of SINGLE-SELECT в12 what material?

I Check with observation	<ul> <li>001 O Mud/Dung</li> <li>002 O Reed/bamboo</li> <li>003 O Wood planks</li> <li>004 O Parquet or polished wood</li> <li>005 O Cement screed</li> <li>006 O Plastic tiles</li> <li>007 O Cement tiles</li> <li>008 O Brick tiles</li> <li>009 O Ceramic/Marble tiles</li> <li>555 O Other, specify</li> </ul>
B12. Specify Others	TEXT B12_SO
<b>E</b> B12 == 555	
<ul><li>B13. What type of toilet facility does your household use?</li><li>I Multiple responses possible.</li></ul>	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	TEXT B13_SO
E B13.Contains(555)	
B14. What is your household's main source of drinking water?	SINGLE-SELECTB14001OPipe borne water treated002OPipe borne water untreated003OBore hole/ hand pump005OWell/spring protected006OWell/spring unprotected007ORiver/spring008OLake/reservoir009ORain water010OTanker/truck/vendor011OBottle/Jar water555OOther, specify
B14. Specify Others	TEXT B14_SO
<b>E</b> B14 == 555	
B15. Do you treat water for drinking purpose (chemical treatment)?	SINGLE-SELECT B15 001 O Yes 002 O No 888 O Don't know
B16. Does anyone in the household have an account at a financial institution?	SINGLE-SELECT B16 01 O Yes 02 O No
B17. At which institution is this account or savings?	MULTI-SELECT B17 001 Commercial bank (including Development Banks and finance companies )

		<ul> <li>002 Cooperative (saving and credit cooperative)</li> <li>003 Microfinance institution</li> <li>555 Other, specify</li> </ul>	
B17. Specify Others		техт	B17_S0
E B17.Contains(555)			
B18. Does anyone in th account at an informa	e household have an institution?	SINGLE-SELECT 01 O Yes 02 O No	B18
B19. At which informal account? I Multiple responses possible E B18 == 1	institution is this	MULTI-SELECT 001 Group savings (rotational) 002 Group savings (one-time disbursement) 555 Other, specify	B19
Specify Others E B19.Contains(555)		техт	B19_SO
B20. If you can get a lo sources of credit/loans I Multiple responses possible	an/credit, what are the s?	MULTI-SELECT         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	В20
B20. Specify Others		ТЕХТ	B20_SO
E B20.Contains (555) B21. Do you have a mo	bile money account?	SINGLE-SELECT 01 O Yes 02 O No	B21
B22. Do you use mobile payments over the mo		SINGLE-SELECT 01 O Yes 02 O No	B22
	e account in the past 90	SINGLE-SELECT 01 O Yes 02 O No	B23
<ul> <li>B21 — 1</li> <li>B24.How do you use th services?</li> <li>I Multiple responses possible</li> <li>E B21 = 1</li> </ul>	e mobile money	MULTI-SELECT 001 Receive money from family/friends/other 002 Transfer credit to	B24

	<ul> <li>004 Receive NGO/State support</li> <li>005 Pay for Electricity</li> <li>006 Pay for Water</li> <li>007 Internet top-up/credit</li> </ul>
	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

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

F	Enumerator: Now, we would need to talk to the most knowledgeable member on household electricity. Who would that person be? HH_ROSTER.Any(x=>x.A5>=2)	SINGLE-SELECT: LINKED	С_МНО
	Is <mark>%C_WHO%</mark> available now?	SINGLE-SELECT CO 01 O Yes 02 O No	C AVAILABLE
E	Enumerator: Record Date and Time for next meeting if the respondent is not currently available. C_AVAILABLE == 2	TEXT (	C_DATE_TIME

### 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 01 O Yes 02 O No	C2
E V1	C3.How far is your house from the nearest national grid line? Meters,Do not know 888 C2 == 2 self <= 150000    self == 888 Entered number is too far. Check again.	NUMERIC: INTEGER	C3
	C4. What is the MAIN reason why your household is not connected to the grid? Record the MAIN reason. C2 == 2	<ul> <li>SINGLE-SELECT</li> <li>001 O Grid is too far from household/not available</li> <li>002 O Cost of initial connection is too expensive</li> </ul>	C4

		<ul> <li>003 O Monthly fee is too expensive</li> <li>004 O Satisfied with current energy solution</li> <li>005 O Renting, Landlord decision</li> <li>006 O Service Unreliable</li> <li>007 O Administrative procedure is too complicated</li> <li>008 O Submitted application and waiting for connection</li> <li>009 O Company refused to connect the household</li> <li>555 O Other, specify</li> </ul>	
	C4. Specify Others	TEXT C4_	SO
E	C4 == 555		
E	C5. Do you expect to get grid connection? C2 == 2	SINGLE-SELECT 001 O Yes 999 O Don't expect to get grid connection 888 O Don't know	C5
E	C6.When do you expect to get grid connection?	SINGLE-SELECT 001 O Upto 6 months 002 O 6 months to 1 year 003 O 1 year to 2 years 004 O More than 2 years 888 O Don't know	C6
E	C7.Who is the service provider of the grid connection? C2 == 1	SINGLE-SELECT 01 O Nepal Electricity Authority (NEA) 02 O Other Private Electricity Providers	C7
E V1	C8.How many years have you had this grid connection? Record in years, if less than 1 year record 1Dont know=888 C2 == 1 C8 < 101    self == 888 Too much. Please check.	NUMERIC: DECIMAL	С8
E	C9. How much did your household pay for the grid connection fee? Don't know		С9
	C9.A. How much did your household pay for any additional connection costs (external wiring, poles etc.)? Do not include the connection fee from C.9 here, NPR Don't know 	NUMERIC: INTEGER CS	A
I	C10. How much did your household pay for the internal wiring fee? - Local currency Don't know	NUMERIC: INTEGER C	210

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		C11
E V1	Don't know		
	C12.How many days after you were connected were you able to use electricity in your home?	NUMERIC: INTEGER	C12
E V1	Number of days,(Insert 0 if immediate), Don't know		
E	C13. Who receives the payment for your electricity service? C2 == 1	SINGLE-SELECT 001 O Energy company for eg.: NEA, BPC 003 O Community/village/municipality	C13
		<ul> <li>004 O Relative</li> <li>005 O Neighbor</li> <li>006 O Landlord</li> <li>007 O No one</li> <li>555 O Other, specify</li> </ul>	
	C13. Specify Others	TEXT	C13_SO
E	C13 == 555		
E	C14.Does your household have an electric meter/sub-meter?	SINGLE-SELECT 01 O Yes 02 O No	C14
	C15.What is the capacity of the meter/sub- meter?	NUMERIC: INTEGER	C15
	Ampere, Please take reference from electricity bill or from meter-box. C14 == 1 && C2 == 1		
E	C17. Does your household share the electric meter/sub-meter?	SINGLE-SELECT 01 O Yes 02 O No	C17
E V1	C18. How many households are sharing the meter/sub meter? Number of Households C17 = 1 && C2 == 1 self < 31 Too many household. Please check.	NUMERIC: INTEGER	C18
	C19. How are you billed for electricity? Read options aloud C13.InList(1,2,3,4,5,6,555) && C2 == 1	SINGLE-SELECT 001 O Fixed monthly fee 002 O Pay based on lights and appliances used 003 O Utility estimates consumption 555 O Other, specify 111 O No bill for electricity	C19

	C19. Specify Others	TEXT	C19_S0
E	C19 = 555	<u>-</u>	<u>-</u>
E	C20. How do you make your electricity bill payment? C13.InList(1,2,3,4,5,6,555) && C2 == 1	SINGLE-SELECT 001 O Cash 002 O Credits using mobile money 003 O Credit, using other ways 555 O Other, specify	C20
	C20. Specify Others	TEXT	C20_S0
E	C20 = 555		
E	<b>C21.Where do you make payments?</b> C13.InList(1,2,3,4,5,6,555) && C2 == 1	SINGLE-SELECT 001 O Local store 002 O Utility office 003 O Bank 004 O Post office 555 O Other, specify	C21
	C21. Specify Other	TEXT	C21_S0
E	C21 = 555		
E	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. C13.InList(1,2,3,4,5,6,555) && C2 == 1	<ul> <li>SINGLE-SELECT</li> <li>01 O Respondent has energy bill and shows it</li> <li>02 O Respondent has energy bill but refuses to show it or could not locate it</li> <li>03 O Respondent does not have an energy bill</li> </ul>	C22
	C23.In the last month, how much did you spend on the electric bill?	NUMERIC: INTEGER	C23
E V1	Don't Know		
	C24. In the last month how much electricity did your household consume?	NUMERIC: INTEGER	C24
E V1	Quantity in Kilowatt Hour (kWh),Don't Know		
	C25. In a typical month, how much did you spend on electricity?	NUMERIC: INTEGER	C25
E V1	Don't know		
E	C26. Are there certain months/seasons every year when the household experiences bad electricity service from the national grid?	SINGLE-SELECT 01 O Yes 02 O No	C26
E	C2 == 1		
	C27. What are the worst months for service	MULTI-SELECT: YES/NO	C27

from the grid?	001	13th April-13th May
Multiple responses are possible. C26 == 1 (self.Yes.Contains(888) && !self.Yes.ContainsAny(1,2,3,4 ,5,6,7,8,9,10,11,12))    (!self.Yes.Contains(888) && sel f.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12)) Select either don't know or other options.	002 003 004 005 006 007 008 009	14th May-14th June 15th June-15th July 16th July-16th August 17th August-16th September 17th September-16th October 17th October-15th November 16th November-15th December 16th December-13th January 14th January-11th February 12th February-13th March 14th March-13th April 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)?	SINGLE-SELECT C2 01 O Yes 02 O No	28
C2 = 1		

C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRICITY FROM NATIONAL GRID  $\ensuremath{\mathsf{A.WORST}}$  MONTHS

**E** C26 == 1

	C29. How many hours of electricity are available each day and night from the grid? (max 24 hours) -hours	NUMERIC: DECIMAL	C29 A
V1	Don't know		
	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	NUMERIC: DECIMAL	C30_A
V1	Don't know		
V1	C31.How many hours of electricity do you use each day and night from the grid? Don't know	NUMERIC: DECIMAL	C31_A
	C32.How many outages/blackouts occur in a week?	NUMERIC: DECIMAL	C32_A
Ι	No outages/blackouts111 Don't know888		
	C33. What is the total duration of all the outages/blackouts in a week?:Hour	NUMERIC: INTEGER	C33_A_HOUR
	Hour, Don't know		

	self <= 168    self == 888 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
E V1	Minute, Don't know	

## 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 V1 M1	Don't know		
	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	С30_В
I V1 M1	Don't know		
	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	С31_В
V1	Don't know		
	C32. How many outages/blackouts occur in a week?	NUMERIC: INTEGER	С32_В
Ι	No outages/blackouts111 Don't know		
	C33.What is the total duration of all the outages/blackouts in a week?:Hour	NUMERIC: INTEGER	C33_B_HOUR
E V1	Hour, Don't know		
	C33.What is the total duration of all the outages/blackouts in a week?:Minutes	NUMERIC: INTEGER	C33_B_MINUTES
Ε	Minute, Don't know		
E	C34.What is your main back-up source of lighting during outages/blackouts of the grid? c2 == 1	SINGLE-SELECT 001 O Electric generator 002 O Rechargeable battery and storage devices (e.g.: car battery) 003 O Solar Lantern (single light)	C34

	<ul> <li>004 O Solar -Lighting System (2+ lights with cell phone charging and/or radio)</li> <li>005 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>006 O Pico-hydro</li> <li>007 O Kerosene lamp</li> <li>008 O Fuel-based lighting</li> <li>009 O Dry-cell (non-rechargeable) battery/ Torch/ Flashlight</li> <li>010 O Candle</li> <li>555 O Other, specify</li> <li>111 O No back-up source</li> </ul>
C34. Specify Others	TEXT C34 SO
E C34 == 555	
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       Call         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	TEXT C35_SO
E C35 = 555	
C36. How do you request for repairs in electricity service or file a complaint? E c2 == 1	SINGLE-SELECT       C36         001       O       Call utility company         002       O       Call a local technician         003       O       Send a letter/email         004       O       Social media         005       O       Talk to community representative         006       O       No system to request repairs/file complaint         555       O       Other, specify
C36. Specify Others	TEXT C36_SO
E C36 == 555	<u> </u>
C37.When there is a blackout in your community, who do you usually approach for assistance? E C2 == 1	SINGLE-SELECT       C37         01       O       The power company         02       O       Someone not from power company         03       O       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

Ι	Number of Days Enumerator: If under 24 hours record 0. if "Have n ot encountered any problem yet enter 111"		
V1	(C37 == 2    C37 == 1) && C2 == 1 self < 100    self==111 Too many. Please check.		
	C39.Do you experience voltage fluctuations from the grid?	SINGLE-SELECT 01 O Yes	C39
E	(C37 == 2    C37 == 1) && C2 == 1	02 <b>O</b> No	
	C40. Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?	SINGLE-SELECT 01 O Yes 02 O No	C40
E	C39 == 1 && C2 == 1		
E	C41. In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the grid? (C39 == 1 & C2 == 1)    C37 == 3	single-select 001 O Yes 002 O No 888 O Don't know	C41
Ι	C42. What are the most serious problems you experience with your grid electricity? 2 options only, Order matters.	MULTI-SELECT: ORDERED 001 Supply shortage/not enough hours of electricity	C42
	C2 == 1	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	TEXT	C42_S0
E	C42.Contains(555)		<u>-</u>
	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)?	single-select 01 O Yes 02 O No	C43
E	C2 == 1		
	C43.A. What was the reasons for this injury?	SINGLE-SELECT 001 <b>O</b> Carelessness or error	C43_A
E	C43 == 1	<ul> <li>001 O Carelessness of error</li> <li>002 O Lack of knowledge about the use of the appliance</li> <li>003 O Faulty wiring or wiring with exposed wires</li> <li>555 O Other, specify</li> </ul>	
	C43.A. Specify Others	TEXT C	43_A_SO
E	C43_A == 555		<u>-</u>
	C44. Is this household connected to a?	single-select 01 <b>O</b> Pico hydro	C44
Е	C_AVAILABLE == 1 && C2 == 2		

02 <b>O</b>	Micro/Mini-hydro grid
03 <b>O</b>	Neither pico-hydro nor
	mini/micro-hydro grid
04 <b>O</b>	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?	TEXT C45
Ι	If both please ask about mini/micro hydro grid.	
	C46. Is there a limit for the load and/or appliances you are allowed to power from this %C45%?	SINGLE-SELECT C46 001 O Yes 002 O No 888 O Don't Know
	C47. How many years have you had this %C45%?	NUMERIC: INTEGER C47
V1	Record in years, if less than 1 year record 1 self < 101 Too many. Please check.	
	C48. How much did your household pay for the %C45% fee?	NUMERIC: INTEGER C48
Ι	Refer to connection cost ONLY, Don't know	
	C48.A. How much did your household pay for any additional connection costs (external wiring, poles etc.)?	TEXT C48_A
	Do not include the connection fee from C.48 here Local currency Don't know	
	C49. How much did your household pay for the internal wiring?	NUMERIC: INTEGER C49
	Don't know	
	C50. How many weeks after you applied for the %C45% did your household get connected?	NUMERIC: INTEGER C50
E V1	(Insert 0 if immediate) C48 != 111 self < 21 Too many. Please check.	
	C51. How many days after you were connected were you able to use electricity in your home? (Insert 0 if immediate)	NUMERIC: INTEGER C51
E	C48 != 111	
	C52. Have you applied for an upgrade of service since you connected to the %C45%?	SINGLE-SELECT C52 01 O Yes 02 O No

	C53. Who receives the payment for your electricity service?	SINGLE-SELECT         001       O         Energy company         002       O         Private entity         003       O         Community/village/municipality         004       O         Relative         005       O         Neighbor         006       Candlord         007       O         08       Cooperative         009       Respondent is the owner (No one)         555       O	C53
	C53. Specify Others	техт	C53_S0
E	C53 = 555		
E	C54. Does your household have an electric meter?	single-select 01 O Yes 02 O No	C54
E	C56. Does your household share the electric meter? c54 = 1	SINGLE-SELECT 01 O Yes 02 O No	C56
V1	C57. How many households are sharing the meter? C56 == 1 self < 31 Too many household.	NUMERIC: INTEGER	C57
	C58. How are you billed for electricity? Read options aloud C54 == 2	SINGLE-SELECT 001 O Fixed monthly fee 002 O Pay based on lights and appliances used 003 O Utility estimates consumption 555 O Other, specify 111 O No bill for electricity	C58
E	C58. Specify Others	техт	C58_SO
	C59. How do you make your electricity bill payment?	SINGLE-SELECT 001 O Cash 002 O Credits using mobile money 003 O Credit, using other ways 555 O Other, specify	C59
	C59. Specify Others	техт	C59_S0
E	C59 == 555		
E	C60.Were you involved in setting the tariff for the %C45%?	SINGLE-SELECT 01 O Yes 02 O No	C60
	C61. How were you involved in the tariff setting?	single-select 001 O Community meeting	C61

E	C60 == 1	<ul> <li>002 O Contacted by mini-grid/pico hydro company</li> <li>003 O Member of electricity committee</li> <li>004 O Member of cooperative</li> <li>555 O Other, specify</li> </ul>	
	C61. Specify Others	ТЕХТ	C61_S0
E	C61 == 555		
E	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. C53 != 7 && C53 != 9	<ul> <li>SINGLE-SELECT</li> <li>01 O Respondent has energy bill and shows it</li> <li>02 O Respondent has energy bill but refuses to show it or could not locate it</li> <li>03 O Respondent does not have an energy bill</li> </ul>	C62
	C63. In the last month, how much did you spend on the electric bill?	NUMERIC: INTEGER	C63
E V1	Calculate amount paid from the last bill. Don't Know888, Local Curren cy C62 == 1 self < 100000    self == 888 Too large. Please check. or if don't know enter 888.		
	C64. In the last month how much electricity did your household use?	NUMERIC: INTEGER	C64
	<b>Don't Know888, KWH</b> C62 == 1    C53 == 7		
	C65. In a typical month, how much did you spend on electricity?	NUMERIC: INTEGER	C65
E V1	Don't Know		
	C66. Are there certain months/seasons every year when the household experiences bad electricity service from this mini-grid/pico-grid?	SINGLE-SELECT 01 O Yes 02 O No	C66
	C67.What are the worst months for service from the mini-grid? Multiple responses are possible. Record all months when household h as the lowest number of hours of electricity supply. C66 = 1	MULTI-SELECT: YES/NO         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	C67
	C68.Do you receive information about a "load- shedding" schedule (load shedding is the set	012 / 14th March-13th April 888 / Don't Know	C68

23/96

01	O	Yes
02	Ο	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_2	A
V1	Don't know		
	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 2	A
V1	Don't know		
	C71. How many hours of electricity do you use each day from the mini-grid?	NUMERIC: INTEGER C71 2	A
V1	Don't know		
	C72. How many outages/blackouts occur in a week?	NUMERIC: INTEGER C72 i	A
Ι	No outages/blackouts111,Dont know888		
	C73A.1.What is the total duration of all the outages/blackouts in a week?:Hours	NUMERIC: INTEGER C73_A_:	1
E V1	Don't know		
	C73.A.2.What is the total duration of all the outages/blackouts in a week?	NUMERIC: INTEGER C73_A_2	2
E V1	Don't know		

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

C69. How many hours of electricity are available each day and night from the minigrid? (max 24 hours) NUMERIC: INTEGER

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С69 В

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	self <= 24    self == 888 Please enter less than or equal to 24 or 888.		
Ŧ	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 C'	70_B
V1	Don't know		
	C71. How many hours of electricity do you use each day from the mini-grid?	NUMERIC: INTEGER C	71_B
V1	Don't know		•
	C72. How many outages/blackouts occur in a week?	NUMERIC: INTEGER C	72_В
Ι	No outages/blackouts111, Dont know888		•
	C73.B.1.What is the total duration of all the outages/blackouts in a week?: Hours	NUMERIC: INTEGER C73	в1
Ε	Don't know		
	C73.B.2.What is the total duration of all the outages/blackouts in a week?	NUMERIC: INTEGER C73	в 2
E V1	Don't know		•
	C74.What is your main back-up source of lighting during outages/blackouts of the grid?	<ul> <li>SINGLE-SELECT</li> <li>001 O Electric generator</li> <li>002 O Rechargeable battery and storage devices (e.g.: car battery)</li> <li>003 O Solar Lantern</li> <li>004 O Solar -Lighting System (2+ lights with cell phone charging and/or radio)</li> <li>005 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>006 O Pico-hydro</li> <li>007 O Kerosene lamp</li> <li>008 O Fuel-based lighting</li> <li>009 O Dry-cell (non-rechargeable) battery/ Torch/ Flashlight</li> <li>010 O Candle</li> <li>555 O Other, specify</li> <li>111 O No back-up source</li> </ul>	C74
	C74. Specify Others	TEXT C7-	4_so
E	C74 == 555		
	C75.What is your main back-up source of electricity for appliances during	SINGLE-SELECT 001 O Electric generator	C75

	outages/blackouts of the mini-grid?	<ul> <li>002 O Rechargeable battery and storage devices (e.g.: car battery)</li> <li>003 O Solar Lantern</li> <li>004 O Solar -Lighting System (2+ lights with cell phone charging and/or radio)</li> <li>005 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>006 O Pico-hydro</li> <li>555 O Other, specify</li> <li>111 O No back-up source</li> </ul>	
	C75. Specify Others	ТЕХТ	C75_S0
E	C75 == 555		<del>-</del>
	C76.How do you request for repairs in electricity service or file a complaint?	SINGLE-SELECT         001       O         002       O         003       O         003       O         Send a letter/email         004       O         Social media         005       O         Talk to community representative         006       O         No system to request repairs/file complaint         555       O	C76
	C76. Specify Others	ТЕХТ	C76_S0
E	C76 == 555		<u>-</u>
	C77. When there is a blackout in your community, who do you usually approach for assistance?	<ul> <li>SINGLE-SELECT</li> <li>01 O The power company</li> <li>02 O Someone not from power company</li> <li>03 O No-one: we wait until power returns</li> </ul>	C77
E V1	C78.The last time you asked for assistance, how many days after you contacted %C77% did they come to fix the problem? Number of days Don't know	NUMERIC: INTEGER	C78
	C79. Do you experience voltage fluctuations from the grid?	SINGLE-SELECT 01 O Yes 02 O No	C79
E	C80.Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?	single-select 01 O Yes 02 O No	C80
E	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?	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't know	C81

I	C82. What are the most serious problems you experience with your mini grid electricity? 2 options only, Order matters.	MULTI-SELECT: ORDERED       C82         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	TEXT C82_SO
E	C82.Contains(555)	
	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 O Yes 02 O No
	C83.A. What was the reasons for this injury?	SINGLE-SELECT C83_A
E	C83 == 1	<ul> <li>001 O Carelessness or error</li> <li>002 O Lack of knowledge about the use of the appliance</li> <li>003 O Faulty wiring or wiring with exposed wires</li> <li>555 O Other, specify</li> </ul>
	C83.A. Specify Others	TEXT C83 A SO
E	C83_A = 555	
	C84. In the last 12 months, did the household use a generator to supply electricity?	SINGLE-SELECT C84 01 O Yes 02 O No
E	C_AVAILABLE == 1	
E	C. SUPPLY AND DEMAND OF ELECTRICITY ELECTRIC GENERATOR SET C84 == 1	
	C85.How many generators does your household use to supply electricity?	NUMERIC: INTEGER C85
V1	Don't know	
	C86.Do you share this generator with other households?	SINGLE-SELECT C86 01 O Yes 02 O No
	C87.How many households are sharing electricity from this generator?	NUMERIC: INTEGER C87

	<b>Don't know888</b> C86 = 1	
	C88.Enumerator Observation: What is the capacity of the generator?	TEXT C88
Ι	Volt Amps (kVA) Don't know	<u></u>
	C89. In the last 12 months, in which months did you use this generator or did you use it all year? (self.Contains(111) && !self.ContainsAny(1,2,3,4,5,6,7,8 ,9,10,11,12))    (!self.Contains(111) && self.ContainsAn y(1,2,3,4,5,6,7,8,9,10,11,12)) 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
V1	C90.How many days per month did you typically use this generator? Number of days Don't know	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	TEXT C91 SO
E	C91.Contains(555)	<u> </u>
	C92. How many years have you used this generator?	NUMERIC: INTEGER C92
Ι	Don't know888	
	C93.Does your household own the generator?	SINGLE-SELECT C93 01 O Yes 02 O No
E	C94.Who owns the generator? C93 = 2	SINGLE-SELECT       C94         001       O       Other Household         002       O       Community organization         003       O       Private person/entity         555       O       Other, specify         888       O       Don't know
	C94. Specify Others	TEXT C94_SO

E	C94 == 555	
E	C95.Do you rent the generator or use it for free? <sup>C93</sup> = 2	SINGLE-SELECT C95 01 O Rent 02 O Use for free
E	C96.How do you pay for electricity services from the generator? C95 = 1	SINGLE-SELECT       C96         001       O       Fixed payment (per month or week)         002       O       Charge by number of lights/appliances         003       O       Charge per kWh         004       O       Pay for fuel only         555       O       Other, specify
	C96. Specify Others	TEXT C96_SO
E	C96 == 555	
	C97.In the months that you use it, how much did you pay to use the generator each month? Don't know	NUMERIC: INTEGER C97
	C98.How much did you pay to purchase the generator?         Don't know	NUMERIC: INTEGER C98
т	C99. In the last 12 months, how much did you pay for repairs/parts/maintenance of the generator?	NUMERIC: INTEGER C99
-	(C97 < 0    C93 == 1) && (C95 == 2    C93 == 1)	
	C100.What fuel is used to power the generator?	SINGLE-SELECT C100 001 O Diesel 002 O Petrol 003 O Kerosene 555 O Other, specify 888 O Don't know
	C100. Specify Others	TEXT C100_SO
E	C100 == 555	
I	C101.In the last 30 days, what was the total quantity of fuel used to power the generator?	NUMERIC: INTEGER C101
	C102.Do you pay for the fuel used to power the generator?	SINGLE-SELECT C102 01 O Yes 02 O No
	C103. In the last 30 days, how much did your household spend on fuel for this generator? Don't know888, NPR C102 == 1	NUMERIC: INTEGER C103

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E	C104.Is the generator the household's main source of electricity?	SINGLE-SELEC 01 O YO 02 O N	es	C104
E	C105. Are there certain months/seasons of the year when less fuel is available to power the generator? C104 == 1    C102 == 2	single-selec 01 O Yo 02 O N	es	C105
E	C106. What are the worst months of fuel availability for the generator? C105 == 1	002       1         003       1         004       1         005       1         006       1         007       1         008       1         009       1         010       1         011       1         012       1	T 13th April-13th May 14th May-14th June 15th June-15th July 16th July-16th August 17th August-16th September 17th August-16th September 17th October-16th October 17th October-15th November 16th November-15th December 16th December-13th January 14th January-11th February 12th February-13th March 14th March-13th April Don't Know	C106

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)	NUMERIC: INTEGER	C107_A
V1	Don't know		
	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)	NUMERIC: INTEGER	C108_A
V1	Max 4 hrs., Don't know		
	C109.How many hours do you actually use this generator each day?	NUMERIC: INTEGER	C109_A
V1	Don't know		

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	С107_В
V1	Don't know		
	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	С108 В
V1	Max 4 hrs., Don't know		
	C109. How many hours do you actually use this generator each day?	NUMERIC: INTEGER	C109_B
V1	Don't know		
E	C110. Do you experience voltage fluctuations from the generator?	SINGLE-SELECT 01 O Yes 02 O No	C110
F	C111.Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?	SINGLE-SELECT 01 O Yes 02 O No	C111
-	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 001 O Yes 002 O No	C112
E	C110 == 1	888 O Don't know	
E	C113. What are the most serious problems you experience with the generator? C84 == 1	<ul> <li>MULTI-SELECT: ORDERED</li> <li>001 Limited power supply</li> <li>002 Cannot power large appliances</li> <li>003 Too expensive to use (including high cost of fuel/rent)</li> <li>004 Availability of the fuel</li> <li>005 Hard to maintain/service</li> <li>006 Loud/Noisy</li> <li>007 Unpredictable interruptions</li> <li>555 Other, specify</li> <li>111 No problems</li> </ul>	C113
	C113. Specify Others	ТЕХТ	C113_S0
E	C113.Contains(555)		<u>-</u>
	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 01 O Yes 02 O No	C114
E	C84 == 1		
	C114.A. What was the reasons for this injury?	SINGLE-SELECT	C114 A

E C114 == 1		002 O 003 O	Carelessness or error Lack of knowledge about the use of the appliance Faulty wiring or wiring with exposed wires Other, specify	
C114.A. Specify	Others	TEXT		C114 A SO
E C114_A == 555		<b>.</b>		
use any recharg	12 months, did the household eable batteries, such as car ectricity AS THE MAIN SOURCE	SINGLE-SEL 01 O 02 O	Yes	C115
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 (self.Yes.Contains(111) && !self.Yes.ContainsAny(1,2,3,4 ,5,6,7,8,9,10,11,12))    (!self.Yes.Contains(111) && sel f.Yes.ContainsAny(1,2,3,4,5,6,7,8,9,10,11,12)) Error! Either select use all or select months only.	MULTI-SELECT: YES/NO         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       /       16th November-15th December         008       /       16th December-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	C116
	C117.In the last 12 months, what did your household use rechargeable batteries for?	MULTI-SELECT 001 Lighting 002 Appliances 003 Home-based income activity 555 Other, specify	C117
	C117. Specify Others	ТЕХТ С	2117_SO
E	C117.Contains(555)		
	C118.Does your household have an inverter that allows you to use AC appliances?	SINGLE-SELECT 01 O Yes 02 O No	C118
	C119.What is the capacity of the inverter?	NUMERIC: INTEGER	C119
	Watts (W) C118 == 1		
	C120.What is the total number of rechargeable batteries that you use in a typical month?	NUMERIC: INTEGER	C120

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

	C. SUPPLY AND DEMAND OF ELECTRICITY / EXTERNALLY RECHARGED ROSTER	BATTERY (CAR BATTERY, ETC) – SKIP IF THIS IS FOR BACKL	IP SOLUTIONS
	generated by numeric question C120		R_C120
	C121.What is the capacity of the rechargeable batteriery %rostertitle%?	NUMERIC: INTEGER	C121
	<b>Don't know</b>		
	C122.What is the voltage of the rechargeable batteriery %rostertitle%?	NUMERIC: INTEGER	C122
	<b>Don't know</b>		
	C123.How much did you pay for the rechargeable battery(ies) %rostertitle%?	NUMERIC: INTEGER	C123
	<b>Don't know</b>		
	C124. How many recharges for all battery %rostertitle% does your household have in a	NUMERIC: INTEGER	C124
T	typical month? Don't know		
	C125.Do you pay someone/some entity outside the household to recharge the battery on a regular basis?	SINGLE-SELECT 01 <b>O</b> Yes	C125
		on a 01 O Yes 02 O No spend NUMERIC: INTEGER	
	C126. How much does your household spend in a typical month to recharge the batteries (in total)?	NUMERIC: INTEGER	C126
	Local currency Don't Know888 C125 == 1		
	C127. What is the electricity source used to recharge the battery?	SINGLE-SELECT 001 O National grid 002 O Local mini-grid 003 O Electric generator 004 O Solar 555 O Other, specify	C123 C124 C124 C125
	C127. Specify Others	ТЕХТ	C127_S0
E	C127 == 555		
	C128.Is battery recharging limited by availability of electricity from %C127%?	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't know	C128
	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		
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?	NUMERIC: INTEGER	C130
Ι	Don't888, Max 4 Hrs		
	self < 5    self == 888 Please enter less than or equal to 4 or 888		
	C131. How many hours do you actually use rechargeable batteries for electricity supply each day?	NUMERIC: INTEGER	C131
V1	Don't Know		
	C132.How many hours do you actually use rechargeable batteries for electricity supply each evening, from 6:00 pm to 10:00 pm?	NUMERIC: INTEGER	C132
V1	Don't Know		
	C133.What are the most serious problems you experience with the rechargeable batteries?	MULTI-SELECT: ORDERED 001  Supply shortage/not enough hours of electricity	C133
Ι	Record up to 2 responses.	<ul> <li>002 Too expensive</li> <li>003 Cannot power large appliances</li> <li>004 Recharging is not convenient</li> <li>005 Maintenance &amp; repair is difficult</li> <li>006 Cannot recharge battery to full capacity</li> <li>555 Other, specify</li> <li>111 No problems</li> </ul>	
	C133. Specify Others	TEXT	C133_SO
E	C133.Contains (555)		<u>-</u>
	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)?	SINGLE-SELECT 01 O Yes 02 O No	C134
E	C115 == 1		
	C134.A. What was the reasons for this injury?	SINGLE-SELECT	C134_A
E	C134 == 1	<ul> <li>001 O Carelessness or error</li> <li>002 O Lack of knowledge about the use of the appliance</li> <li>003 O Faulty wiring or wiring with exposed wires</li> <li>555 O Other, specify</li> </ul>	
	C134.A. Specify Others	ТЕХТ	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 Syst em is Device 1)
- E C\_AVAILABLE == 1

#### 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?

\_\_\_\_\_

C135

MULTI-SELECT

04 🔲 None

01 **Solar lanterns** 

02 🔲 Solar lighting system

03 🔲 Solar home system

	Number of solar lanterns C135.Contains (1)	
	C137. How many solar lighting systems (2+lights with cell phone charger and/or radio) do you have?	NUMERIC: INTEGER C
	Number of solar lighting system C135.Contains (2)	
	C138. How many solar home systems (2+ lights with cell phone charger and TV/fan/fridge) do you have?	NUMERIC: INTEGER C
Ι	Number of solar home system C135.Contains (3)	
	C. SUPPLY AND DEMAND OF ELECTRICITY Roster: SOLAR BASED DEVICE	-
E	<pre>generated by multi-select question C135 C_AVAILABLE == 1 &amp;&amp; C135.ContainsAny(1,2,3)</pre>	F
	C141.What is the manufacturer and model of the %rostertitle%?	TEXT C
Ι	Don't Know888	
	C142.Does this %rostertitle% have a mobile charger?	SINGLE-SELECT C 01 O Yes 02 O No
	C142.B Does this %rostertitle% have a radio?	SINGLE-SELECT C14 01 O Yes 02 O No
	C143.Is this %rostertitle%your MAIN solar device?	SINGLE-SELECT C 01 O Yes 02 O No
	C144. What is the type of solar device?	SINGLE-SELECT C
	<pre>(self == 1 &amp;&amp; Cl35.Contains(1))    (self == 2 &amp;&amp; Cl35.Co ntains(2))    (self == 3 &amp;&amp; Cl35.Contains(3)) Error! Please select the valid response.</pre>	<ul> <li>01 O Solar Lantern</li> <li>02 O Solar lighting system</li> <li>03 O Solar Home System</li> </ul>
	C145.How many light bulbs are there (that can be separated from each other)?	NUMERIC: INTEGER C
	NUMBER OF LIGHT BULBS C144 != 1	
	C146.What is the power rating of the solar panel?	NUMERIC: INTEGER C
	If unknown, enter "888" , Read the name plate of the solar panel, Watt-Peak (Wp) C144 $= 1$	
	C148.What is the capacity of the battery?	NUMERIC: INTEGER C
	<b>Don't Know888</b> C144 != 1 && C146 != 888	
	C149.Do you have an inverter?	SINGLE-SELECT C

		01 O Yes 02 O No	
	C150.How many years have you had this %rostertitle%?	NUMERIC: DECIMAL	C150
V1	Record in years, if less than 1, record 1 self < 100 Too many. Please check.		
	C151.Who decided to purchase/ acquire this %rostertitle%?	SINGLE-SELECT: LINKED	C151
Ι	MEMBER ID		
	C152.Did you buy this <b>%rostertitle%</b> paying upfront or under installment, do you rent it/pay a fee to use it, or did you receive it for free?	SINGLE-SELECT 01 O Bought, fully paid 02 O Bought, under installment 03 O Rent/pay fee to use 04 O Received for free	C152
E	C153.Who gave you this %rostertitle%? C152 == 4	SINGLE-SELECT 001 O Local private organizations (NGO) 002 O Chief of village 003 O Local government 004 O Relative/Friend 555 O Other, specify	C153
	C153. Specify Others	ТЕХТ	C153_SO
E	C153 == 555		<u>_</u>
	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		
E	C155.What payment system do you use? C152 == 3	<ul> <li>SINGLE-SELECT</li> <li>01 O Mobile Pay-as-you-go</li> <li>02 O Other Pay-as-you go (scratch card, etc.)</li> <li>03 O Fixed fee</li> </ul>	C155
	C156.What is the monthly payment for %rostertitle% (INSTALLMENT/ FEE TO RENT/USE)?	NUMERIC: INTEGER	C156
E	C154_PARTIAL >= 0    C152 == 3		
E	C157.Did/do you borrow money to make your payement for %rostertitle%? C152 <= 3    C154_FULL >= 0	SINGLE-SELECT 01 O Yes 02 O No	C157
	C158.Did you receive information and training on this %rostertitle%?	SINGLE-SELECT 01 O Yes 02 O No	C158

	C159.How many hours do you use %rostertitle% for lighting and other applications each day?	NUMERIC: INTEGER	C159
V1	Don't know888 self <= 24    self == 888 Please enter less than 25 or 888.		
	C160.What is the most serious problem you experience with %rostertitle%?	SINGLE-SELECT 001 O Duration of service too short 002 O Too expensive 003 O Cannot power large appliances 004 O Breaks too often 005 O Maintenance and availability of spare parts 006 O Quality of light 007 O Battery problems 555 O Other, specify 111 O No problems	
	C160. Specify Others	ТЕХТ	C160_S0
E	C160 == 555		<u>-</u>
	C. SUPPLY AND DEMAND OF ELECTRICITY MAIN SOLAR-BASED DEVICE C135.ContainsAny(1,2,3) Enter the name of main solar-based device (self == 1 && C135.Contains(1))    (self == 2 && C135.Co	SINGLE-SELECT	
M1	ntains (2))    (self == 3 && Cl35.Contains (3)) Error! Please select the valid response.	<ul> <li>01 O Solar lanterns</li> <li>02 O Solar lighting system</li> <li>03 O Solar home system</li> </ul>	IMP_SOLAR_DEVICE
M1	ntains(2))    (self == 3 && C135.Contains(3))	02 O Solar lighting system	IMP SOLAR DEVICE

- 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

**E** C161 == 1

	C163.How many hours do you receive service from this %IMP_SOLAR_DEVICE% each day and night?	NUMERIC: INTEGER	C163_A
V1	Don't know		
	C164. How many hours is service available from this %IMP_SOLAR_DEVICE% each evening,	NUMERIC: INTEGER	C164_A
т	from 6:00 pm to 10:00 pm?		
V1	self <= 4    self == 888 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
T	Don't know		
V1	self <= C163_A    self == 888 Please enter less than or equal to %C163_A% or 888		
	C. SUPPLY AND DEMAND OF ELECTRICITY / MAIN SOLAR-BASED DEVICE		
	C163.How many hours do you receive service	NUMERIC: INTEGER	С163_В
	from this %IMP_SOLAR_DEVICE% each day and night?		
	Don't know		
	Please enter less than 25 or 888		
	C164. How many hours is service available from this %IMP_SOLAR_DEVICE% each evening,	NUMERIC: INTEGER	С164 В
_	from 6:00 pm to 10:00 pm?		
	Don't know		
M1	Please enter less than 5 or 888		
	C165. How many hours do you actually use the %IMP_SOLAR_DEVICE% each day for lighting	NUMERIC: INTEGER	С165_В
	and other applications?		
	Don't know		
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	SINGLE-SELECT	C166
	injury) damage because of the %IMP_SOLAR_DEVICE% (for example, serious	01 O Yes 02 O No	
	bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?		
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 <b>O</b> Carelessness or error	

		<ul> <li>0002 O Lack of knowledge about the use of the appliance</li> <li>0003 O Faulty wiring or wiring with exposed wires</li> <li>5555 O Other, specify</li> </ul>	
E	C167.Is there any device you do not have that you would like to have? C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't know	C167
	C168.What devices would you most like to have? Multiple response (Up to three devices) C167.InList(1) && C135.ContainsAny(1,2,3)	MULTI-SELECT 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
E	C168. Specify Others C168.Contains (555)	техт	C168_SO
E	C169.Overall, how satisfied with the service provided by the main solar device? C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)	SINGLE-SELECT 01 O Very satisfied 02 O Somewhat satisfied 03 O Neutral 04 O Unsatisfied 05 O Very unsatisfied	C169
	C170.In what year did you get your first solar device? Don't know	NUMERIC: INTEGER	C170
E	C171.Has solar been your main source of lighting/electricity since %C170%? C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)	SINGLE-SELECT 01 O Yes 02 O No	C171
E	C172.What was your main source of lighting/electricity when it was not a solar device? (C171 = 2    C171 = 888) && C135.ContainsAny(1,2,3)	SINGLE-SELECT         001       O         002       O         Local mini grid connection         003       O         Electric generator         004       O         Rechargeable battery and storage devices (e.g.: car battery)         005       O         Pico-hydro         006       O         Kerosene lamp         007       O         Fuel-based lighting         008       Dry-cell (non-rechargeable) battery/ Torch/Flashlight         009       O         S55       O         Other, specify	C172
	C172. Specify Others	TEXT	C172 SO

Ε	C172 == 555		<u>-</u>
	C173.Compared to the first time you used solar lighting, do you currently Read aloud options C_AVAILABLE == 1 && C135.ContainsAny(1,2,3)	SINGLE-SELECT 01 O Use more solar lighting 02 O Use about the same solar lighting 03 O Use less solar lighting	C173
E	C174.What appliances do you use today that you did not use with your first solar lighting device? C173.InList(1,2,888) && C135.ContainsAny(1,2,3)	MULTI-SELECT 001 Mobile phone charger 002 Radio 003 TV 004 Fan 005 Refrigerator 006 No change 555 Other, specify	C174
	C174. Speicify Others	ТЕХТ	C174_SO
E	C174.Contains (555)		<b>-</b>
E	C. SUPPLY AND DEMAND OF ELECTRICITY MAIN SOURCE OF ELECTRICITY		
E	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned	SINGLE-SELECT	C175
	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned above, which is the source that you use the most in your household?	<ul> <li>001 O National Grid Connection</li> <li>002 O Local Mini Grid connection</li> </ul>	C175
	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned above, which is the source that you use the	<ul> <li>001 O National Grid Connection</li> <li>002 O Local Mini Grid connection</li> <li>003 O Electric generator</li> <li>004 O Solar Lantern</li> </ul>	C175
V1	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned above, which is the source that you use the most in your household? (self == 1 && C2 == 1)    (self == 2 && C44 == 2)    (se lf == 3 && C84 == 1)    (self InList(4,5,6) && C135.Cont ainsAny(1,2,3))    (self == 7 && C115 == 1)    self.InLi	<ul> <li>001 O National Grid Connection</li> <li>002 O Local Mini Grid connection</li> <li>003 O Electric generator</li> <li>004 O Solar Lantern</li> <li>005 O Solar Lighting System (2+ lights with cell phone charging and/or radio</li> <li>006 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>007 O Rechargeable Battery</li> <li>008 O Pico-hydro</li> <li>009 O Dry-cell battery</li> </ul>	C175
V1	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned above, which is the source that you use the most in your household? (self == 1 && C2 == 1)    (self == 2 && C44 == 2)    (se lf == 3 && C84 == 1)    (self == 7 && C145 == 1)    (self.InLi ainsAny(1,2,3))    (self == 7 && C115 == 1)    self.InLi st(8,9,111,555)	<ul> <li>001 O National Grid Connection</li> <li>002 O Local Mini Grid connection</li> <li>003 O Electric generator</li> <li>004 O Solar Lantern</li> <li>005 O Solar Lighting System (2+ lights with cell phone charging and/or radio</li> <li>006 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>007 O Rechargeable Battery</li> <li>008 O Pico-hydro</li> </ul>	C175
V1	MAIN SOURCE OF ELECTRICITY C_AVAILABLE == 1 C175.Of all the sources that you mentioned above, which is the source that you use the most in your household? (self == 1 && C2 == 1)    (self == 2 && C44 == 2)    (se lf == 3 && C84 == 1)    (self == 7 && C145 == 1)    (self.InLi ainsAny(1,2,3))    (self == 7 && C115 == 1)    self.InLi st(8,9,111,555)	<ul> <li>001 O National Grid Connection</li> <li>002 O Local Mini Grid connection</li> <li>003 O Electric generator</li> <li>004 O Solar Lantern</li> <li>005 O Solar Lighting System (2+ lights with cell phone charging and/or radio</li> <li>006 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)</li> <li>007 O Rechargeable Battery</li> <li>008 O Pico-hydro</li> <li>009 O Dry-cell battery</li> <li>111 O No electricity</li> </ul>	C175 C175 SO

### 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	SINGLE-SELECT C177
charge all their mobile phones as often as they	001 O Yes
need inside your dwelling?	002 O No
E c176 > 0	888 O Don't know

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

## 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	SINGLE-SELECT: LINKED	D2
C2 = 2		

#### 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?

SIN	GLE-SE	LECT
01	Ο	Yes

E	C2 == 2	02 <b>O</b> No	
	Please enter the amount displayed %Rand_Amt_D%	NUMERIC: DECIMAL	D3 Amount
E	C2 == 2		
	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?	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	D4
E	D3 == 2		
	Please enter the amount displayed %Rand_Amt_D%	NUMERIC: INTEGER	D4 Amount
Е	D3 == 2		
	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?	single-select 001 O Yes 002 O No 888 O Don't Know	D5
Е	D4 == 2		
	Please enter the amount displayed %Rand_Amt_D%	NUMERIC: DECIMAL	D5 Amount
E	D4 == 2		
	VARIABLE Rand_Amt_D/12	DOUBLE	Rand_Amt_D_12
E	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?	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	D6
	Please enter the amount displayed %Rand_Amt_D%	NUMERIC: DECIMAL	D6_Amount
E	D5 == 2		
E	D7.If the connection fee were waived, would you get a grid connection? D6 == 2    D6 == 888	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	D7
E	D8.Why would you not accept the offer?	SINGLE-SELECT 001 O Cannot afford the payment 002 O Do not need electricity 003 O Electricity service is unreliable 004 O Monthly fee is too expensive 555 O Other, specify	D8
	D8. Specify Others	ТЕХТ	D8 SO

E	D8 == 555	
	D9.How much do you think it would cost to do all the internal electrical wiring in your house?	NUMERIC: INTEGER D9
	Don't Know	
	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?	NUMERIC: INTEGER D10
	Don't Know	

## E. WILLINGNESS TO PAY FOR IMPROVED ELECTRICITY SUPPLY

	Enter the amount for improved electricity supply displayed above:	NUMERIC: INTEGER Amount_E SCOPE: IDENTIFYING
E	E2. Do you experience electricity outages? c2 == 1	SINGLE-SELECT E2 01 O Yes 02 O No
E	E3.Did the household experience power outages 1 year ago? E2 == 1	SINGLE-SELECT E3 01 O Yes 02 O No
	E4.How many days of electricity outages one year ago did you experience on a typical month?	NUMERIC: INTEGER E4
V1	E3 == 1 self <33 Error! Please enter less than or equal to 32.	
	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?	SINGLE-SELECT E5 01 O Yes 02 O No
E	E3 == 1	
	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?	NUMERIC: DECIMAL E6
E V1	<pre>In NPR. E3 == 1 (self &gt;= Amount_E &amp;&amp; E5 == 1)    (self &lt; Amount_E &amp;&amp; E5 == 2)</pre>	
IVI'I	Error ! Please check.	

# F. WILLINGNESS TO PAY FOR SOLAR DEVICE

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 SCOPE: IDENTIFYING	CF_F
F3.Would you be willing to pay %CF_F% for this solar device?	SINGLE-SELECT 01 O Yes 02 O No	F3
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?	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	F4
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 001 O Yes 002 O No 888 O Don't Know	F5
<b>variable</b> CF_F / 24	DOUBLE	CF_24
<ul> <li>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.</li> <li>E F5 = 2    F5 = 888</li> </ul>	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	F6
F7.Why would you not accept the offer? E F6 == 2    F6 == 888	SINGLE-SELECT 001 O Cannot afford the payment 002 O Do not need electricity 003 O Maintenance/servicing of device is not available 555 O Other, specify	F7
F7. Others Specify	TEXT	F7 SO
<b>E</b> F7 == 555	<u>-</u>	<u>-</u>

## 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
FLCT.Contains(555)	
G. KEROSENE/FUEL-BASED /CANDLE LIGHTING / FUEL LAMP/ CANDLE/ TARA ROSTER: FUEL LAMP/ CANDLE/ TASK LIGHT generated by multi-select question FLCT FLCT.ContainsAny (1, 2, 3, 4, 555)	ASK LIGHT
G2. Enter the name of respondent	SINGLE-SELECT: LINKED G2

E	G4.What is the main fuel source for %rostertitle%? ((long?)@rowcode).InList(2,3,4,5,555)	SINGLE-SELECT 001 O Kerosene 002 O Biogas 003 O Edible Oil 555 O Other, specify	G4
	G4. Specify Others	техт	G4_SO
E	G4 == 555		
-	G5. How many of these lamps does your household have?	NUMERIC: INTEGER	G5
	<pre>((long?)@rowcode).InList(2,3,4,5,555) self &lt; 6 Too many.Please check.</pre>		
	G6.How much did you pay for each %rostertitle%?	техт	G6
I E	If more than 1 device, input the average ((long?)@rowcode).InList(2,3,4,5,555)		
	G7.In the last 12 months, how many months did you use %rostertitle%?	NUMERIC: INTEGER	G7
E	Don't know		

M1	Please enter less than or equal to 12		
	G8.In the last month, how many days did you use %rostertitle%?	NUMERIC: INTEGER	G8
E	FLCT.ContainsAny(1,2,3,4)		
V1	self <= 32		
M1	Please enter less than or equalt to 32.		
	G9.How many hours do you use %rostertitle% each day?	NUMERIC: DECIMAL	G9
I	If less than 1 hour, input 0		
	FLCT.ContainsAny(1,2,3,4)		
	self <= 24 Please enter less than or equal to 24.		
	G13.What don't you like most about using the %rostertitle%? 2 Options. FLCT.ContainsAny(1,2,3,4)	MULTI-SELECT 001 Lantern too expensive 002 Fuel too expensive 003 Fuel not available 004 Accidents can happen	G13
		005 Bad for health 006 Subsidies needed	
		007 Time spent to collect fuel 555 Other, specify	
		111 D No problems	
	G13. Specify Others	ТЕХТ	G13_S0
E	G13.Contains(555)		<u>-</u>
E	G14.In the last 12 months, what type of harm/injury did any household members have from %rostertitle%? FLCT.ContainsAny(1,2,3,4)	MULTI-SELECT          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	G14
	G15. What is the main source of lighting the children who are currently enrolled in school usually use for studying/doing homework? Single Response FLCT.ContainsAny(1,2,3,4)	SINGLE-SELECT001OElectric lighting/lamp002OSolar powered light source003OBattery-operated light source004OStreet lighting005OKerosene lamp006OCandles007OBiogas lamps008ONo school going children555OOther, specify111OStudying and homework only during daylight hours	G15

	G2.C. What is the total quantity of kerosene you purchase at a typical time?	NUMERIC: INTEGER	G2C
Ι	LITERS OF FUEL		
	G2.D. How long does this quantity of kerosene typically last?	NUMERIC: INTEGER	G2_D
т	Days		
1 V1	self < $366$		
<b>M</b> 1	Please enter less than 365.		
	G2.E. How much do you pay in total for the amount of fuel you purchased?	NUMERIC: INTEGER	G2_E
Ι	LOCAL CURRENCY		
	G2.F. What is the percentage of this kerosene you use for lighting?	NUMERIC: INTEGER	G2_F
V1	self < 101		-•
M1	Please enter in range 0-100.		

# 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?	NUMERIC: INTEGER	G2C_C
I Number of Candles		
G2.D.C. How long does this quantity of Candle typically last?	NUMERIC: INTEGER	G2_D_C
I Days		
G2.E.C How much do you pay in total for the amount of fuel you purchased?	NUMERIC: INTEGER	G2 E C
I LOCAL CURRENCY		

## 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

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

**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
	self < 6 Too many. Please Check.		
	H5.How much did you pay for each %rostertitle% on average?	NUMERIC: INTEGER	Н5
Ι	If paying in installment, enter total value of payments,If more than 1 d evice, input the average.		•
	H6.In the last 12 months, how many months did you use %rostertitle%?	NUMERIC: INTEGER	H6
V1	if less than 1 month write 0 self <= 12 Please enter less than or equal to 12.		•
	H7.How many minutes do you use %rostertitle% each day on a typical day?	NUMERIC: INTEGER	Н7
	self <= 1440 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 01 O Regular source of lighting 02 O Back-up source of lighting	Н8
E	((long?)@rowcode).InList(1,2,3,555)	03 O No light available	
	H9.How many of dry cell batteries do you purchase each month?	NUMERIC: INTEGER	Н9
E	H3.Yes.ContainsAny(1,2,3,4,555)		•
	H10.How much do you spend each month on dry cell batteries?	NUMERIC: INTEGER	H10
E V1	NPR H3.Yes.ContainsAny(1,2,3,4,555) self < 100001 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 01 LPG/ cooking gas	I2

 $R_{LS}$ 

<ul> <li>Wood</li> <li>Charcoal</li> <li>Solar</li> <li>Kerosene</li> <li>Animal waste/ Dung</li> <li>Crop Residue/ Plant Biomass</li> <li>Sawdust</li> <li>Sawdust</li> <li>Biomass Briquette</li> <li>Electric</li> <li>Pellets/ processed biomass/ wood chips</li> <li>Biogas</li> <li>Carbage</li> </ul>
<ul> <li>Biogas</li> <li>Garbage</li> </ul>

# 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 01 O Yes 02 O No	I3_LC
I4.In the last 12 months, what did your household use LPG/Cooking gas for? E I3_LC = 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4_I10_LC
I11. In the last 12 months, in which months did you use this LPG/Cooking gas? E I3_LC = 1	MULTI-SELECT 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	III_LC
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 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	I12_LC

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 01 O Yes 02 O No	I3_WP
I4.In the last 12 months, what did your household use Wood for? E I3_WP == 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4_I10_WP
I11. In the last 12 months, in which months did you use this Wood? E I3_WP == 1	MULTI-SELECT 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	Ill WP
I12.In the last 12 months, in which months was this Wood scarce and significantly more expensive? E I3_WP == 1	MULTI-SELECT 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	I12_WP

<ul> <li>011 12th February-13th March</li> <li>012 14th March-13th April</li> <li>888 Don't Know</li> </ul>
NUMERIC: INTEGER I13_WP
NUMERIC: INTEGER I15 WP
NUMERIC: INTEGER I16_WP
NUMERIC: INTEGER I17_WP
SINGLE-SELECT I3_CC 01 O Yes 02 O No
MULTI-SELECT I4_I10_CC 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY
MULTI-SELECT       I11       Used all year         01       13th April-13th May         02       14th May-14th June         03       15th June-15th July         04       16th July-16th August         05       17th August-16th September         06       17th September-16th October         07       17th October-15th November         08       16th November-15th December         09       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

<pre>this Charcoal scarce and significantly expensive? E I3_CC == 1</pre>	more111Available all year00113th April-13th May00214th May-14th June00315th June-15th July00416th July-16th August00517th August-16th September00617th September-16th October00717th October-15th November00816th November-15th December00916th 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 th Charcoal did your household use?	is NUMERIC: INTEGER	I13_CC
I kg E I3_CC == 1		
I15.How much of this Charcoal did yo purchase?	U NUMERIC: INTEGER	I15_CC
I kg,DO NOT PURCHASE111 E I13_CC > 0		
I16.How long does this quantity of Ch typically last?	arcoal NUMERIC: INTEGER	I16_CC
E I15_CC > 0 && I15_CC != 111		
I17.How much did you pay for the am Charcoal that you purchased?	ount of NUMERIC: INTEGER	I17_CC
E I15_CC > 0 && I15_CC != 111		
I. HOUSEHOLD FUEL CONSUMPTION FOR COOKIN	G	

E I2.Contains	s (5)
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I3.In the last 12 months, did your house-hold use this Solar?	SINGLE-SELECT 01 O Yes 02 O No	I3_SL
I4.In the last 12 months, what did your household use Solar for? E I3_SL = 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4_I10_SL
I11. In the last 12 months, in which months did you use this Solar? E I3_SL == 1	MULTI-SELECT 111 Used all year 001 13th April-13th May 002 14th May-14th June 003 15th June-15th July	111_SL

	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          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	I12_SL

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING F. KEROSENE

E I2.Contains(6)

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I3.In the last 12 months, did your house-hold use this Kerosene?	SINGLE-SELECT 01 O Yes 02 O No	I3 KS
I4.In the last 12 months, what did your household use Kerosene for? E I3_KS == 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4_I10_KS
I11. In the last 12 months, in which months did you use this Kerosene? E I3_KS = 1	MULTI-SELECT 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	I11 KS

	008 D16th 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_KS
this Kerosene scarce and significantly more	111 🗖 Available all year	
expensive?	001 🔲 13th April-13th May	
E I3_KS = 1	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 O Yes 02 O 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         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	I12_AWD
I13.In the last 7 days, how much of this Animal waste/Dung did your household use?	NUMERIC: INTEGER	I13_AWD
I kg E I3_AWD == 1		
I15.How much of this Animal waste/Dung did you purchase?	NUMERIC: INTEGER	I15 AWS
I kg,DO NOT PURCHASE111 E I13_AWD > 0		
	NUMERIC: INTEGER	I16 AWS
E I15_AWS > 0 && I15_AWS != 111		
I17.How much did you pay for the amount of Animal waste/Dung that you purchased? 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 01 O Yes 02 O No	I3_CRPB

I4.In the last 12 months, what did your household use Crop Residue/ Plant Biomass for?

E I3\_CRPB == 1

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING

06 HOME-BASED INCOME ACTIVITY

MULTI-SELECT

01 LIGHTING

02 COOKING

03 HEATING

04 FIRE STARTER/ IGNITION

05 🔲 BOILING WATER

I4 I10 CRPB

E	you use this Crop Residue/ Plant Biomass? I3_CRPB == 1	<ul> <li>111 Used all year</li> <li>001 13th April-13th May</li> <li>002 14th May-14th June</li> <li>003 15th June-15th July</li> <li>004 16th July-16th August</li> <li>005 17th August-16th September</li> <li>006 17th September-16th October</li> <li>007 17th October-15th November</li> <li>008 16th November-15th December</li> <li>009 16th December-13th January</li> <li>010 14th January-11th February</li> <li>011 12th February-13th March</li> <li>012 14th March-13th April</li> <li>888 Don't Know</li> </ul>
_	I12.In the last 12 months, in which months was this Crop Residue/ Plant Biomass scarce and significantly more expensive?	MULTI-SELECT I12_CRPB
E	I3_CRPB == 1	<ul> <li>14th May-14th June</li> <li>15th June-15th July</li> <li>16th July-16th August</li> <li>17th August-16th September</li> <li>17th September-16th October</li> <li>17th October-15th November</li> <li>16th November-15th December</li> <li>16th December-13th January</li> <li>16th December-13th January</li> <li>14th January-11th February</li> <li>12th February-13th March</li> <li>14th March-13th April</li> <li>Don't Know</li> </ul>
	I13.In the last 7 days, how much of this Crop Residue/ Plant Biomass did your household use?	NUMERIC: INTEGER I13_CRPB
	kg I3_CRPB == 1	
	I15.How much of this Crop Residue/ Plant Biomass did you purchase?	NUMERIC: INTEGER I15_CRPB
	kg,DO NOT PURCHASE111 I13_CRPB > 0	
	I16.How long does this quantity of Crop Residue/ Plant Biomass typically last?	NUMERIC: INTEGER I16 CRPB
E	I15_CRPB > 0 && I15_CRPB != 111	
	I17.How much did you pay for the amount of Crop Residue/ Plant Biomass that you purchased?	NUMERIC: INTEGER I17_CRPB
E	I15_CRPB > 0 && I15_CRPB != 111	

# 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 01 O Yes 02 O No	I3 SD
E	I4.In the last 12 months, what did your household use Sawdust for? I3_SD == 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4 I10 SD
E	I11. In the last 12 months, in which months did you use this Sawdust? I3_SD = 1	MULTI-SELECT111Used all year00113th April-13th May00214th May-14th June00315th June-15th July00416th July-16th August00517th August-16th September00617th September-16th October00717th October-15th November00816th November-15th December00916th December-13th January01014th January-11th February01112th February-13th March01214th March-13th April888Don't Know	I11_SD
E	I12.In the last 12 months, in which months was this Sawdust scarce and significantly more expensive? I3_SD = 1	MULTI-SELECT         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         011       12th February-11th February         012       14th March-13th April         888       Don't Know	I12_SD
	I13.In the last 7 days, how much of this Sawdust did your household use? kg I3 SD = 1	NUMERIC: INTEGER	I13 SD
Ι	I15_SD = 1 I15.How much of this Sawdust did you purchase? kg,DO NOT PURCHASE111 I13_SD > 0	NUMERIC: INTEGER	I15 SD

T

I16.How long does this quantity of Sav typically last?	dust NUMERIC: INTEGER	I16 SD
<b>E</b> I15_SD > 0 && I15_SD != 111		
I17.How much did you pay for the am Sawdust that you purchased? E I15_SD > 0 && I15_SD != 111		I17_SD
I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING M. BIOMASS BRIQUETTE E I2.Contains (13)		
I3.In the last 12 months, did your hous use this Biomass Briquette?	e-hold SINGLE-SELECT 01 O Yes 02 O No	I3_BB
I4.In the last 12 months, what did you household use Biomass Briquette for	MULTI-SELECT I4_I 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	IIO_BB
I11. In the last 12 months, in which mo you use this Biomass Briquette?	MULTI-SELECT       I         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	II1_BB
I12.In the last 12 months, in which mo this Biomass Briquette scarce and sign more expensive?		I12_BB

		012 14th March-13th April 888 Don't Know	
	I13.In the last 7 days, how much of this Biomass Briquette did your household use?	NUMERIC: INTEGER	I13_BB
Ι	kg		
	I15.How much of this Biomass Briquette did you purchase?	NUMERIC: INTEGER	I15 BB
	<b>kg,DO NOT PURCHASE111</b> 113_BB > 0		
	I16.How long does this quantity of Biomass Briquette typically last?	NUMERIC: INTEGER	I16 BB
E	I15_BB > 0 && I15_BB != 111		
	I17.How much did you pay for the amount of Biomass Briquette that you purchased?	NUMERIC: INTEGER	I17 BB
E	I15_BB > 0 && I15_BB != 111		
	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 O Yes 02 O No
E	I4.In the last 12 months, what did your household use Electric for? 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 01 O Yes 02 O No	I3 PB
I4.In the last 12 months, what did your household use Pellets/processed biomass/wood chips for? E I3_PB = 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4_I10 PB
I11. In the last 12 months, in which months did	MULTI-SELECT	I11 PB

E	you use this Pellets/processed biomass/wood chips? I3_PB = 1	<ul> <li>111 Used all year</li> <li>001 13th April-13th May</li> <li>002 14th May-14th June</li> <li>003 15th June-15th July</li> <li>004 16th July-16th August</li> <li>005 17th August-16th September</li> <li>006 17th September-16th October</li> <li>007 17th October-15th November</li> <li>008 16th November-15th December</li> <li>009 16th December-13th January</li> <li>010 14th January-11th February</li> <li>011 12th February-13th March</li> <li>012 14th March-13th April</li> <li>888 Don't Know</li> </ul>	
	I12.In the last 12 months, in which months was this Pellets/processed biomass/wood chips scarce and significantly more expensive?	MULTI-SELECT: ORDERED 111	I12_PB
E	I3_PB = 1	00214th May-14th June00315th June-15th July00416th July-16th August00517th August-16th September00617th September-16th October00717th October-15th November00816th November-15th December00916th December-13th January01014th January-11th February01112th February-13th March01214th March-13th April888Don't Know	
	I13.In the last 7 days, how much of this Pellets/processed biomass/wood chips did your household use?	NUMERIC: INTEGER	I13_PB
	kg I3_PB == 1		
	I15.How much of this Pellets/processed biomass/wood chips did you purchase?	NUMERIC: INTEGER	I15 PB
	<b>kg,DO NOT PURCHASE111</b> I13_PB > 0		
F	I16.How long does this quantity of Pellets/processed biomass/wood chips typically last?	NUMERIC: INTEGER	I16 PB
C	I15_PB > 0 && I15_PB != 111		T17 DD
E	I17.How much did you pay for the amount of Pellets/processed biomass/wood chips that you purchased? I15_PB > 0 && I15_PB != 111		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 01 O Yes 02 O No	I3_BG
I4.In the last 12 months, what did your household use Biogas for? E I3_BG == 1	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING 04 FIRE STARTER/ IGNITION 05 BOILING WATER 06 HOME-BASED INCOME ACTIVITY	I4 I10 BG
I11. In the last 12 months, in which months did you use this Biogas? E I3_BG == 1	MULTI-SELECT 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	I11_BG
I12.In the last 12 months, in which months was this Biogas scarce and significantly more expensive? E I3_BG = 1	MULTI-SELECT 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	I12_BG

# I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING R. GARBAGE

E I2.Contains(18)

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

SINGLE-SELECT

01 <b>(</b>	) Yes
-------------	-------

02 **O** No

I3 GP

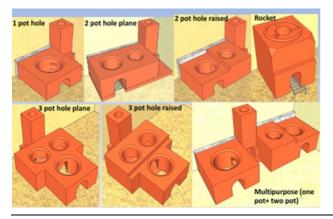
I4.In the last 12 months, what did your household use Garbage for?	MULTI-SELECT 01 LIGHTING 02 COOKING 03 HEATING	I4_GP
	<ul> <li>o4 FIRE STARTER/ IGNITION</li> <li>o5 BOILING WATER</li> <li>o6 HOME-BASED INCOME ACTIVITY</li> </ul>	

## 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	
self < 11	
Too many stoves. Please check.	

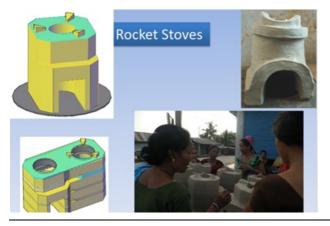
STATIC TEXT

## 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?

I List upto 5

MULTI-SELECT

- 01 🔲 3-Stone/Open fire stove
- 02 🔲 Traditional stove
- 03 🔲 Improved stove
- 04 🔲 Biogas stove

J3

05	Kerosene	stove
----	----------	-------

06 🔲 Solar Cooker

07 🔲 LPG/Natural gas stove

08 🔲 Electric/Induction/rice cooker

	generated by multi-select question J3	CSID
	Enter the ID	LIST J2
	J4. How did you obtain this %rostertitle%?	SINGLE-SELECT J4
E	((long?)@rowcode).InList(3,4,5,6,7,8)	<ul> <li>01 O Purchased</li> <li>02 O Receive for free</li> </ul>
	J5.Who decided to build/ purchase this %rostertitle%?	SINGLE-SELECT: LINKED J5
E	J4 == 1	
	J6.How much did you pay for %rostertitle%?	NUMERIC: INTEGER J6
E	J4 == 1	
E	J7.Who gave %rostertitle% to you? J6 < 0    J4 == 2	SINGLE-SELECT       J7         001       O       Local private organizations (NGO)         002       O       Chief of village         003       O       Local govt         004       O       Friend/ relative         555       O       Other, specify
	J7. Specify Others	TEXT J7_SO
E	J7 == 555	
E	J8.Did you receive training or information on %rostertitle%?	SINGLE-SELECT JB 01 O Yes 02 O No
E	J9.Did you ever receive an after-sales training? $_{\rm J8}=1$	SINGLE-SELECT J9 01 O Yes 02 O No
	J10.What is the manufacturer and model of %rostertitle%?	TEXT J10
E	((long?)@rowcode).InList(3,4,5,6,7,8)	
	J11.If you want to sell %rostertitle% in your community today, how much would you receive?	NUMERIC: INTEGER J11
	Don't know888 ((long?)@rowcode).InList(3,4,5,6,7,8)	
E	J12. Is %rostertitle% a metal stove? ((long?)@rowcode).InList(3,4,5,6,7,8)	SINGLE-SELECT J12 01 O Yes

02 **O** No

	J13.How many working burners/ potholes does %rostertitle% have?	NUMERIC: INTEGER	J13
V1	((long?)@rowcode).InList(2,3,4,5,6,7,8) self < 7 Too Many.Check		
	J14.How long have you been using %rostertitle% for?	NUMERIC: DECIMAL	J14
Ι	YEARS and MONTHS,Don't Know888		
	J15.In the last 12 months, during which of the following months did you use %rostertitle%?	MULTI-SELECT          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	J15
	J16.Is the %rostertitle% fixed in one place or moveable?	SINGLE-SELECT 01 O Fixed 02 O Moveable	J16
	J17.In the last 12 months, where did you normally cook with %rostertitle%?	SINGLE-SELECT 001 O In dwelling, NOT in sleeping area 002 O In dwelling, in a sleeping area 003 O In a separate dwelling 004 O In a veranda (roofed platform with at least two open sides) 005 O Outdoors 555 O Other, specify	J17
	J17. Specify Others	ТЕХТ	J17_S0
E	J17 == 555		
E	J17A.Do you use a grate with %rostertitle%? J3.ContainsAny(2,3) && J17.InList(1,2,3,555)	SINGLE-SELECT 01 O Yes 02 O No	J17A
E	J17B.Does %rostertitle% have a working fan attached to it? J3.ContainsAny(2,3) && J17.InList(1,2,3,555)	SINGLE-SELECT 01 O Yes 02 O No	J17B
E	J18.Do you use a chimney, hood, other exhaust system while using %rostertitle%?	SINGLE-SELECT 01 O Yes 02 O No	J18
	J19. Do you regularly clean a chimney, hood or	SINGLE-SELECT	J19

E	other exhaust system? J17.InList(1,2,3,555) && J18 == 1	01 O Yes 02 O No	
	J20.A. In the last 12 months, what are the fuels you used on %rostertitle%? self != 16 Please select one option.	SINGLE-SELECT         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_A
	J20. Specify Others	ТЕХТ	J20A SO
E	J20_A == 555		
V1	J20.B. In the last 12 months, what are the fuels you used on %rostertitle%?:Second Most Used I2.Length > 1 self != J20_A Error ! Please select different options.	SINGLE-SELECT         001       ChG/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 B
	J20. Specify Others	техт	J20B_SO
E	J20_B == 555		
	J21.In the last 12 months, how often was the %J20_A% available? Read aloud options J20_A != 16	<ul> <li>SINGLE-SELECT</li> <li>01 O Always available</li> <li>02 O Mostly available</li> <li>03 O Sometimes available</li> <li>04 O Rarely available</li> </ul>	J21_A
	J21.In the last 12 months, how often was the %J20_B% available?	single-select 01 <b>O Always available</b>	J21_B

	Read aloud options J20_B != 16 && I2.Length > 1	<ul> <li>02 O Mostly available</li> <li>03 O Sometimes available</li> <li>04 O Rarely available</li> </ul>
	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
V1	Minutes, per Meal self < 500 Value too large. Please check.	
	J23.In the last 7 days, how many days did you use %rostertitle%?	NUMERIC: INTEGER J23
	self < 8 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
V1	Minutes self < 361 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
V1	Minutes self < 361 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
V1	Minutes self < 361 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
V1	Minutes self < 1441 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
V1	Minutes self < 1441 Value too large. Please check.	

	J30.Do you also use %rostertitle% for space heating?	01 O Yes 02 O No
V1	J31.In the last 12 months, during which of the following months did you use %rostertitle% for heating? J30 == 1 (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)) Error !If response is used all year, don't select other options.	MULTI-SELECT       J31         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 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? NUMBER OF HOURS J30 = 1	NUMERIC: INTEGER J32
	self < 25 Please enter less than 25.	
	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
E	J33A.What are the reasons for this injury? J33.ContainsAny(1,2,3,4,5,6,7,8,10)	SINGLE-SELECT       J33A         001       O       Carelessness or human error         002       O       Problem with the stove or malfunction         003       O       Problem with fuel         555       O       Other, specify
	J33A. Specify Others	TEXT J33A_SO
E	J33A == 555	•
	J34.Is this %rostertitle% is your main cookstove?	SINGLE-SELECT J34 01 O Yes 02 O No
_	J35.Why do you not use %rostertitle% most of the time?	MULTI-SELECT J35 001 Clectricity/fuel for this stove unavailable
E	J34 == 2	

TEXT J35_SO
555 Other, specify
better with another stove
available 010 Certain type of meals taste
expensive or often not
009 I prefer another energy source but the electricity/fuel is too
008 Stove is difficult/inconvenient to use
time to prepare
007  Electricity/fuel takes a long
006 Stove takes a long time to cook
005 Cookstove flame is too weak
004 Cookstove does not have enough burners
possible with this stove
003 Certain type of cooking is not
002 Electricity/fuel for this stove too expensive

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 ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF TH E FUEL. 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	NUMERIC: INTEGER	J37_B
Ι	ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF TH E FUEL.		
Е	J34 == 1 && I2.Length > 1 && J20_B != 16		
V1	self != J37_A		
M1	The two amount cannot be same.		

# 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 001 O Yes 002 O No 888 O Don't Know	J38
J39.Record the rough shape of the cooking space E J38 = 1	single-select 01 O Roughly square 02 O Roughly rectangular	J39

	<ul> <li>03 O Roughly Circular</li> <li>04 O None of the above</li> </ul>	
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 I Feet E J39 = 2	NUMERIC: INTEGER	J41
J42. Record the type of roof covering the cooking space E J39.InList(1,2,3)	SINGLE-SELECT 01 O Flat 02 O Roughly Conical 03 O Gable (triangular cross- section) 04 O None of the above	J42
J43.Estimate the height of the highest point of the ceiling relative to your own height I Feet E J42.InList(1,2,3)	NUMERIC: INTEGER	J43
J44.How many doors and windows (opening to the outside) does the cooking space have? E J42.InList(1,2,3)	NUMERIC: INTEGER	J44

## K. SPACE AND WATER HEATING

K1. Do you heat water for washing (either for washing dishes and clothes or for bathing)?	SINGLE-SELECT 01 O Yes 02 O No	Kl
K2. What is the main source you use to heat water? E K1 == 1	SINGLE-SELECT 01 O Electric heater/boiler 02 O Electric kettle/coil 03 O Electric stove 04 O Gas heater 05 O Gas stove 06 O Solar thermal system 07 O Same solid fuel stove used for cooking 08 O Separate solid fuel stove 09 O Kerosene stove	K2
K3.What is the MAIN fuel you use in this stove? F I2.Contains(@optioncode) E K2.InList(8,9)	SINGLE-SELECT 001 O LPG/cooking gas 002 O Wood purchased 003 O Wood collected 004 O Solar 005 O Kerosene	КЗ

	<ul> <li>006 O Animal Waste/Dung</li> <li>007 O Crop Residue/Plants (with examples such as dried leaves, twigs, straw etc.)</li> <li>008 O Saw Dust</li> <li>009 O Coal/Charcoal</li> <li>010 O Briquette</li> <li>011 O Electric</li> <li>012 O Biogas</li> <li>555 O Other, specify</li> </ul>	
K3. Specify Others	ТЕХТ	K3_SO
E K3 == 555		
K4.Do you heat your house?	SINGLE-SELECT 01 O Yes 02 O No	К4
K5.What is the main source you use to heat your house?	<ul> <li>SINGLE-SELECT</li> <li>01 O Electric heater</li> <li>02 O Gas heater</li> <li>03 O Solar thermal system</li> <li>04 O Same solid fuel stove used for cooking</li> <li>05 O Separate solid fuel stove</li> <li>06 O Kerosene Heater/Spirit heater</li> </ul>	к5
K6.What is the MAIN fuel you use in this stove?	SINGLE-SELECT001OLPG/cooking gas002OWood purchased003OWood collected004OSolar005OKerosene006OAnimal Waste/Dung007OCrop Residue/Plants (with examples such as dried leaves, twigs, straw etc.)008OSaw Dust009OCoal/Charcoal011OBriquette012OBiogas555OOther, specify	Кб
K6. Specify Others	ТЕХТ	K6 SO
Е к6 == 555		<u>-</u>

## 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.	<ul> <li>SINGLE-SELECT</li> <li>01 O HH uses more fuelwood or crop residues than charcoal</li> <li>02 O HH uses more charcoal than fuelwood or crop residues</li> <li>03 O HH does not use any solid biomass (no charcoal, fuelwood or crop residues)</li> </ul>	L1
L2.Enumerator: Record Respondent name for this section	SINGLE-SELECT: LINKED	L2

## E L1.InList(1,2)

#### 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 SCOPE: IDENTIFYING	Random_L

#### 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 SCOPE: IDENTIFYING	Prefilled_L1

#### 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 SCOPE: IDENTIFYING	Prefilled_L2
	STATIC TEXT		
E	(Eco_Reg.InList(1,2))		
	%Prefilled_L1%		
	STATIC TEXT		
Е	Eco_Reg == 3		
	%Prefilled L2%		

	Enter the amount for cookstove displayed above.	NUMERIC: INTEGER	CF_Stove
V1	L1.InList(1,2) self == Prefilled_L1    self == Prefilled_L2 Error! Please enter the amount displayed above.		
F	L3.Would you be willing to purchase this cookstove at %CF_Stove%?	SINGLE-SELECT 01 O Yes 02 O No	L3
	L4.Would you be willing to pay %CF_Stove% for this stove, if you were given 6 months to make the payment? L1.InList(1,2) & L3 == 2	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	L4
E	L5.Would you be willing to pay %CF_Stove% for this solar device, if you were given 12 months to make the payment? L4.InList(2,888) && L3 == 2	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	L5
E	L6. Would you be willing to pay %CF_Stove% for this stove, if you were given 24 months to make the payment? L5.InList(2,888) && L3 == 2	SINGLE-SELECT 001 O Yes 002 O No 888 O Don't Know	L6
E	L7.Why would you not accept the offer?	SINGLE-SELECT 001 O Cannot afford the payment 002 O Do not need an improved cookstove 003 O Fuel for this stove is unreliable 004 O Do not have sufficient information about this stove 555 O Other, specify	L7
E	L7. Specify Others	TEXT	L7_SO
E	L8. What is the most important attribute for you in a cook stove? L6.InList(2,888)	SINGLE-SELECT         01       O         02       O         03       O         04       O         05       O         06       Case of use         07       O         08       Multiple pot option         09       Ability to control fire power         10       Portability         11       O         Additional functions (mobile charging, lighting)         12       O         Space heating (for high hills and mountains)	L8

## 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
Specify Others	TEXT N_LIST1_SO
E N_LIST1.Yes.Contains(16)	
N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPM	/ENT OWNERSHIP AND TOTAL

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

#### Specify Others

#### N. HOUSEHOLD ASSETS: TRANSPORTATION AND AGRICULTURAL EQUIPMENT OWNERSHIP AND TOTAL Roster: ROSTER-(N17-N45) generated by multi-select question N $_{\rm LIST2}$ R LIST2 (N17-N45). a. How many %rostertitle% in NUMERIC: DECIMAL N17 45 A working condition does your household own? \_\_\_\_\_ (N17-N45).b.How many hours does your NUMERIC: DECIMAL N17 45 household use %rostertitle% in a typical day? (Only for lights, fan, radio and TV) 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 01 O Yes 02 O No	P1_A
P2.Who was affected by the event?	SINGLE-SELECT 01 O Just this household 02 O Family members outside HH 03 O Several HHs in this village 04 O Most or all HHs in this village 05 O Several villages in this area	P2_A

#### 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 O Yes 02 O No
P2.Who was affected by the event?	SINGLE-SELECT       P2 B         01       O       Just this household         02       O       Family members outside HH         03       O       Several HHs in this village         04       O       Most or all HHs in this village         05       O       Several villages in this area

### Q. STREET LIGHTING

#### STATIC TEXT

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

	Q1.Respondent name	SINGLE-SELECT: LINKED	Ql
I	Q2.Does your neighborhood have any form of street lighting? "Neighborhood" means 0.5 KM from Household	single-select 01 O Yes 02 O No	Q2
E	Q3.How satisfied are you by the brightness of the street lighting service in your neighborhood? $Q^2 = 1$	SINGLE-SELECT 01 O Very unsatisfied 02 O Somewhat unsatisfied 03 O Somewhat satisfied 04 O Very satisfied	Q3
E	Q4.What do you think are the risks/problems with street lighting in your neighborhood? Q2 == 1	MULTI-SELECT 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
E	Q4. Specify, others Q4.Contains (555)	техт	Q4_SO
Ι	Q5.Do you have a light that you could turn on at night to provide light outside your home? Instruction	SINGLE-SELECT 01 O Yes 02 O No	Q5
V1	Q6.How many hours do you turn it on each night after it becomes dark? Q5 == 1 self <= 13 Error. Please enter less than or equal to 13.	NUMERIC: INTEGER	Q6

### **R.TIME USE**

E V1	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)         (self.Contains (1) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=1         5)    (self.Contains (2) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=15)         (self.Contains (2) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=1         5)    (self.Contains (3) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=1         5)    (self.Contains (3) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=1         64 x.A5>=15)     (self.Contains (3) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=1	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)	MULTI_TIME_USE
M1	Error ! Please select member group by taking reference with househol d roster.		

#### R.TIME USE Roster: TIME USE generated by multi-select question MULTI 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 01 O Yes 02 O No	R1_A
	R2.A. In a typical day, how many total minutes did %rostertitle% spend gathering, collecting or purchasing fuels including travel time?	NUMERIC: INTEGER	R2_A
-	minutes R1_A == 1		
	R3.A.How often does your household collect or purchase fuel?	SINGLE-SELECT 001 O Daily	R3_A
E	R1_A == 1	002OWeekly003OBi-Weekly004OMonthly555OOther, specify	
	R3.A Specify Others	ТЕХТ	R3_A_SO
E	R3_A == 555		<u>_</u>
	R4.A.How many times do the household members go to collect/purchase fuels %R3_A%?	NUMERIC: INTEGER	R4_A
	Number of times R1_A == 1		
	R9.A.In a typical day, does anyone from your household spend time preparing fuel/energy source (chopping, making pellets)?	SINGLE-SELECT 01 O Yes 02 O No	R9_A
	R10.A.In a typical day, how many total minutes did %rostertitle% spend preparing fuel/energy source (chopping, making pellets)?	NUMERIC: INTEGER	R10_A
	minutes R9_A == 1		
	R11.A.In a typical day, does anyone from your household spend time cooking (food, tea, boiling water)?	SINGLE-SELECT 01 O Yes 02 O No	R11_A
E	R9_A.InList(1,2)		
	R12.A.In a typical day, how many total minutes did %rostertitle% spend cooking (food, tea, boiling water)?	NUMERIC: INTEGER	R12_A
	minutes R11_A == 1		
	R13.A. In a typical day, does anyone from your household spend other time in cooking area(s)?	SINGLE-SELECT 01 O Yes 02 O No	R13 A
E	R11_A.InList(1,2)		
	R14.A.In a typical day, how many total minutes did %rostertitle% spend other time in cooking area(s)?	NUMERIC: INTEGER	R14 A
	Minutes R13_A == 1		

	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)?	SINGLE-SELECT 01 O Yes 02 O No	R15_A
E	R13_A.InList(1,2)		
	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)?	NUMERIC: INTEGER	R16_A
	Minutes R15_A = 1		
	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)?	SINGLE-SELECT 01 O Yes 02 O No	R17_A
E	R15_A.InList(1,2)		
	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)?	NUMERIC: INTEGER	R18_A
	Minutes R17_A == 1		
	R19.A.In a typical day, does anyone from your household spend time caring, attending, or playing with/for younger children?	single-select 01 O Yes 02 O No	R19_A
E	R17_A.InList(1,2)		
	R20.A.In a typical day, how many total minutes did %rostertitle% spend caring, attending, or playing with/for younger children?	NUMERIC: INTEGER	R20_A
	Minutes R19_A == 1		
	R21.A. In a typical day, does anyone from your household spend time studying or helping with school work?	SINGLE-SELECT 01 O Yes 02 O No	R21_A
Е	R19_A.InList(1,2)		
	R22.A.In a typical day, how many total minutes did %rostertitle% spend studying or helping with school work?	NUMERIC: INTEGER	R22 A
	Minutes R21_A == 1		
	R23.A.In a typical day, does anyone from your household spend time working for pay outside of the house (employed and self-employed)?	single-select 01 O Yes 02 O No	R23 A
E	R21_A.InList(1,2)		
	R24.A. In a typical day, how many total minutes did %rostertitle% spend working for pay outside of the house (employed and self- employed)?	NUMERIC: INTEGER	R24_A
	Minutes R23_A == 1		

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

### S. HEALTH IMPACTS

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

	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 S1_A 01 O Yes 02 O No
E	S2.A. Number of %rostertitle% with an illness with a cough at any time in the last 14 days?	NUMERIC: INTEGER S2_A
V1	S3.A. Of %rostertitle% who had an illness with a cough, how many went to see a doctor/clinic? S2_A > 0 self <= S2_A 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?	
V1	$S2_A > 0$ self <= $S2_A$ Please enter less than or equal to %S2_A%.	
E	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? 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?	NUMERIC: INTEGER S5_A_CHEST
E	S5_A.Contains(1)	
	S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in nose?	NUMERIC: INTEGER S5 A NOSE
E	S5_A.Contains(2)	
	S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in both nose and chest?	NUMERIC: INTEGER S5_A_BOTH
E	S5_A.Contains(3)	
	S5.A.Please enter the number of people who are suffering form rapid breathe or difficult breathing and problem in other?	NUMERIC: INTEGER S5_A_OTHER
E	S5_A.Contains(4)	
E	S6.A. Has anyone from your household had an eye irritation or eye problems in the last 14 days? S4_A > 0    S1_A == 2	SINGLE-SELECT S6_A 01 O Yes 02 O No
	S7.A. Number of %rostertitle% with eye irritation or eye problems in the last 14 days?	NUMERIC: INTEGER S7_A
E	S6_A == 1	
F	S8.A. Has anyone from your household had any poisoning from liquid fuel?	SINGLE-SELECT S8_A 01 O Yes 02 O No
L	S9.A.In the last 12 months, how many %rostertitle% have experienced poisoning from liquid fuel?	NUMERIC: INTEGER S9_A
E	S8_A == 1	
F	S10.A.Has anyone from your household had any burns related to cooking or heating or fuel?	SINGLE-SELECT S10 A 01 O Yes 02 O No
L	S8_A.InList(1,2)	
	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?	NUMERIC: INTEGER S12_A
E	S11_A > 0	
	S13.A.Has anyone from your household had any back or neck problems from carrying fuel for cooking/heating?	SINGLE-SELECT S13 A 01 O Yes 02 O No
	S14.A.In the last 12 months, how many %rostertitle% have experienced back or neck problems from carrying fuel for cooking/heating?	NUMERIC: INTEGER S14 A
E	S13_A == 1	
	S15.A.Has anyone from your household had any electrical injuries (e.g. shocks) that prevent attendance in school/work?	SINGLE-SELECT S15_A 01 O Yes 02 O NO
E	S13_A.InList(1,2)	
	S16.A.In the last 12 months, how many %rostertitle% have experienced electrical injuries (e.g. shocks) that prevent attendance in school/work?	NUMERIC: INTEGER S16_A
E	S15_A = 1	
F	S17.A.Has anyone from your household had any other minor electrical injuries?	SINGLE-SELECT S17_A 01 O Yes 02 O No
E	S15_A.InList(1,2)	
	S18.A.In the last 12 months, how many %rostertitle% have experienced other minor electrical injuries?	NUMERIC: INTEGER S18 A
E	S17_A == 1	

### T. ATTITUDES

<ul> <li>T2.How has the price of electricity changed over the last 12 months?</li> <li>I Read options aloud (Do not read option Don't know aloud, type 888 if r elevant.)</li> <li>E C2 == 1</li> </ul>	SINGLE-SELECT 001 O It has gotten much higher 002 O Stayed about the same 003 O It has gotten cheaper 888 O Don't know	T2
<ul> <li>T3.How has the frequency of black out or brown out changed over the last 12 months?</li> <li>I Read options aloud (Do not read option Don't know aloud, type 888 if r elevant.)</li> <li>E C2 == 1</li> </ul>	SINGLE-SELECT 001 O It has gotten worse 002 O Stayed the same 003 O Better 888 O Don't know	Τ3
T4.What are the main reasons you experience	MULTI-SELECT	Т4

E	power shortages? c2 == 1	<ul> <li>Demand for electricity exceeds supply</li> <li>Damage to critical infrastructure due to conflict / fighting</li> <li>Lack of investment in the sector (and/or new power generation assets)</li> <li>Lack of general maintenance of critical infrastructure by the central government</li> <li>Lack of general maintenance of critical infrastructure by the regional / local government</li> <li>Electricity theft</li> <li>Other (please specify)</li> </ul>	
	Specify Others	TEXT	54_SO
E	T4.Contains(7)		
	T5.How has the duration of electricity supply at night changed over the last 12 months? Read options aloud (Do not read option Don't know aloud, type 888 if r elevant.) C2 == 1	SINGLE-SELECT 001 O It has gotten worse 002 O Stayed the same 003 O Better 888 O Don't know	Т5
	T6.Since you first received your electricity connection, how has the duration of electricity supply during the day changed? Read options aloud (Do not read option Don't know aloud, type 888 if r elevant.) C2 = 1	SINGLE-SELECT 001 O It has gotten worse 002 O Stayed the same 003 O Better 888 O Don't know	Тб
	T7.If you could use your %C175% to power an appliance that you do not currently own, what would it be? Instruction C175 != 111 && C175 != 4	MULTI-SELECT         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	т7
	T7. Specify Others	TEXT	.7_SO
E	T7.Contains (555)		
E	T8.Why do you not yet own one of these appliances? !T7.Contains(111)	MULTI-SELECT 001 Too expensive 002 No products available 003 Products require too much energy, cannot power them with my system 555 Other, specify	Τ8
	Specify Others	TEXT	78_SO

E	T8.Contains(555)	
	T9.How satisfied are you with the service from %C175%?	SINGLE-SELECT       TS         01       O       Very satisfied         02       O       Somewhat satisfied         03       O       Neutral         04       O       Unsatisfied         05       O       Very unsatisfied

# T. ATTITUDES STATEMENT READ THE FOLLOWING STATEMENT AND ASK RESPONDENT WHETHER HE OR SHE

STATIC TEXT	
Electricity	
T10.It is important for my household to conserve electricity.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T11.I am concerned with the reliability of public electricity supply (i.e., frequent power shortages)	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T12.I would be willing to pay more for public electricity if supply was more reliable	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T13.Higher public electricity prices would lead to a better service.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T14.The current price for public electricity is fair.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T15.The monthly electric bill is or would be a financial burden for my family.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T16.The electricity makes it easy to have information and the news.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion
T17.Watching TV provides my household with great entertainment.	single-select 01 <b>O Agrees</b>

01 O Agrees  ${\scriptstyle 02}$  O Disagrees 03 O No Opinion T10

T11

т12

T13

T14

T15

T16

T17

T18.News and information from radio and television provide good information relevant for conducting business and agricultural activities.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	T18
T19.News and information from radio and television provide good knowledge on family health issues.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	T19
T20.Electricity can benefit communities through economic and enterprise development.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	Т20
static text Energy Subsidies		
T21.The current public electricity prices reflect the cost of production.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	T21
T22.The amount I pay to {UTILITY} for electricity covers the real cost of providing me with electricity.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	T22
T23.If the government used some of the money saved on electricity subsidies to compensate poor households, I would support higher prices.	SINGLE-SELECT 01 O Agrees 02 O Disagrees 03 O No Opinion	Т23
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 01 O Agrees 02 O Disagrees 03 O No Opinion	T24
T25.Why is energy conservation important to your household? (Up to 3 options) Upto 3 responses.	<ul> <li>MULTI-SELECT</li> <li>001 To save money for my family</li> <li>002 To help the planet</li> <li>003 To burn fewer fossil fuels so that our air is cleaner</li> <li>004 Because my neighbors are working hard to conserve energy</li> <li>005 To become a good example for my family members and others</li> <li>006 Using less power has benefits for our society</li> <li>007 If we conserve power we can stop power-outs in rural areas</li> <li>555 Other (specify)</li> </ul>	Т25
Specify Others	ТЕХТ	T25_S0
T25.Contains(555)		
T26.How should public electricity tariffs be managed?	SINGLE-SELECT	Т26

Е

I

I	Read options aloud	<ul> <li>O Tariffs should remain unchanged</li> <li>O Tariffs should be increased</li> <li>O Tariffs should be decreased</li> <li>O Don't know</li> </ul>
	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 O Yes 002 O No 888 O Don't know
	T28.How would you cope if electricity prices increase?	SINGLE-SELECT       T28         001       O       Consume less electricity         002       O       Cut down on other costs in your budget         003       O       Do nothing, it will come out of savings or other monies         888       O       Other, (specify)
	T28. Specify Othes	TEXT T28 SO
E	T28 == 888	
	T29.If public electricity tariffs are to increase, who should pay higher prices?	SINGLE-SELECT       T29         01       O       Wealthy households         02       O       Middle income households         03       O       Poor + near poor households         04       O       Government agencies         05       O       Industry         06       O       Urban households         07       O       Rural households         08       O       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       O       Healthcare schemes         002       O       Education         003       O       Jobs         004       O       Pension plans         005       O       Transport         006       O       Urban/Rural development         007       O       Electricity         888       O       Other, please specify
	T30. Specify Others	TEXT T30 SO
E	T30 == 888	
	T31.What do you think is the top concern for the country's energy sector? Single response.	SINGLE-SELECT       T31         01       O       Corruption in the sector         02       O       Investing in new infrastructure         03       O       Energy security         04       O       Energy theft (illegal connections)         05       O       Tariffs

### U. WOMEN'S EMPOWERMENT

\_\_\_\_\_

#### STATIC TEXT

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	i have to go with your	<sup>•</sup> husband: Mark who decides
about each of the activities below.			

U1.Visiting parents/relatives/friends within or outside the village	SINGLE-SELECT     U1       01     O       02     O       03     O       04     O       04     O
U1. Specify Others	TEXT U1_SO
E Ul == 4	
U2. Going to markets/banks/commercial centers/places of work.	SINGLE-SELECT     U2       01     O       Can do herself       02     O       Can do with husband       03     O       Can do with others       04     O       Other Specify
U2. Specify Others	TEXT U2_SO
E U2 == 4	
U3.Going outside the village	SINGLE-SELECT     U3       01     O     Can do herself       02     O     Can do with husband       03     O     Can do with others       04     O     Other Specify
U3. Specify Others	TEXT U3_SO
E U3 == 4	

#### STATIC TEXT

ACCESS TO INFORMATION, ORGANIZATION MEMBERSHIP, VILLAGE ELECTRIFICATION COMMITTEE, CAPACITY BUILDING AND ACCESS TO FINANCE

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
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       O       Limited time         02       O       Lack of support from family or community         03       O       Limited confidence         04       O       Limited education         05       O       Other specify
U5. Specify Others	TEXT U5_SO
<b>E</b> U5 == 5	
U6.Are you a member of the village electrification committee?	single-select U6 01 O Yes 02 O 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       O       No account         02       O       Own account         03       O       Joint account (with spouse)         04       O       Joint account (with group)

### M. CONSUMPTION / EXPENDITURE

STATIC TEXT

5

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, cocoyar	
	02 / M2. Pulses & nuts (e.g.: beans, groundnuts, palm nuts, soy bea	
	<sup>03</sup> ☐ / ☐ M3. Milk & milk products (e.g.: powder, tinned, fresh)	
	04   /	
	05 / M5. Vegetables (e.g.: okra, toma 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, pepp salt, spices, butter, jam, bread, groundnut paste, processed foods, etc.)	ber,
	11 🔲 / 🔲 M9. Meals/food bought outside	2
	12 / M10. Beverages (e.g.: malt drinl minerals, coffee/Lipton/Milo	<s,< td=""></s,<>

#### M. CONSUMPTION / EXPENDITURE Roster: ROSTER COMSUMPTION

	generated by multi-select question M ITEMS	ROS	STER_M
	(M1-M11).A.Value of Consumption (local currency) during last 7 days: Purchased.	NUMERIC: INTEGER	ΜA
Ι	888=Don't know		
	(M1_M11).B.Value of Consumption (local currency) during last 7 days Produced/Acquired.	NUMERIC: INTEGER	М В
Ι	888=Don't know		
	(M1-M11).C. Value of Consumption (local currency) during last 7 days Received as a gift/ Donation.		M_C
Ι	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	М13
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		М15
M16.Internet, land phone, dish, cable, and other household communication	NUMERIC: INTEGER	М16
M17.House Rent		М17
M18.Transportation costs (fuel for own vehicles, cost of public transportation, buses, taxis)		M18
M19.Other recurring monthly expenditure	NUMERIC: INTEGER	M19

### M. CONSUMPTION / EXPENDITURE / EXPENDITURE-VALUE OF EXPENDITURE (LOCAL CURRENCY) DURING LAST 7 DAYS -888=DON'T KNOW 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.	NUMERIC: INTEGER	М20
I NPR		
M21.Clothing, shoes, and accessories	NUMERIC: INTEGER	M21
I NPR		
M22.Celebrations (e.g. funerals and expenses weddings, festivals, naming ceremony, engagement)	5, NUMERIC: INTEGER	M22
I NPR		
M23.Gifts and donations (e.g.: donation to church made by the household, tithes)	NUMERIC: INTEGER	M23
I Only include gifts and donations not already included in M.22,	NPR	
M24.Hospital/Doctor visits and Diagnostic tests (e.g.: consultations at private hospital,	NUMERIC: INTEGER	M24
public hospital, traditional healer)		
I NPR		
M25.Furniture (e.g.: mattresses, room furniture, furnishing items, floor mats, carpe	NUMERIC: INTEGER	M25
I NPR		
M26.Purchase, Repair, maintenance, and building (e.g.: cement, roofing, paint, carpentry, labor for repairs, sewerage removal)	NUMERIC: INTEGER	M26
I NPR		
M27.Utensils & kitchen equipment (e.g.: cups plates, cutleries, cooking pots, buckets)	, NUMERIC: INTEGER	M27
I NPR		
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		M28
I NPR		
M29.Appliances & tools (e.g.: electric iron, electric fans, refrigerators, lanterns, brooms)	NUMERIC: INTEGER	M29
I NPR		
M30.Vehicles & motorcycle & bicycle (purchas or repair of own car/moto/ car battery)	Se NUMERIC: INTEGER	м30
I NPR		

	M31.Remittance sent to family members and relatives	NUMERIC: INTEGER M31	
Ι	NPR		
	M32.Losses due to theft, robbery, accidents, natural disasters, etc.	NUMERIC: INTEGER M32	
Ι	NPR		
	M33.Other major expenses not yet covered (specify)	NUMERIC: INTEGER M33	
Ι	NPR		

I

### 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 Ol 01 O Yes 00 O No
O2.What unit is the land measured in? E O1 == 1	SINGLE-SELECT       02         001       O       Ropani         002       O       Bigha         003       O       Ana         004       O       Kattha         005       O       Dhur         006       O       Hectares         555       O       Other, specify
O2. Specify Others	TEXT 02_SO
E 02 == 555	
O3. What is the total size of the land?	NUMERIC: INTEGER 03
I Area E 01 == 1	
O4. If you were to sell, what is the total value?	NUMERIC: INTEGER 04
I NPR E 01 == 1	

### CONTROL SHEET - INTERVIEW STATUS

O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

#### STATIC TEXT

Thank You very much for your time.

## CONTROL SHEET - INTERVIEW STATUS VISIT 1 : STATUS

Gps Location	GPS	LOCATION
	<u>_</u> N	
	<del>.</del>	
	A	
End time of Interview	DATE: CURRENT TIME	TIME END VISIT1
Disposition Code	<ul> <li>SINGLE-SELECT</li> <li>01 O No Household Member at home or no competent respondent at home</li> <li>02 O Entire household absent for extended period</li> <li>03 O Dwelling vacant or address not a dwelling</li> <li>04 O Out of Scope (the household is not within the sample)</li> <li>05 O Completed (all modules are complete)</li> <li>06 O Postponed/Rescheduled (interview was postponed and a new time scheduled)</li> <li>07 O Partial Complete/Will Return (interview was stopped but will continue later)</li> <li>08 O Partial Complete/Interview Finished (interview was stopped and will not continue)</li> <li>09 O Final Refusal (interview was refused/no interview was refused, FS will follow-up)</li> <li>11 O Other Non-Interview (specify)</li> </ul>	DISP1
Other Non-Interview (specify)	ТЕХТ	OTHER1_SPECIFY
DISP1==11		
[ENUMERATOR : Record date on when respondent can be contacted	ТЕХТ	RESCHD_2
DISP1==1    DISP1==6    DISP1==7    DISP1==10    DISP1== 11		
[ENUMERATOR : Record time on when respondent can be contacted	ТЕХТ	RESCHD_2_T
DISP1==1    DISP1==6    DISP1==7    DISP1==10    DISP1== 11		

Е

Е

Е

E DISP1==1 || DISP1==6 || DISP1==7 || DISP1==10 || DISP1== 11

### CONTROL SHEET - INTERVIEW STATUS VISIT 2 : STATUS

E DISP1==1 || DISP1==6 || DISP1==7 || DISP1==10 || DISP1==11

Date of Visit 2 with respondent	DATE	DATE_VISIT2
Disposition Code	<ul> <li>SINGLE-SELECT</li> <li>01 No Household Member at home or no competent respondent at home</li> <li>02 Entire household absent for extended period</li> <li>03 Dwelling vacant or address not a dwelling</li> <li>04 Out of Scope (the household is not within the sample)</li> <li>05 Completed (all modules are complete)</li> <li>06 Postponed/Rescheduled (interview was postponed and a new time scheduled)</li> <li>07 Partial Complete/Will Return (interview was stopped but will continue later)</li> <li>08 Partial Complete/Interview Finished (interview was stopped but will continue)</li> <li>09 Final Refusal (interview was refused/no interview was refused, FS will follow-up)</li> <li>11 O Other Non-Interview (specify)</li> </ul>	DISP2
Other Non-Interview (specify)	ТЕХТ	OTHER2_SPECIFY
DISP2==11		
[ENUMERATOR : Record date on when respondent can be contacted DISP2==1    DISP2==6    DISP2==7    DISP2==10    DISP2==	техт	RESCHD_3
II [ENUMERATOR : Record time on when respondent can be contacted	техт	RESCHD_3_T
DISP2==1    DISP2==6    DISP2==7    DISP2==10    DISP2== 11 [ENUMERATOR : Record contact number of	ТЕХТ	RESCHD_3_D
respondent         DISP2==1    DISP2==6    DISP2==7    DISP2==10    DISP2==         11		

\_\_\_\_\_

Date of Visit 3 with respondent	DATE DATE VISITS
Disposition Code	SINGLE-SELECT       DISP3         01       O       No Household Member at home or no competent respondent at home         02       O       Entire household absent for extended period         03       O       Dwelling vacant or address not a dwelling         04       O       Out of Scope (the household is not within the sample)         05       O       Completed (all modules are complete)         06       O       Postponed/Rescheduled (interview was postponed and
	<ul> <li>a new time scheduled)</li> <li>Partial Complete/Will Return (interview was stopped but will continue later)</li> <li>Partial Complete/Interview Finished (interview was stopped and will not continue)</li> <li>Final Refusal (interview was refused/no interview was refused/no interview completed):</li> <li>Temporary Refusal (interview was refused, FS will follow-up)</li> <li>Other Non-Interview (specify)</li> </ul>
Other Non-Interview Specify	TEXT OTHER3 SPECIFY
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) )</pre>

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) ) ||</pre>

(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:Sol ukhumbu, 12:Okhaldhunga, 13:Khotang, 14:Udayapur, 15:Saptari, 16:Siraha, 17:Dhanusha, 18:Mahottari, 19:Sarlahi, 20:Sindhuli, 21:Ram echhap, 22:Dolakha, 23:Sindhupalchok, 24:Kavrepalanchok, 25:Lalitpur, 26:Bhaktapur, 27:Kathmandu, 28:Nuwakot, 29:Rasuwa, 30:Dhadin g, 31:Makwanpur, 32:Rautahat, 33:Bara, 34:Parsa, 35:Chitwan, 36:Gorkha, 37:Lamjung, 38:Tanahun, 39:Syangja, 40:Kaski, 41:Manang, 4 2:Mustang, 43:Myagdi, 44:Parbat, 45:Baglung, 46:Gulmi, 47:Palpa, 48:Nawalparasi, 49:Rupandehi, 50:Kapilbastu, 51:Arghakhachi, 52:Pyu than, 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 ce ment, 8:Blocks, unplastered, 9:Bricks and Cement, 10:Mud bricks (traditional), 11:Steel, 12:Cargo container, 13:Parquet or polished wood, 1 4: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 bu ffalo, 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 mo bile 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)	S
Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur?	MULTI-SELECT s4_rel_leaders_other SCOPE: PREFILLED 01 Community animal health workers
<pre>I This refers to family relations E s3_time_other &gt; 0 V1 s4_rel_leaders_which.Contains(98) M1 Can not be itself V2 (s3_time_other_breeding_advice &lt;= (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</pre>	<ul> <li>or is community duminal field in volters</li> <li>or is community duminal field in volt</li></ul>
Additional information:	Link to full set in appendix

"I" - Question instruction

"E" - Enabling condition

"V1" – Validation condition Nº1

"M1" – Message for validation N $^{\circ}$ 1

"F" - Filter in Categorical questions

Breadcrumbs

Roster Title

Type or roster

CHAPTER 3 IDENTIFICATION / Roster: LEADER RELATION DETAILS generated by fixed list:

- 01 Ward Livestock Officer
- 02 Village Livestock Officer

99 Other (specify)

List items