## Copy of <br> 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.
P. HOUSEHOLD ECONOMIC SHOCKS

Sub-sections: 2, No rosters, Questions: 4, Static texts: 1.
Q. STREET LIGHTING

No sub-sections, No rosters, Questions: 7, Static texts: 1.
R.TIME USE

No sub-sections, Rosters: 1, Questions: 26.
S. HEALTH IMPACTS

No sub-sections, Rosters: 1, Questions: 23.

## T. ATTITUDES

Sub-sections: 1, No rosters, Questions: 36, Static texts: 2.
U. WOMEN'S EMPOWERMENT

No sub-sections, No rosters, Questions: 13, Static texts: 3.
M. CONSUMPTION / EXPENDITURE

Sub-sections: 3, Rosters: 1, Questions: 26, Static texts: 1.
O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

Sub-sections: 1, No rosters, Questions: 5, Static texts: 1.
CONTROL SHEET - INTERVIEW STATUS
Sub-sections: 3, No rosters, Questions: 17, Static texts: 1.

APPENDIX A — VALIDATION CONDITIONS AND MESSAGES

APPENDIX B — OPTIONS

LEGEND

SURVEY IDENTIFICATION INFORMATION QUESTIONNAIRE DESCRIPTION

## Basic information

Title Copy of Field_MTF_Energy_Survey_HH_07252017

## HOUSEHOLD IDENTIFICATION



|  |  |  |
| :---: | :---: | :---: |
| VDC/Municipality | ```SINGLE-SELECT 01 O VDC 02 Municipality``` | VDC_MUN |
| VDC/Municipality Name | TEXT $\qquad$ | VDC MUN NAME |
| 3.District | SINGLE-SELECT: CASCADING <br> 01 O Taplejung Panchthar Ilam Jhapa Morang Sunsari Dhankuta Tehrathum Sankhuwasabha Bhojpur Solukhumbu Okhaldhunga Khotang Udayapur Saptari <br> 16 Siraha | District |
| 4. EA | NUMERIC: INTEGER |  |
| 5. LOCALITY | single-Select <br> 01 ○ Urban <br> 02 ○ Rural | LOCALITY |
| 6. Household ID | NUMERIC: INTEGER | HH_ID |

## INTERVIEW DETAILS

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 <br> 01 O Yes <br> 02 O No | CONSENT |
| :---: | :---: | :---: | :---: |
|  | 7. Name of Household Head | text | HH_HEAD_NAME |
| E CONSENT $=1$ |  |  |  |
| 8. Language of interview <br> E CONSENT $=1$ |  | SINGLE-SELECT <br> LANGUAGE English <br> 02 Nepali |  |
|  | 11. Enumerator ID | NUMERIC: INTEGER | ENUM_ID |
| E CONSENT $=1$ |  |  |  |
| Supervisor ID |  | NUMERIC: INTEGER <br> SCOPE: SUPERVISOR |  |
| E Consent $=1$ |  |  |  |
|  | Date of Interview DD/MM/YY | DATE | DATE_INTERVIEW |
| E CONSENT $=1$ |  |  |  |
|  | Start Time | DATE: CURRENT TIME | START_TIME |
| E CONSENT $=1$ |  |  |  |
| Static text |  |  |  |
| E CONSENT $=1$ |  |  |  |
| IN ORDER TO MAKE A COMPREHENSIVE LIST OF INDIVIDUALS CONNECTED TO THE HOUSEHOLD, USE THE FOLLOWING PROBE QUESTIONS: First, give me the names of all the members of your immediate family who normally live and eat their meals together here for the last 6 months. WRITE DOWN NAMES, SEX, AND RELATIONSHIP TO HH HEAD (Q2 - Q4). LIST HOUSEHOLD HEAD ON LINE 1. Then, give me the names of any other persons related to you or other household members who normally live and eat their meals together here. FILL IN Q2-Q4. Are there any other persons not here now who normally live and eat their meals here? For example, household members studying elsewhere or traveling. FILL IN Q2 - Q4. Then, give me the names of any other persons not related to you or other household members, but who normally live and eat their meals together here, such as servants, lodgers, or other who are not relatives. FILL IN Q2 Q4. DO NOT LIST HOUSEHELP WHO HAVE A HOUSEHOLD ELSEWHERE, AND GUESTS WHO ARE VISITING TEMPORARILY AND HAVE A HOUSEHOLD ELSEWHERE. IF MORE THAN 20 INDIVIDUALS, USE SECOND QUESTIONNAIRE. |  |  |  |

## A. HOUSEHOLD ROSTER

Please tell us the number of household member in your family.

I Make a complete list of all individuals who normally live and eat their meals together in this household, starting with the head of household.
A. HOUSEHOLD ROSTER

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


1 O Head
2 O Wife/Spouse
3 O Child/adopted child
4 O Grandchild
05 O Niece/Nephew
06 O Father/Mother
${ }^{7}$ O Sister/Brother
8 O Son/Daughter-in-law
9 O Brother/Sister-in-law
0 O Father/Mother-in-law
11 O Grandfather/mother
12 O Other relative
3 O Servant/servant's relative
14 O Other non-relative
$01 \bigcirc$ Yes
02 ○ No

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

## SINGLE-SELECT

03 O Secondary
04 O Higher Secondary
05 O Vocational/ Technical School
06 O Graduate
07 O Post-Grad

A10. ENUMERATOR: Is \%A2\% 12 years or older?
E A6 == 1

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

A11. What is \%A2\%'s marital status?

E A10 == 1
V1 A4 ==1 \&\& HH ROSTER.Any ( $\mathrm{x}=>\mathrm{x}$. A4 $==2$ ) ? self $==1$ : true
M1 Marital status of head of household with spouse must be married.
V2 A4==2 \&\& self == 1 || A4!=2
M2 Spouse to to the head of household must be married

SINGLE-SELECT
$01 \bigcirc$ Married
02 Cohabitating
$03 \bigcirc$ Never Married
$04 \bigcirc$ Divorced
05 〇 Separated
$06 \bigcirc$ Widowed

A12. How frequently does \%A2\% cook food for the household?

E A10 == 1

SINGLE-SELECT
$01 \bigcirc$ Everyday
02 A few times in a week
03 Once a week
$04 \bigcirc$ A few times in a month
05 Once a month
06 ○ Never

SINGLE-SELECT
A13

E A10 == 1

A14. What was \%A2\%'s main occupation for the last 12 months?

E A13 == 1
$01 \bigcirc$ Yes
02 ○ No

SINGLE-SELECT
001 Wage/Salaried Employee, NonFarm
002 ○ Wage/Salaried Employee, Farm
003 Self-Employed Non-FarmBusiness enterprise
004 ○ Self-Employed Non-FarmIndependent contractor, technician, professional, etc
005 〇 Self-Employed Agriculture/Livestock
006 Assistance in family enterprise
007 O Casual/Day Laborer
008 O Intern/free labor/voluntary work
009 ○ Student
010 Retired/pensioner
011 O Too old to work
012 O Disabled
013 Job Seeker
014 O Unemployed
015 House wife/husband
555 O Other

| A14. Specify Others | TEXT | A14_SO |
| :---: | :---: | :---: |
| E A14 $=$ = 555 | -.. | ....- |
| A16. Out of the last 12 months, how many months were you engaged in this activity? | NUMERIC: INTEGER | A16 |
| E A14. InList (1,2,3,4,5,6,7,8,555) |  |  |
| self < 13 |  |  |
| 1 Enter less than or equal to 12. |  |  |

A17. How many days per month does \%A2\% work in this activity?

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

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

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

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

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


## SINGLE-SELECT

$01 \bigcirc$ Yes
02 ○ No

## NUMERIC: INTEGER

A19

## B.HOUSEHOLD CHARACTERISTICS



| I Number of households <br> E B5．InList（2，4，5，555） |  |  |
| :---: | :---: | :---: |
| B7．Do you own this dwelling？ | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \bigcirc \text { Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | B7 |
| B8．Do you use it for free or rent it？ $\mathrm{E} \text { B7 }=2$ | single－Select <br> $01 \bigcirc$ Free <br> 02 ○ Rented | B8 |
| B9．How many rooms（excluding the kitchen， toilet，and bathroom）does the household occupy？ <br> I Record number of rooms <br> E B8＝＝ 2 | NUMERIC：INTEGER | B9 |
| B10．The walls of the dwelling are mainly made of what material？ <br> Check with observation | SINGLE－SELECT | B10 |
| B10．Others Specify $\mathrm{E} \text { B10 }=555$ | text |  |
| B11．The roof of the dwelling is mainly made of what material？ <br> I Check with observation | SINGLE－SELECT <br> $001 \bigcirc$ Wood and mud <br> 002 〇 Wood and thatch <br> 003 ○ Stone <br> 004 ○ Brick／Roof tiles <br> 005 O Corrugated iron sheet <br> 006 〇 Asbestos <br> 007 〇 Reed／bamboo <br> 008 ○ Plastic／canvas <br> 009 O Concrete <br> 555 〇 Other，specify | B11 |
| B11．Others Specify $\text { E B11 == } 555$ | TEXT |  |
| B12．The floor of the dwelling is mainly made of what material？ | SINGLE－SELECT | B12 |

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


| B14. What is your household's main source of | SINGLE-SELECT | B14 |
| :--- | :--- | :--- |

drinking water?

001 O Pipe borne water treated
002 O Pipe borne water untreated
${ }_{0} 03$ O Bore hole/ hand pump
005 O Well/spring protected
006 O Well/spring unprotected
007 O River/spring
008 O Lake/reservoir
009 O Rain water
010 O Tanker/truck/vendor
011 O Bottle/Jar water
555 O Other, specify
text
B14_SO

| B14. Specify Others | text | B14_S0 |
| :---: | :---: | :---: |
| B14 $=555$ |  |  |


| B15. Do you treat water for drinking purpose | SINGLE-SELECT | B15 |
| :--- | :--- | :--- | (chemical treatment)?


|  | 888 O Don't know |  |
| :---: | :---: | :---: |
| B16. Does anyone in the household have an account at a financial institution? | SINGLE-SELECT <br> ${ }^{01}$ O Yes <br> 02 O No | B16 |
| B17. At which institution is this account or savings? $\mathrm{B} 16=1$ | MULTI-SELECT <br> $001 \square$ Commercial bank (including Development Banks and finance companies ) | ${ }^{17}$ |

001 O Yes
002 O No
888 O Don't know

SINGLE-SELECT
01 O Yes
02 O No


|  | $004 \quad \square$ Receive NGO/State support $005 \square$ Pay for Electricity $006 \square$ Pay for Water $007 \square$ Internet top-up/credit $008 \square$ Commercial purchases $009 \square$ Insurance $010 \square$ Loan payments $011 \square$ Savings $012 \square$ Get small loans from mobile $55 \square$ provider 50 Other, specify |  |
| :---: | :---: | :---: |
| B24. Specify Others | text | B24_SO |
| E B24.Contains (555) |  |  |

## C. SUPPLY AND DEMAND OF ELECTRICITY

## STATIC TEXT

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

| Enumerator: Now, we would need to talk to the most knowledgeable member on household electricity. Who would that person be? | SINGLE-SELECT: LINKED | C_WHO |
| :---: | :---: | :---: |
| HH_ROSTER.Any(x=>x.A5>=2) |  |  |
| Is \%C_WHO\% available now? | SINGLE-SELECT <br> 01 O Yes <br> 02 No | C_AVAILABLE |
| Enumerator: Record Date and Time for next meeting if the respondent is not currently available. <br> C_AVAILABLE $==2$ | text $\qquad$ | 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 | single-SELECT <br> grid? | 01 Y Yes <br> 02 O No |
| :--- | :--- | :--- |
| C3.How far is your house from the nearest <br> national grid line? | nUMERIC: INTEGER | C3 |

I Meters,Do not know... 888
E C2 == 2
V1 self <= 150000 || self == 888
M1 Entered number is too far. Check again.

C4. What is the MAIN reason why your household is not connected to the grid?

I Record the MAIN reason.
E $C 2=2$

## SINGLE-SELECT

001 ○ Grid is too far from household/not available
002 〇 Cost of initial connection is too expensive

|  | $003 \bigcirc$ Monthly fee is too expensive$004 \bigcirc$ Satisfied with current energysolution005 Renting, Landlord decision$006 \bigcirc$ Service Unreliable$007 \bigcirc$Administrative procedure is <br> too complicated$008 \bigcirc$Submitted application and <br> waiting for connection009 OCompany refused to connect <br> the household555 Other, specify |
| :---: | :---: |
| C4. Specify Others | TEXT C4_SO |
| E $\mathrm{C} 4=555$ | -............................................................................... |
| C5. Do you expect to get grid connection? E C2 == 2 | SINGLE-SELECT <br> 001 Yes <br> 999 Don't expect to get grid connection <br> 888 Don't know |
| C6.When do you expect to get grid connection? E C5 $=1$ | Upto 6 months <br> 002 6 months to 1 year <br> 003 1 year to 2 years More than 2 years Don't know |
| C7.Who is the service provider of the grid connection? | SINGLE-SELECT <br> 01 O Nepal Electricity Authority (NEA) <br> 02 Other Private Electricity Providers |
| C8.How many years have you had this grid connection? ```I Record in years, if less than 1 year record 1 . .Dont know=888 E C2 == 1 V1 C8 < 101 \|| self \(==888\) M1 Too much. Please check.``` | $\qquad$ |
| C9. How much did your household pay for the grid connection fee? | NUMERIC: INTEGER C9 |
| ```I Don't know.``` $\qquad$ <br> ```888 Household was already connected........ 111 ,,Refer to connection fee ONLY. \\ E C2 == 1None``` |  |
| C9.A. How much did your household pay for any additional connection costs (external wiring, poles etc.)? <br> I Do not include the connection fee from C. 9 here, NPR Don't know......... .............. 888 $\qquad$ |  |
| C10. How much did your household pay for the internal wiring fee? - Local currency <br> I Don't know........................888, Do not include the connection fee from $\%$ C9\% here | NUMERIC: INTEGER |


$\qquad$

C20. How do you make your electricity bill payment?

E 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 ○ Other, specify
TEXT C20_SO

E C20 == 555

C21.Where do you make payments?
E C13.InList $(1,2,3,4,5,6,555) \& \& C 2==1$
SINGLE-SELECT
001 Local store

002 O Utility office
003 ○ Bank
004 O Post office
555 ○ Other, specify
text
C21_So
E C21 == 555

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

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

SINGLE-SELECT
$01 \bigcirc$ Respondent has energy bill and shows it
02 Respondent has energy bill but refuses to show it or could not locate it
$03 \bigcirc$ Respondent does not have an energy bill

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

I Don't Know.
E $\mathrm{C} 22=1$
V1 self < 100000 || self $=888$
M1 Too much. Please check or if don't know enter 888.
C24. In the last month how much electricity did your household consume?

I Quantity in Kilowatt Hour (kWh),Don't Know............ 888
E22 == 1
V1 self < 100000 || self $==888$
M1 Too much. Please check. or if don't know enter 888.

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

I Don't know............888,
$\mathrm{E} \mathrm{C} 24<0$ || $\mathrm{C} 22=3$ || $\mathrm{C} 22=2$ || C13 == 7
V1 self >= 30 || self < 100000 || self $==888$
M1 Amount iseither too small or too high. Please check again. or if don't kn ow enter 888.

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

E C2 == 1
$01 \bigcirc$ Yes
02 ○ No
from the grid?
I Multiple responses are possible.
E26 == 1
V1 (self.Yes.Contains (888) \&\& !self.Yes.ContainsAny (1, 2, 3, 4 ,5,6,7,8,9,10,11,12)) || (!self.Yes.Contains(888) \&\& sel f.Yes.ContainsAny (1,2,3,4,5,6,7,8,9,10,11,12) )

M1 Select either don't know or other options.

| $001 \square / \square$ | 13th April-13th May |
| :---: | :---: |
| $002 \square / \square$ | 14th May-14th June |
| $003 \square / \square$ | 15th June-15th July |
| $004 \square / \square$ | 16th July-16th August |
| $005 \square$ | 17th August-16th September |
| $006 \square / \square$ | 17th September-16th October |
| $007 \square / \square$ | 17th October-15th November |
| $008 \square / \square$ | 16th November-15th December |
| $009 \square / \square$ | 16th December-13th January |
| $010 \square / \square$ | 14th January-11th February |
| $011 \square / \square$ | 12th February-13th March |
| $012 \square / \square$ | 14th March-13th April |
| $888 \square / \square$ | 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 "loadshedding" schedule (load shedding is the set hours of electricity NOT available from the grid)?

SINGLE-SELEC
C28

E C2 == 1
$01 \bigcirc$ Yes
02 ○ No
C. SUPPLY AND DEMAND OF ELECTRICITY / ELECTRICITY FROM NATIONAL GRID
A.WORST MONTHS

E $\mathrm{C} 26=1$

| C29. How many hours of electricity are | NUMERIC: DECIMAL |
| :--- | :--- |
| available each day and night from the grid? |  |

available each day and night from the grid?
(max 24 hours) -hours
I Don't know............ 888
V1 self < 25 || self $==888$
M1 Please enter less than or equal to 24 or 888 .

| C30.How many hours of electricity are available | NUMERIC: DECIMAL C30_A |
| :--- | :--- |

each evening, from 6:00 pm to 10:00 pm from
the grid? (max 4 hours)-hours
I Don't know............ 888
V1 self < 5 || self == 888
M1 Pelase enter less than or equal to 4 or 888 .

| C31.How many hours of electricity do you use each day and night from the grid? | NUMERIC: DECIMAL | C31_A |
| :---: | :---: | :---: |

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

| C32.How many outages/blackouts occur in a |  |
| :--- | :--- |
| week? | NUMERIC: DECIMAL |

week?
I No outages/blackouts..... 111 Don't know............ 888
C33. What is the total duration of all the outages/blackouts in a week?:Hour

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

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

I Minute, Don't know. .. 888
E C32 A ! = 111
V1 self < 60 || self $==888$
M1 Please enter less than 59 or 888 .

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

## B. TYPICAL MONTH

E C2 ==1

| C29. How many hours of electricity are available each day and night from the grid? (max 24 hours) | NUMERIC: INTEGER | C29_B |
| :---: | :---: | :---: |

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

| C30. How many hours of electricity are | NUMERIC: INTEGER |
| :--- | :--- |

available each evening, from 6:00 pm to 10:00 pm from the grid? (max 4 hours)

I Don't know............ 888
V1 self < 5 || self == 888
M1 Pelase enter less than or equal to 4 or if don't know enter 888 .
C31. How many hours of electricity do you use each day and night from the grid? Cannot exceed number of available hours in C. 29

## NUMERIC: INTEGER

I Don't know............ 888
V1 self <= C29_B || self == 888
M1 Please enter less than or equal to \%C29_B\%. or 888 for don't know
C32. How many outages/blackouts occur in a week?

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

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

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

I Minute, Don't know........... 888
E C32_B ! = 111
V1 self < 60 || self $==888$
M1 Please enter less than 59 or 888 .

C34.What is your main back-up source of lighting during outages/blackouts of the grid?

E C2 ==1

001 O Electric generator
002 〇 Rechargeable battery and storage devices (e.g.: car battery)
003 ○ Solar Lantern (single light)


I .....Number of Days Enumerator: If under 24 hours record 0. if "Have $n$ ot encountered any problem yet enter 111"
E (C37 == 2 || C37 == 1) \&\& C2 == 1
V1 self < 100 || self==111
M1 Too many. Please check.

| C39.Do you experience voltage fluctuations from the grid? <br> (C37 == 2 \|| C37 == 1) \&\& C2 == 1 | single-select <br> 01 O Yes <br> 02 O No | c39 |
| :---: | :---: | :---: |
| C40. Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)? | SINGLE-SELECT <br> 01 O Yes <br> 02 O No | C40 |

E C39 == 1 \&\& C2 == 1
C41. In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the grid?

E (C39 == $1 \& \& \mathrm{C} 2=1)$ || C37 == 3

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

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

## SINGLE-SELECT

001 O Yes
002 O No
888 O Don't know

| - | $\quad$ voltage fluctuations $003 \square$ Unpredictable interruptions $004 \square$ Unexpectedly high bills $005 \square$ High cost of electricity $006 \square$ Do not trust the supplier $007 \square$ Cannot power large appliances $008 \square$ Maintenance/service problems $009 \square$ Unpredictable bills $555 \square$ Other, specify $111 \square$ No problems |  |
| :---: | :---: | :---: |
| C42. Specify Others | text | C42_so |
| E C42.Contains (555) | .............................. |  |
| C43.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the grid electricity (for example, serious bodily injury because of | SINGLE-SELECT <br> 01 O Yes <br> 02 O No | C43 | electric shocks, fire/sparks due to short circuit/voltage surge)?

```
E C2 == 1
```

| C43.A. What was the reasons for this injury? | Single-select | C43 |
| :---: | :---: | :---: |
| E C43 == 1 | Carelessness or error <br> 002 Lack of knowledge about the use of the appliance Faulty wiring or wiring with exposed wires Other, specify |  |
| C43.A. Specify Others | text | C43_A_S |
| E C43_A $=555$ |  |  |

C43_A $==555$
C44. Is this household connected to a?
E C_AVAILABLE $==1 \& \& C 2==2$
${ }_{03}$ O Neither pico-hydro nor 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/ | TEXT |
| :--- | :--- |
| mini/micro company? |  |
| I If both please ask about mini/micro hydro grid. | _.......................................................................................- |

I Do not include the connection fee from C. 48 here Local currency Don't know....................... 888
E C48 != 111

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

I Don't know....................... 888 Do not include the connection fee from C. 48 here
E C48 != 111

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

I (Insert 0 if immediate)
E C48 != 111
V1 self < 21
M1 Too many. Please check.

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

C48 != 111

C52. Have you applied for an upgrade of service since you connected to the \%C45\%?
SINGLE-SELECT
01 O Yes
02 O
02

C53．Who receives the payment for your electricity service？

SINGLE－SELECT
001 ○ Energy company
002 ○ Private entity
003 ○ Community／village／municipality
004 〇 Relative
005 ○ Neighbor
006 〇 Landlord
007 O No one
008 ○ Cooperative
009 〇 Respondent is the owner（No one）
555 ○ Other，specify

| C53．Specify Others | text | C53＿so |
| :---: | :---: | :---: |
| E C53＝ 555 |  |  |

C54．Does your household have an electric meter？

E C53 ！＝ 7 \＆\＆C53 ！$=9$
C56．Does your household share the electric meter？

E C54＝＝1
C57．How many households are sharing the meter？

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

|  |  |  |
| :--- | :--- | :--- |
| C58．How are you billed for electricity？ | SINGLE－SELECT | C58 |

I Read options aloud
E C54＝＝ 2

single－select

C54

01 O Yes

02 ○ No

## single－select

C56
01 O Yes
02 ○ No
NUMERIC：INTEGER C57

SINGLE－SELECT C58
001 O Fixed monthly fee
002 〇 Pay based on lights and appliances used
$003 \bigcirc$ Utility estimates consumption
555 ○ Other，specify
111 O No bill for electricity

| C58．Specify Others | text | C58＿So |
| :---: | :---: | :---: |
| E C58＝ 555 |  |  |


| C59．How do you make your electricity bill | SINGLE－SELECT | C59 |
| :--- | :--- | :--- | payment？

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

|  | 555 O Other，specify |  |
| :--- | :--- | :--- |
| C59．Specify Others | TExT | C59 so |

E

```
C59 == 555
```

| C60．Were you involved in setting the tariff for | SINGLE－SELECT | C60 |
| :--- | :--- | :--- | the \％C45\％？

E C53 ！＝ 7 \＆\＆C53 ！＝ 9
C61．How were you involved in the tariff setting？

001 ○ Cash
002 〇 Credits using mobile money
003 ○ Credit，using other ways
555 O Other，specify
text
C59 SO
$01 \bigcirc$ Yes
02 ○ No

002
O Contacted by mini-grid/pico hydro company
003 O Member of electricity committee
004 O Member of cooperative
555 O Other, specify

| C61. Specify Others | text | C61_so |
| :---: | :---: | :---: |
| E $\mathrm{C} 61=555$ |  |  |
| 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. | SINGLE-SELECT | C62 |
|  | 01 〇 Respondent has energy bill and shows it |  |
|  | 02 O Respondent has energy bill but |  |
| E C53 ! $=7$ \&\& C53 ! $=9$ | refuses to show it or could not locate it <br> 03 Respondent does not have an energy bill |  |
|  |  |  |

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

I Calculate amount paid from the last bill. Don't Know...888, Local Curren cy
E C62 == 1
V1 self < 100000 || self $=888$
M1 Too large. Please check. or if don't know enter 888.

| C64. In the last month how much electricity did | NUMERIC: INTEGER |
| :--- | :--- |
| your household use? |  |
| Don't Know.....888, KWH <br> C62 ==1 11 C53 $==7$ |  |
| C65. In a typical month, how much did you <br> Spend on electricity? | NUMERIC: INTEGER |

I Don't Know.......................................... 888
(C64 < 1 \&\& C62 == 1) || (C62 == 2 || C62 == 3)
V1 self < 100000 || self == 888
M1 Too Large, Please check or if don't know enter 888

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

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

I Multiple responses are possible. Record all months when household $h$ as the lowest number of hours of electricity supply.
E C66 == 1

## SINGLE-SELECT

$01 \bigcirc$ Yes
02 ○ No

| MULTI-SELECT: YES/NO | C67 |
| :---: | :---: |
| $001 \square / \square$ 13th April-13th May |  |
| $002 \square / \square$ 14th May-14th June |  |
| $003 \square / \square$ 15th June-15th July |  |
| $004 \square / \square$ 16th July-16th August |  |
| $005 \square / \square$ 17th August-16th September |  |
| $006 \square / \square$ 17th September-16th October |  |
| $007 \square / \square$ 17th October-15th November |  |
| $008 \square$ / $\square$ 16th November-15th December |  |
| $009 \square / \square$ 16th December-13th January |  |
| $010 \square / \square$ 14th January-11th February |  |
| $011 \square / \square$ 12th February-13th March |  |
| $012 \square / \square$ 14th March-13th April |  |
| $888 \square / \square$ Don't Know |  |
| SINGLE-SELECT | C68 |

hours of electricity available from the mini
01 O
Yes grid)?

02 ○ No
E C44.InList $(1,4)$

STATIC TEXT
Ask respondent first about the worst months and then about a typical month for C.69- C. 73 If no seasonal changes, ask only about a typical month. Ask questions by ROW.
C. SUPPLY AND DEMAND OF ELECTRICITY / \%C44\%
A. WORST MONTHS

E C66 == 1

| C69. How many hours of electricity are | C69_A |
| :--- | :--- |
| available each day and night from the mini- | NUMERIC: INTEGER |
| grid? (max 24 hours) | - |
| I Don't know............ 888 |  |
| 1 self $<=24$ II self $==888$ |  |
| 1 Please enter less than or equal to 24 or 888. |  |


| C70. How many hours of electricity are | NUMERIC: INTEGER |
| :--- | :--- |

available each evening, from 6:00 pm to 10:00 pm from the mini-grid? (max 4 hours)

I Don't know............ 888
V1 self <= 4 || self == 888
M1 Please enter less than or equal to 4 or 888 .
C71. How many hours of electricity do you use $\quad$ NUMERIC: INTEGER $\quad$ C71_A
each day from the mini-grid?
I Don't know............ 888
V1 self <= C69_A || self == 888
M1 Please enter less than \%C69_A\% or if don't konw enter 888.

| C72. How many outages/blackouts occur in a week? | NUMERIC: INTEGER | C72_A |
| :---: | :---: | :---: |
| No outages/blackouts.....111,Dont know ...888 |  |  |
| C73A.1.What is the total duration of all the outages/blackouts in a week?:Hours | NUMERIC: INTEGER | C73_A_1 |

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

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

I Don't know........... 888
E C72_A ! = 111
V1 self < 60 || self $==888$
M1 Error! Please check. or if don't know enter 888.
C. SUPPLY AND DEMAND OF ELECTRICITY / \%C44\%

## B.TYPICAL MONTH

C69. How many hours of electricity are
-
C70．How many hours of electricity are $\quad$ NUMERIC：INTEGER C70＿B
available each evening，from 6：00 pm to 10：00 pm from the mini－grid？（max 4 hours）

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

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

I Don＇t know．．．．．．．．．．．． 888
V1 self＜＝C69＿B｜｜self＝＝ 888
M1 Please enter less than or equal to \％C69＿B\％or 888
C72．How many outages／blackouts occur in a week？

I No outages／blackouts．．．．．111，Dont know ．．． 888
C73．B．1．What is the total duration of all the outages／blackouts in a week？：Hours

I Don＇t know．．．．．．．．．．． 888
E C72＿B ！＝ 111
V1 self＜ 169 ｜｜self＝＝ 888
M1 Error！Please check or enter 888 for don＇t know．
C73．B．2．What is the total duration of all the outages／blackouts in a week？

I Don＇t know．．．．．．．．．．． 888
E C72＿B ！＝ 111
V1 self＜ 60 ｜｜self $=888$
M1 Error！Please check．or if don＇t know enter 888.

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

SINGLE－SELECT C74
001 ○ Electric generator
002 〇 Rechargeable battery and storage devices（e．g．：car battery）
003 〇 Solar Lantern
004 〇 Solar－Lighting System（2＋ lights with cell phone charging and／or radio）
005 ○ Solar Home System（2＋lights with cell phone charging，and TV／fan／fridge）
006 ○ Pico－hydro
007 〇 Kerosene lamp
008 ○ Fuel－based lighting
009 O Dry－cell（non－rechargeable） battery／Torch／Flashlight
010 O Candle
555 O Other，specify
111 ○ No back－up source

| C74．Specify Others | TEXT | C74＿SO |
| :--- | :--- | :--- |
| E C74 $=555$ | $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |  |

outages/blackouts of the mini-grid?

| E C75 == 555 |
| :--- |
| C75. Specify Others |
| C76.How do you request for repairs in <br> electricity service or file a complaint? |

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

TEXT
C75_SO

SINGLE-SELECT C76
001 ○ Call mini-grid/pico hydro operator
002 ○ Call a local technician
003 ○ Send a letter/email
004 ○ Social media
005 〇 Talk to community representative
006 ○ No system to request repairs/file complaint
555 ○ Other, specify
TEXT C76 SO

E C76 == 555

|  |  |
| :--- | :--- |
| C77. When there is a blackout in your | SINGLE-SELECT |

community, who do you usually approach for assistance?

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

| C78.The last time you asked for assistance, | NUMERIC: INTEGER | C78 |
| :--- | :--- | :--- |
| how many days after you contacted $\% \mathrm{C} 77 \%$ did |  |  | they come to fix the problem?

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

C79. Do you experience voltage fluctuations from the grid?

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

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

E C79 = $=1$

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

E $\mathrm{C} 79=1$
$01 \bigcirc$ Yes
02 ○ No

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

I 2 options only，Order matters．

MULTI－SELECT：ORDERED
$001 \square$ Supply shortage／not enough hours of electricity
$002 \square$ Low／high voltage problems or voltage fluctuations
$003 \square$ Unpredictable interruptions
$004 \square$ Unexpectedly high bills
$005 \square$ Too expensive
$006 \square$ Do not trust the supplier
$007 \square$ Cannot power large appliances
$008 \square$ Maintenance／service problems
$009 \square$ Unpredictable bills
$555 \square$ Other，specify
$111 \square$ No problems
TEXT C82＿SO
．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．

SINGLE－SELECT C83
01 ○ Yes

02 ○ No
electricity（for example，bodily injury because of electric shocks，fire／sparks due to short circuit／voltage surge）？

|  |  |
| :--- | :--- |
|  |  |

C83．A．What was the reasons for this injury？
E C83 $==1$
SINGLE－SELECT
C83＿A
001 〇 Carelessness or error

002 〇 Lack of knowledge about the use of the appliance
$003 \bigcirc$ Faulty wiring or wiring with exposed wires
555 O Other，specify

TEXT
C83＿A＿SO
E C83＿A $=555$
C84．In the last 12 months，did the household use a generator to supply electricity？

E C＿AVAILABLE＝＝ 1

SINGLE－SELECT
C84
01 O Yes
02 O No

C．SUPPLY AND DEMAND OF ELECTRICITY
ELECTRIC GENERATOR SET
E C84＝＝ 1

| C85．How many generators does your household use to supply electricity？ | NUMERIC：INTEGER | C85 |
| :---: | :---: | :---: |
| Don＇t know $\qquad$ ．．888，If multiple generators，ask f ollowing questions about main generator． <br> self＜ 6 ｜｜self＝＝888 <br> Too many．Please check again． |  |  |
| C86．Do you share this generator with other households？ | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \text { 〇 Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ | C86 |
| C87．How many households are sharing | NUMERIC：INTEGER | C87 |




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

E $\mathrm{C} 102=1$

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

E C104 == 1 || C102 == 2
C106. What are the worst months of fuel availability for the generator?

E C105 == 1

SINGLE-SELECT
01 O Yes
02 O No

## single-Select

01 ○ Yes
02 O No

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

I Don't know............ 888
V1 self < 25 || self == 888
M1 Please enter less than or equal to 24 or 888 .
C108. How many hours could you use this generator each evening, from 6:00 pm to 10:00 pm if you wanted to?

I Max 4 hrs., Don't know............ 888
V1 self < 5 || self == 888
M1 Please enter less than or equal to 4 or 888
C109. How many hours do you actually use this generator each day?

I Don't know............ 888
V1 self <= C107_B || self == 888
M1 Please enter less than or equal to \%C107_B\% or 888 .
C110. Do you experience voltage fluctuations from the generator?

E C84 == 1

C111.Have you installed an instrument to prevent damage caused by the voltage fluctuations (eg: stabilizer)?
$\mathrm{E} \mathrm{C} 110=1$

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

E
C110 $==1$

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

E C84 == 1

NUMERIC: INTEGER
C107_B


NUMERIC: INTEGER
C108_B


C109_B

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

SINGLE-SELECT
01 O Yes
02 O No

001 Y Yes
002 ○ No
888 O Don't know
mULTI-SELECT: ORDERED
$001 \quad \square$ Limited power supply
$002 \square$ Cannot power large appliances

$003 \square$| Too expensive to use |
| :--- |
| (including high cost of |
| fuel/rent) |

$004 \square$ Availability of the fuel
$005 \square$ Hard to maintain/service
$006 \square$ Loud/Noisy
$007 \square$ Unpredictable interruptions
$555 \square$ Other, specify
$111 \square$ No problems

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)?

E C84 == 1

SINGLE-SELECT
01 ○ Yes
02 ○ No

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

| C114.A. Specify Others | TEXT C114_A_SO |
| :--- | :--- |

E C114_A $=555$

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

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

SINGLE-SELECT
C115
01 O Yes
02 ○ No
C. SUPPLY AND DEMAND OF ELECTRICITY

EXTERNALLY RECHARGED BATTERY (CAR BATTERY, ETC) - SKIP IF THIS IS FOR BACKUP SOLUTIONS
E C115 == 1

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

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

M1 Error! Either select use all or select months only.
MULTI-SELECT: YES/NO C116
$111 \square / \square$ Used all year
$001 \square / \square$ 13th April-13th May
$002 \square / \square$ 14th May-14th June
$003 \square / \square$ 15th June-15th July
$004 \square / \square$ 16th July-16th August
$005 \square / \square$ 17th August-16th September
$006 \square / \square$ 17th September-16th October
$007 \square / \square$ 17th October-15th November
$008 \square / \square$ 16th November-15th December
$009 \square / \square$ 16th December-13th January
$010 \square / \square$ 14th January-11th February
$011 \square / \square$ 12th February-13th March
$012 \square / \square$ 14th March-13th April
$888 \square / \square$ Don't Know
multi-Select
C117
$001 \square$ Lighting
$002 \square$ Appliances
$003 \square$ Home-based income activity
$555 \square$ Other, specify

| C117. Specify Others | TExt | C117_SO |
| :--- | :--- | :--- |
| E C117.Contains (555) | $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |  |


| C118.Does your household have an inverter that allows you to use AC appliances? | single-select <br> 01 O Yes <br> 02 O No | C118 |
| :---: | :---: | :---: |
| C119.What is the capacity of the inverter? | NUMERIC: INTEGER | C119 |
| $\begin{aligned} & \text { Watts (W) } \\ & \text { C118 == } 1 \end{aligned}$ | ------- |  |
| C120.What is the total number of rechargeable batteries that you use in a typical month? | NUMERIC: INTEGER | C120 |

```
    I Total number of rechargeable batteries. Don't know
    ........ }88
    E C118.InList(1,2)
V1 self < 20
M1 Toomany.
```

C. SUPPLY AND DEMAND OF ELECTRICITY / EXTERNALLY RECHARGED BATTERY (CAR BATTERY, ETC) - SKIP IF THIS IS FOR BACKUP SOLUTIONS Roster: BATTERY ROSTER
generated by numeric question C120
R_C120
C121.What is the capacity of the rechargeable batteriery \%rostertitle\%?

I Don't know........................................ 888
E $\mathrm{C} 118=2$
C122.What is the voltage of the rechargeable batteriery \%rostertitle\%?
$\qquad$
E C118 = 2

| C123.How much did you pay for the | NUMERIC: INTEGER C123 |
| :--- | :--- |

rechargeable battery(ies) \%rostertitle\%?
I Don't know....................................... 888
E C118 = $=2$

| C124. How many recharges for all battery | NUMERIC: INTEGER |
| :--- | :--- |

\%rostertitle\% does your household have in a
typical month?
I Don't know.
.. 888

C125.Do you pay someone/some entity outside

## SINGLE-SELECT

the household to recharge the battery on a
regular basis?
$01 \bigcirc$ Yes
C How much does your household spend

02 ○ No

C126. How much does your household spend in a typical month to recharge the batteries (in total)?

## NUMERIC: INTEGER

I Local currency Don't Know
.. 888
E $\mathrm{C} 125=1$

C127. What is the electricity source used to recharge the battery?

(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?I Don't..888, Max 4 Hrs
V1 self < 5 || self == 888
M1 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?

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

I Don't Know.
.. 888
V1 self <= C130 || self $==888$
M1 Please enter less than or equal than \%C130\% or 888
C133.What are the most serious problems you experience with the rechargeable batteries?

I Record up to 2 responses.

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)

MULTI-SELECT
$01 \square$ Solar lanterns
$02 \square$ Solar lighting system
03 Solar home system
$04 \square$ None

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?

| I Number of solar lanterns |  |
| :--- | :--- |
| E C135.Contains (1) | NUMERIC: INTEGER |
| C137. How many solar lighting systems <br> (2+lights with cell phone charger and/or radio) <br> do you have? <br> I Number of solar lighting system <br> E C135. Contains (2) |  |
| C138. How many solar home systems (2+ lights <br> with cell phone charger and TV/fan/fridge) do <br> you have? <br> I Number of solar home system <br> E C135.Contains (3) | NUMERIC: INTEGER |

## C. SUPPLY AND DEMAND OF ELECTRICITY

Roster: SOLAR BASED DEVICE
generated by multi-select question C135 R_SD
E C_AVAILABLE $==1$ \&\& C135. ContainsAny $(1,2,3)$

| C141.What is the manufacturer and model of | TEXT |
| :--- | :--- |
| the \%rostertitle\% ? | n............................................................................................... |
| I Don't Know ..888 | C141 |
| C142.Does this \%rostertitle\% have a mobile | SINGLE-SELECT |
| charger? | 01 Yes |


|  | $\begin{aligned} & 01 \text { 〇 Yes } \\ & 02 \text { 〇 No } \end{aligned}$ |  |
| :---: | :---: | :---: |
| C150.How many years have you had this \%rostertitle\%? | NUMERIC: DECIMAL | C150 |
| I Record in years, if less than 1 , record 1 V1 self < 100 <br> M1 Too many. Please check. |  |  |
| C151.Who decided to purchase/ acquire this \%rostertitle\%? | SINGLE-SELECT: LINKED | C151 |
| I MEMBERID |  |  |
| C152.Did you buy this \%rostertitle\% paying upfront or under installment, do you rent it/pay a fee to use it, or did you receive it for free? | ```SINGLE-SELECT``` <br> ```Bought, fully paid ``` <br> ```Bought, under installmentNone ``` <br> ```Rent/pay fee to useNone ``` <br> ```Received for free ``` | C152 |
| C153.Who gave you this \%rostertitle\%? $\text { E C152 == } 4$ | SINGLE-SELECT <br> 001 Local private organizations (NGO) Chief of village Local government Relative/Friend Other, specify | C153 |
| C153. Specify Others | TEXT | C153_SO |
| E C153 $=555$ | ................................................................................. |  |
| C154.How much did you pay for this \%rostertitle\% upfront? : Full amount | NUMERIC: INTEGER | C154_FULL |
| E C152 = 1 |  |  |
| C154.How much did you pay for this \%rostertitle\% upfront? : PARTIAL | NUMERIC: INTEGER | C154_PARTIAL |
| E C152 = 2 |  |  |
| C155.What payment system do you use? | SINGLE-SELECT Mobile Pay-as-you-go <br> 02 Other Pay-as-you go (scratch card, etc.) <br> 03 Fixed fee | C155 |
| C156. What is the monthly payment for \%rostertitle\% (INSTALLMENT/ FEE TO RENT/USE)? | NUMERIC: Integer | C156 |
| E C154_PARTIAL >= 0 \|| C152 == 3 |  |  |
| C157.Did/do you borrow money to make your payement for \%rostertitle\%? <br> E C152 <= 3 \|| C154_FULL >= 0 | SINGLE-SELECT <br> 01 O Yes <br> 02 ○ No | C157 |
| C158.Did you receive information and training on this \%rostertitle\%? | sIngle-sELECT $\begin{aligned} & 01 \mathrm{O} \text { Yes } \\ & 02 \mathrm{O} \text { No } \end{aligned}$ | C158 |

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

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

NUMERIC：INTEGER

SINGLE－SELECT
001 〇 Duration of service too short
002 O Too expensive
003 ○ Cannot power large appliances
004 〇 Breaks too often
005 〇 Maintenance and availability of spare parts
006 〇 Quality of light
007 ○ Battery problems
555 〇 Other，specify
111 O No problems

E C160＝＝ 555

TEXT
C160＿SO
$\qquad$

C．SUPPLY AND DEMAND OF ELECTRICITY
MAIN SOLAR－BASED DEVICE
E C135．ContainsAny $(1,2,3)$


[^0]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

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

## A. WORST MONTHS

## E

C163. How many hours do you receive service from this \%IMP_SOLAR_DEVICE\% each day and night?

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

C164. How many hours is service available from this \%IMP_SOLAR_DEVICE\% each evening, from 6:00 pm to 10:00 pm?

I Don't know............ 888
V1 self <= 4 || self $==888$
M1 Please enter less than 5 or 888 .

C165. How many hours do you actually use the \%IMP_SOLAR_DEVICE\% each day for lighting and other applications?

I Don't know............ 888
V1 self <= C163_A || self == 888
M1 Please enter less than or equal to \%C163_A\% or 888
$\qquad$


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

## B. TYPICAL MONTH

C163. How many hours do you receive service from this \%IMP_SOLAR_DEVICE\% each day and night?

## NUMERIC: INTEGER

C163_B

I Don't know............ 888
V1 self <= 24 || self $==888$
M1 Please enter less than 25 or 888
C164. How many hours is service available from this \%IMP_SOLAR_DEVICE\% each evening, from 6:00 pm to 10:00 pm?

I Don't know............ 888
V1 self <= 4 || self $==888$
M1 Please enter less than 5 or 888
C165. How many hours do you actually use the \%IMP_SOLAR_DEVICE\% each day for lighting and other applications?

I Don't know............ 888
V1 self <= C163_B || self == 888
M1 Please enter less than \%C163_B\% or 888
166.In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the \%IMP_SOLAR_DEVICE\% (for example, serious bodily injury because of electric shocks, fire/sparks due to short circuit/voltage surge)?

E C_AVAILABLE $==1$ \&\& C135.ContainsAny $(1,2,3)$
C166.A. What was the reasons for this injury?
E $\mathrm{C} 166=1$

SINGLE-SELECT
C166
$01 \bigcirc$ Yes
02 ○ No

0002 〇 Lack of knowledge about the use of the appliance
$0003 \bigcirc$ Faulty wiring or wiring with exposed wires
5555 Other，specify

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

E C＿AVAILABLE $==1 \& \&$ C135．ContainsAny $(1,2,3)$
SINGLE－SELECT
001 〇 Yes
$002 \bigcirc$ No
888 Don＇t know
C168．What devices would you most like to

| multi－SELECT | C168 |
| :--- | :--- | have？

I Multiple response（Up to three devices）
E C167．InList（1）\＆\＆C135．ContainsAny（1，2，3）
$001 \square$ Television
$002 \square$ Fan
$003 \square$ Refrigerator
$004 \square$ Radio
$005 \square$ Tablet／laptop／computer
$006 \square$ Mobile phone charger
$555 \square$ Other，specify
$888 \square$ Don＇t know／refuse to answer

| C168．Specify Others | TEXT |
| :--- | :--- |
| E C168．Contains（555） | $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |

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

E C＿AVAILABLE $==1 \& \&$ C135．ContainsAny $(1,2,3)$

|  | $\begin{array}{lll}04 \bigcirc & \text { Unsatisfied } \\ 05 \bigcirc \text { Very unsatisfied }\end{array}$ |  |
| :---: | :---: | :---: |
| C170．In what year did you get your first solar device？ | NUMERIC：INTEGER | C170 |

I Don＇t know．．．．．．．．．．．．．． 888
E C＿AVAILABLE $==1$ \＆\＆C135．ContainsAny $(1,2,3)$
V1 self．InRange $(1990,2074)$｜｜self $==888$
M1 Error！Please check．
SINGLE－SELECT
01 O Very satisfied
02 〇 Somewhat satisfied
$03 \bigcirc$ Neutral
04 〇 Unsatisfied
05 〇 Very unsatisfied
C170．In what year did you get your first solar
NUMERIC：INTEGER

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

E C＿AVAILABLE $=1 \& \&$ C135．ContainsAny（ $1,2,3$ ）

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

E
（C171＝＝ 2 ｜｜C171＝＝888）\＆\＆C135．ContainsAny $(1,2,3)$
single－select
$01 \bigcirc \mathrm{Yes}$
02 O No

| SINGLE－SELECT | C172 |
| :---: | :---: |
| 001 ○ National grid connection |  |
| 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 ○ Fuel－based lighting |  |
| 008 ○ Dry－cell（non－rechargeable） battery／Torch／Flashlight |  |
| 009 O Candle |  |
| 555 O Other，specify |  |
| text | C172＿so |


C. SUPPLY AND DEMAND OF ELECTRICITY

MAIN SOURCE OF ELECTRICITY
E C_AVAILABLE == 1

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

V1 (self == $1 \& \& C 2==1$ ) || (self $==2 \& \& C 44==2)$ || (se lf == 3 \&\& C84 == 1) || (self.InList $(4,5,6) \& \&$ C135.Cont ainsAny (1,2,3)) || (self == 7 \&\& C115 == 1) || self.InLi st ( $8,9,111,555$ )

SINGLE-SELECT
C175
001 〇 National Grid Connection
002 ○ Local Mini Grid connection
003 ○ Electric generator
004 O Solar Lantern
005 Solar Lighting System (2+ lights with cell phone charging and/or radio
006 O Solar Home System (2+ lights with cell phone charging, and TV/fan/fridge)
007 ○ Rechargeable Battery
008 ○ Pico-hydro
009 ○ Dry-cell battery
111 ○ No electricity
555 ○ Other, specify

C175. Specify Others
E C175 == 555

TEXT
C175 SO
$\qquad$
C. SUPPLY AND DEMAND OF ELECTRICITY / MAIN SOURCE OF ELECTRICITY

CHARGING MOBILE PHONE

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

NUMERIC: INTEGER C176
$\qquad$
C177.Are members of your household able to charge all their mobile phones as often as they need inside your dwelling?

E
C176 > 0

SINGLE-SELECT
C177
001 ○ Yes
002 ○ No
888 D Don't know

C178. Can you charge at least one mobile phone to full charge everyday inside your dwelling?

E
C177.InList $(2,888)$

C179.Can you charge at least one mobile phone to full charge in 3 days inside your dwelling?

E $\mathrm{C} 178=2$
C180.How many mobile phones of your household members do you charge outside your dwelling?

E C178 == 2
V1 self <= C176
M1 Please enter less than or equal to $\%$ C176\%.

C181.Do members of your household have to go more than 500 meters (walk more than 5 minutes) to charge your mobile phones outside your dwelling?

E
C180 > 0

C182. How much does your household spend each month (in total) on charging the mobile phone(s) outside your dwelling?

SINGLE-SELECT
01 ○ Yes
02 O No

## 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 <br> SCOPE: IDENTIFYING |
| :--- | :--- |
| D2. Enumerator: Record Respondent name for | SINGLE-SELECT: LINKED |

E 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.


```
E D8 == 555
D9. How much do you think it would cost to do all the internal electrical wiring in your house?
I Don't Know.
``` \(\qquad\)
``` .888
E D7 == \(2||D 7==888|| D 3=1| | D 4==1| | D 5=1| |\)
D6 \(==1\)
```

D10.Think about the amount you would need to spend each month for electricity, not the connection fee. How much would you need to spend each month for electricity?

I Don't Know.. $\qquad$ . 888
E D7 == 2 || D7 == 888

## E. WILLINGNESS TO PAY FOR IMPROVED ELECTRICITY SUPPLY

Enter the amount for improved electricity supply displayed above: $\qquad$
E2. Do you experience electricity outages?
E $C 2=1$ $\qquad$
E3.Did the household experience power outages 1 year ago?

E $\mathrm{E} 2=1$
E4.How many days of electricity outages one year ago did you experience on a typical month?

E E3 == 1
V1 self <33
M1 Error! Please enter less than or equal to 32.
E5. Would you be willing to pay an additional \%Amount_E\% on your monthly electricity bill to avoid going back to the experience of the power outages from 1 year ago?

E E3 == 1
E6. How much would you be willing to pay additional, at the most, to avoid experiencing same level of electricity outages as one year ago?

I In NPR.
E $\mathrm{E} 3=1$
V1 (self >= Amount_E \&\& E5 == 1) || (self < Amount_E \&\& E5 $=2$ )
M1 Error ! Please check.

NUMERIC: INTEGER SCOPE: IDENTIFYING

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

| SINGLE-SELECT | E3 |
| :--- | :--- |
| $01 \bigcirc$ Yes |  |
| $02 \bigcirc$ No |  |

NUMERIC: INTEGER
$\qquad$
single-select
$01 \bigcirc$ Yes
02 ○ No

NUMERIC: DECIMAL
E6

## 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 $\$\{C F\}: 33 \%, 66 \%$, 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
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 | F3 |
|  | 01 O Yes |  |
|  | 02 O No |  |
| VARIABLE | DOUBLE | CF_6 |
| CF_F/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 | F4 |
|  | 001 ○ Yes |  |
|  | 002 ○ No |  |
| F3 $=2$ | 888 O Don't Know |  |
| VARIABLE | DOUBLE | CF_12 |
| CF_F/12 |  |  |
| F5.Would you be willing to pay \%CF_F\% for this solar device, if you were given 12 months to make the payment? | SINGLE-SELECT | F5 |
|  | 001 ○ Yes |  |
|  | 002 O No |  |
| F4 $==2\| \| F 4=888$ | 888 O Don't Know |  |
| VARIABLE | DOUBLE | CF_24 |
| CF_F / 24 |  |  |
| F6.Would you be willing to pay \%CF_F\% for this | SINGLE-SELECT | F6 |
| solar device, if you were given 24 months to | 001 O Yes |  |
| make the payment? This means that each month you will pay $\$\{C F / 24\}$ per month for 24 | 002 ○ No |  |
| months. | 888 O Don't Know |  |

E F5 == $2|\mid F 5==888$

| F7.Why would you not accept the offer? | sINGLE-SELECT | F7 |
| :--- | :--- | :--- |

E F6 == $2|\mid \mathrm{F} 6=-888$
001 O Cannot afford the payment
002 O Do not need electricity
003 〇 Maintenance/servicing of device is not available
555 O Other, specify

F7. Others Specify | TEXT | F7_SO |
| :--- | :--- |

E $\mathrm{F} 7=555$

## G. KEROSENE/FUEL-BASED /CANDLE LIGHTING

| G1. Enumerator: Record Respondent name for <br> this section | SINGLE-SELECT: LINKED |
| :--- | :--- |

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

Roster: FUEL LAMP/ CANDLE/ TASK LIGHT
generated by multi-select question FLCT
ROSTER_G
E FLCT.ContainsAny (1,2,3,4,555)


|  | Please enter less than or equal to 12 |  |  |
| :---: | :---: | :---: | :---: |
|  | G8．In the last month，how many days did you use \％rostertitle\％？ | NUMERIC：INTEGER | G8 |
| V1 | FLCT．ContainsAny（1，2，3，4） <br> self＜＝ 32 <br> Please enter less than or equalt to 32 ． |  |  |
|  | G9．How many hours do you use \％rostertitle\％ each day？ | NUMERIC：DECIMAL | G9 |
| V1 M1 | If less than 1 hour，input 0 <br> FLCT．ContainsAny（1，2，3，4） <br> self＜＝ 24 <br> Please enter less than or equal to 24 ． |  |  |
| E | G13．What don＇t you like most about using the \％rostertitle\％？ <br> 2 Options． <br> FLCT．ContainsAny（1，2，3，4） | mULT－SELECT $001 \quad \square$ Lantern too expensive $002 \square$ Fuel too expensive $003 \quad \square$ Fuel not available $004 \quad \square$ Accidents can happen $005 \square$ Bad for health $006 \square$ Subsidies needed $007 \square$ Time spent to collect fuel $555 \quad \square$ Other，specify $111 \square$ No problems | G13 |
|  | G13．Specify Others | TEXT | G13＿SO |
| E | G13．Contains（555） | －．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．．． |  |
| E | G14．In the last 12 months，what type of harm／injury did any household members have from \％rostertitle\％？ <br> FLCT．ContainsAny（1，2，3，4） | MULT－SELECT $001 \quad \square$ Death or permanent limb $002 \square$ damage $002 \square$ Poisnsonifing $004 \square$ Eye problems $005 \square$ Respiratory problem $006 \square$ Other major injury $007 \square$ Minor injury $008 \square$ Fire with no injury $111 \square$ 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－SELECT <br> 001 Electric lighting／lamp <br> 002 Solar powered light source | G15 |
| I | Single Response | 003 ○ Battery－operated light source |  |
| E | FLCT．ContainsAny（1，2，3，4） | 004 O Street lighting 005 〇 Kerosene lamp 006 〇 Candles 007 〇 Biogas lamps 008 〇 No school going children 555 O Other，specify 111 Studying and homework only during daylight hours |  |


G. KEROSENE/FUEL-BASED /CANDLE LIGHTING

CANDLE
E FLCT.Contains(1)


## 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] | ```MULTT-SELECT: YES/NO \\ \(001 \square / \square\) Lanterns \\ \(002 \square / \square\) Flashlights \\ \(003 \square / \square\) Task lights \\ \(004 \square / \square\) Radio \\ \(111 \square / \square\) None \\ \(555 \square / \square\) Other, specify``` | н3 |
| H3.Specify Others | text | H3_SO |

## H.DRY-CELL BATTERIES

Roster: LIGHT SOURCE
generated by multi-select question H3 R_LS
E H3.Yes.ContainsAny (1, 2, 3, 4,555)

STATIC TEXT
LIGHT SOURCE
H4.How many of \%rostertitle\% does your
NUMERIC: INTEGER
household power with dry cell batteries?
V1 self < 6
M1 Too many. Please Check.

| H5.How much did you pay for each | NUMERIC: INTEGER |
| :--- | :--- |

\%rostertitle\% on average?
I 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\%?

I if less than 1 month write 0
V1 self <= 12
M1 Please enter less than or equal to 12.

| H7.How many minutes do you use | NUMERIC: INTEGER |
| :--- | :--- |

\%rostertitle\% each day on a typical day?
V1
self <= 1440
M1 Please enter less than or equal to 1440.

H8.Do you use \%rostertitle\% as a regular source of lighting or only as a back-up source when the main source is not available?

E
( (long?) @rowcode). InList (1, 2, 3, 555)

## SINGLE-SELECT

$01 \bigcirc$ Regular source of lighting
02 Back-up source of lighting
03 〇 No light available
H9.How many of dry cell batteries do you purchase each month?

NUMERIC: INTEGER

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

H10.How much do you spend each month on
dry cell batteries?
I NPR
E H3.Yes.ContainsAny (1,2,3,4,555)
V1 self < 100001
M1 Too much. Please check.

## I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING

| Chhose respondent who most frequently <br> cooks food for the household. | SINGLE-SELECT: LINKED |
| :--- | :--- |
| I2.Fuel Type | MULTI-SELECT |
|  | $01 \square$ LPG/ cooking gas |

```
02 \square Wood
4 Charcoal
05 \square Solar
06 \square Kerosene
09 \square Animal waste/ Dung
0 \square Crop Residue/ Plant Biomass
1 \square Sawdust
3 Biomass Briquette
14 }\square\mathrm{ Electric
15 \square Pellets/ processed biomass/
    wood chips
\square Biogas
1 8
```

```Garbage
```

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
A. LPG/ COOKING GAS

E I2.Contains(1)

| I3.In the last 12 months, did your house-hold use this LPG/Cooking gas? | SINGLE-SELECT | I3_LC |
| :---: | :---: | :---: |
|  | $01 \bigcirc$ Yes |  |
|  | 02 O No |  |
| I4.In the last 12 months, what did your household use LPG/Cooking gas for? | MULTI-SELECT | I4_I10_LC |
|  | $01 \square$ LIGHTING |  |
| I3_LC $=1$ | $02 \square$ COOKING |  |
|  | $03 \square$ HEATING |  |
|  | $04 \square$ FIRE STARTER/ IGNITION |  |
|  | $05 \square$ BOILING WATER |  |
|  | $\begin{aligned} & 06 \square \begin{array}{l} \text { HOME-BASED INCOME } \\ \text { ACTIVITY } \end{array} \end{aligned}$ |  |
| I11. In the last 12 months, in which months did you use this LPG/Cooking gas? | MULTI-SELECT | I11_LC |
|  | $111 \square$ Used all year |  |
| I3_LC $=1$ | $001 \square$ 13th April-13th May |  |
|  | $002 \square$ 14th May-14th June |  |
|  | $003 \square$ 15th June-15th July |  |
|  | $004 \square$ 16th July-16th August |  |
|  | $005 \square$ 17th August-16th September |  |
|  | $006 \square$ 17th September-16th October |  |
|  | $007 \square$ 17th October-15th November |  |
|  | $008 \square$ 16th November-15th <br> December |  |
|  | $009 \square$ 16th December-13th January |  |
|  | $010 \square$ 14th January-11th February |  |
|  | $011 \square$ 12th February-13th March |  |
|  | $012 \square$ 14th March-13th April |  |
|  | $888 \square$ Don't Know |  |

I12.In the last 12 months, in which months was this LPG/Cooking gas scarce and significantly more expensive?

E I3 LC $==1$
MULTI-SELECT I12_LC
$111 \square$ Available all year
$001 \square$ 13th April-13th May
$002 \square$ 14th May-14th June
$003 \square$ 15th June-15th July
$004 \square$ 16th July-16th August
$005 \square$ 17th August-16th September
006
17th September-16th October

```
0 0 7 \square \text { 17th October-15th November}
008 \square 16th November-15th
    December
009 \square 16th December-13th January
010 \square 14th January-11th February
011 \square 12th February-13th March
012 \square 14th March-13th April
888 \square Don't Know
```

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
B. WOOD

E
I2. Contains (2)

| I3.In the last 12 months, did your house-hold use this Wood? | SINGLE-SELECT | I3_WP |
| :---: | :---: | :---: |
|  | $\begin{aligned} & 01 \text { 〇 Yes } \\ & 02 \text { No } \end{aligned}$ |  |
|  |  |  |
| I4.In the last 12 months, what did your | MULTI-SELECT | I4_I10 WP |
| household use Wood for? | $01 \square$ LIGHTING |  |
| I3 WP == 1 | $02 \square$ COOKING |  |
|  | $03 \square$ HEATING |  |
|  | $04 \square$ FIRE STARTER/ IGNITION |  |
|  | $05 \square$ BOILING WATER |  |
|  | ```06 \square HOME-BASED INCOME ACTIVITY``` |  |

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

E I3_WP == 1

| multi-SELECT | I11_WP |
| :---: | :---: |
| $111 \square$ Used all year |  |
| $001 \square$ 13th April-13th May |  |
| $002 \square$ 14th May-14th June |  |
| $003 \square$ 15th June-15th July |  |
| $004 \square$ 16th July-16th August |  |
| $005 \square$ 17th August-16th September |  |
| $006 \square$ 17th September-16th October |  |
| $007 \square$ 17th October-15th November |  |
| ```008 \square 16th November-15th``` |  |
| $009 \square$ 16th December-13th January |  |
| $010 \square$ 14th January-11th February |  |
| $011 \square$ 12th February-13th March |  |
| $012 \square$ 14th March-13th April |  |
| $888 \square$ Don't Know |  |

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

E I3 WP == 1
MULT-SELECT
$111 \quad \square$ Available all year
$001 \square$ 13th April-13th May
$002 \square$ 14th May-14th June
$003 \square$ 15th June-15th July
$004 \square$ 16th July-16th August
$005 \square$ 17th August-16th September
$006 \square$ 17th September-16th October
$007 \square$ 17th October-15th November
$008 \square$ 16th November-15th
$009 \square$ 16th December-13th January
$010 \square$ 14th January-11th February
$011 \square$ 12th February-13th March
$012 \square$ 14th March-13th April
888 Don't Know

| I13.In the last 7 days, how much of this Wood did your household use? | NUMERIC: INTEGER | I13_WP |
| :---: | :---: | :---: |
| I kg |  |  |
| E I3_WP == 1 |  |  |
| I15.How much of this Wood did you purchase? | NUMERIC: INTEGER | I15_WP |
| I kg,DO NOT PURCHASE.... 111 |  |  |
| E I13_WP > 0 |  |  |
| I16.How long does this quantity of Wood typically last? | NUMERIC: INTEGER | I16_WP |
| E I15_WP>0 \&\& I15_WP ! $=111$ | - - - - - | - |
| I17.How much did you pay for the amount of Wood that you purchased? | NUMERIC: INTEGER | I17_WP |
| E I15_WP>0 \&\& I15_WP ! 111 | ------------------------------- |  |

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
D. CHARCOAL

E I2.Contains(4)

| I3.In the last 12 months, did your house-hold use this Charcoal? | single-select <br> 01 ○ Yes <br> 02 O No | I3_CC |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Charcoal for? $\text { I3_CC == } 1$ | muLti-sELECT <br> $01 \quad \square$ LIGHTING <br> $02 \square$ COOKING <br> $03 \square$ HEATING <br> $04 \square$ FIRE STARTER/ IGNITION <br> $05 \square$ BOILING WATER <br> $06 \square$ | I4_I10_CC |
| I11. In the last 12 months, in which months did you use this Charcoal? $\text { I3_CC == } 1$ | multi-SELECT <br> $111 \quad \square$ Used all year <br> $001 \square$ <br> 002 <br> 002 <br> 003$\square$ 13th April-13th May May-14th June | I11_CC |

this Charcoal scarce and significantly more expensive?

E I3 $\mathrm{CC}=1$

| $1 \square$ | Available all year |
| :---: | :---: |
| $001 \square$ | 13th April-13th May |
| $002 \square$ | 14th May-14th June |
| $003 \square$ | 15th June-15th July |
| $004 \square$ | 16th July-16th August |
| $005 \square$ | 17th August-16th September |
| $006 \square$ | 17th September-16th October |
| $007 \square$ | 17th October-15th November |
| $008 \square$ | 16th November-15th December |
| $009 \square$ | 16th December-13th January |
| $010 \square$ | 14th January-11th February |
| $011 \square$ | 12th February-13th March |
| $012 \square$ | 14th March-13th April |
| $888 \square$ | Don't Know |

NUMERIC: INTEGER ..... I13 CC

I13.In the last 7 days, how much of this Charcoal did your household use?
I kg
E I3_CC == 1

| I15.How much of this Charcoal did you | NUMERIC: INTEGER |
| :--- | :--- |
| purchase? |  |

I kg,DO NOT PURCHASE.... 111
E I13_CC > 0

I16. How long does this quantity of Charcoal typically last?
I15_CC > 0 \&\& I15_CC != 111

I17.How much did you pay for the amount of Charcoal that you purchased?

E
I15_CC > 0 \&\& I15_CC != 111
I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
E. SOLAR

E I2.Contains (5)

| I3.In the last 12 months, did your house-hold use this Solar? | single-select <br> 01 O Yes <br> 02 O No |  |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Solar for? $\text { I3_SL }==1$ | MULT-SELECT$01 \quad \square$ LIGHTING$02 \square$ COOKING$03 \square$ HEATING$04 \square$ FIRE STARTER/ IGNITION$05 \square$ BOILING WATER$06 \square$HOME-BASED INCOME <br>  <br>  <br> ACTIVITY | I4_I10_SL |
| I11. In the last 12 months, in which months did you use this Solar? $\text { I3_SL }==1$ |  | I11_SL |


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

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
F. KEROSENE

E
I2. Contains (6)

| I3.In the last 12 months, did your house-hold use this Kerosene? | single-Select <br> $01 \bigcirc$ Yes <br> 02 ○ No |  |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Kerosene for? <br> I3_KS == 1 | mULt--SELECT$01 \quad \square$ LIGHTING$02 \square$ COOKING$03 \square$ HEATING$04 \square$ FIRE STARTER/ IGNITION$05 \square$ BOILING WATER$06 \square$HOME-BASED INCOME <br> ACTIVITY | I4_I10_KS |
| I11. In the last 12 months, in which months did you use this Kerosene? <br> I3_KS == 1 | multi-Select <br> $111 \quad \square$ Used all year <br> $001 \square$ 13th April-13th May <br> $002 \square$ 14th May-14th June <br> $003 \square$ 15th June-15th July <br> $004 \square$ 16th July-16th August <br> $005 \square$ <br> 006 17th August-16th September 1 17th September-16th October | I11_KS |


|  | $008 \quad \square$ | 16th November-15th |
| :--- | :--- | :--- |
| December |  |  |

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 <br> 01 O Yes <br> 02 O No | I3_AWD |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Animal waste/Dung for? $\text { I3_AWD }==1$ | MULTI-SELECT <br> $01 \quad \square$ LIGHTING <br> $02 \square$ COOKING <br> $03 \square$ HEATING <br> $04 \quad \square$ FIRE STARTER/ IGNITION <br> $05 \square$ <br> 06$\quad$BOILING WATER <br> HOME-BASED INCOME <br> ACTIVITY | I4_I10_AWD |
| I11. In the last 12 months, in which months did you use this Animal waste/Dung? $\text { I3_AWD }==1$ |  | I11_AWD |


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

E I2.Contains(10)

| I3.In the last 12 months, did your house-hold use this Crop Residue/ Plant Biomass? | SINGLE-SELECT | I3_CRPB |
| :---: | :---: | :---: |
|  | $\begin{aligned} & 01 \bigcirc \text { Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ |  |
|  |  |  |
| I4.In the last 12 months, what did your | MULTI-SELECT | I4_I10_CRPB |
| household use Crop Residue/ Plant Biomass | $01 \square$ LIGHTING |  |
| for? | $02 \square$ COOKING |  |
| I3_CRPB $=1$ | $03 \square$ HEATING |  |
|  | $04 \square$ FIRE STARTER/ IGNITION |  |
|  | $05 \square$ BOILING WATER |  |
|  | $\begin{aligned} & 06 \text { HOME-BASED INCOME } \\ & \text { ACTIVITY } \end{aligned}$ |  |
| I11. In the last 12 months, in which months did | MULTI-SELECT | I11_CRPB |

you use this Crop Residue/ Plant Biomass?

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

E I3_CRPB $=1$

| 111 |  |  |
| :--- | :--- | :--- |
| 001 |  |  |
| 0 | $\square$ | Used all year |
| 002 | $\square$ | 14th April-13th May-14th June |
| 003 | $\square$ | 15th June-15th July |
| 004 | $\square$ | 16th July-16th August |
| 005 |  |  |
| 0 | $\square$ | 17th August-16th September |
| 006 | $\square$ | 17th September-16th October |
| 007 |  |  |
| 008 | 17th October-15th November |  |
| 008 | 16th November-15th |  |
| 009 | $\square$ | 16th December |
| 010 | $\square$ | 14th January-11th February |
| 011 | $\square$ | 12th February-13th March |
| 012 | $\square$ | 14th March-13th April |
| 888 | $\square$ | Don't Know |


| multi-SELECT | I12 CRPB |
| :---: | :---: |
| $111 \square$ Available all year |  |
| $001 \square$ 13th April-13th May |  |
| $002 \square$ 14th May-14th June |  |
| $003 \square$ 15th June-15th July |  |
| $004 \square$ 16th July-16th August |  |
| $005 \square$ 17th August-16th September |  |
| $006 \square$ 17th September-16th October |  |
| $007 \square$ 17th October-15th November |  |
| $008 \square$ 16th November-15th |  |
| $009 \square$ 16th December-13th January |  |
| $010 \square$ 14th January-11th February |  |
| $011 \square$ 12th February-13th March |  |
| $012 \square$ 14th March-13th April |  |
| $888 \square$ Don't Know |  |

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

```
E I3_CRPB == 1
```

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

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

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

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
I13_CRPB

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

NUMERIC: INTEGER
I15_CRPB


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

NUMERIC: INTEGER
I16_CRPB


## NUMERIC: INTEGER

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
K. SAWDUST

| I3.In the last 12 months, did your house-hold use this Sawdust? | single-select <br> 01 O Yes <br> 02 O No |  |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Sawdust for? $\text { I3_SD }==1$ | MULTI-SELECT $01 \quad \square$ LIGHTING $02 \square$ COOKING $03 \square$ HEATING $04 \square$ 05 05 $\square$$\quad$ FIRE STARTER/ IGNITION | I4_I10_SD |
| I11. In the last 12 months, in which months did you use this Sawdust? $\text { I3_SD == } 1$ | MULTI-SELECT $111 \quad \square$ Used all year $001 \square$ 13th April-13th May $002 \square$ 14th May-14th June $003 \square$ 004 $\square$ 15th June-15th July 16 th July-16th August | I11_SD |
| I12.In the last 12 months, in which months was this Sawdust scarce and significantly more expensive? $\text { I3_SD }==1$ | MULTI-SELECT $111 \quad \square$ Available all year $001 \quad \square$ 13th April-13th May $002 \square$ 14th May-14th June $003 \square$ 004 $\square$$\quad$ 15th June-15th July 1 16th July-16th August | I12_SD |


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

I kg,DO NOT PURCHASE.... 111
E I13_SD > 0

I16. How long does this quantity of Sawdust typically last?

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

E
I15 SD > 0 \&\& I15_SD ! $=111$

I17.How much did you pay for the amount of NUMERIC: INTEGER I17_SD
Sawdust that you purchased?
I17_SD
I15_SD > 0 \&\& I15_SD != 111
I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
M. BIOMASS BRIQUETTE

E
12.Contains (13)

| I3.In the last 12 months, did your house-hold use this Biomass Briquette? | SINGLE-SELECT <br> $01 \bigcirc$ Yes <br> 02 ○ No | I3_BB |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Biomass Briquette for? | MULTI-SELECT $01 \quad \square$ LIGHTING $02 \square$ COOKING $03 \square$ HEATING $04 \square$ 05 05 $\square$$\quad$ FIRE STARTER/ IGNITION | I4_I10_BB |
| I11. In the last 12 months, in which months did you use this Biomass Briquette? |  | I11_BB |
| I12.In the last 12 months, in which months was this Biomass Briquette scarce and significantly more expensive? |  | I12_BB |


|  | ```012 \square 14th March-13th April 888 \square Don't Know``` |
| :---: | :---: |
| I13.In the last 7 days, how much of this Biomass Briquette did your household use? | NUMERIC: INTEGER I13_BB |
| I kg |  |
| I15. How much of this Biomass Briquette did you purchase? | NUMERIC: INTEGER I15_BB |
| I kg,DO NOT PURCHASE.... 111 |  |
| E I13_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 |
| :---: | :---: | :---: |
|  | $01 \bigcirc$ Yes |  |
|  | 02 O No |  |
| I4.In the last 12 months, what did your household use Electric for? | MULTI-SELECT | I4_I10_EC |
|  | $01 \square$ LIGHTING |  |
| I3_EC > 0 | $02 \square$ COOKING |  |
|  | $03 \square$ HEATING |  |
|  | $04 \square$ FIRE STARTER/ IGNITION |  |
|  | $05 \square$ BOILING WATER |  |
|  | $\begin{aligned} & 06 \square \begin{array}{l} \text { HOME-BASED INCOME } \\ \text { ACTIVITY } \end{array} \end{aligned}$ |  |

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? | $\begin{aligned} & \text { SINGLE-SELECT } \\ & 01 \text { 〇 Yes } \\ & 02 \text { O No } \end{aligned}$ | I3_PB |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Pellets/processed biomass/wood chips for? $\text { I3_PB == } 1$ |  | I4_I10_PB |
| I11. In the last 12 months, in which months did | multi-SELECT | I11_PB |

you use this Pellets/processed biomass/wood chips?

E I3_PB $=1$

| $1 \square$ | Used all year |
| :---: | :---: |
| $001 \square$ | 13th April-13th May |
| $002 \square$ | 14th May-14th June |
| $003 \square$ | 15th June-15th July |
| $004 \square$ | 16th July-16th August |
| $005 \square$ | 17th August-16th September |
| $006 \square$ | 17th September-16th October |
| $007 \square$ | 17th October-15th November |
| $008 \square$ | 16th November-15th December |
| $009 \square$ | 16th December-13th January |
| $010 \square$ | 14th January-11th February |
| $011 \square$ | 12th February-13th March |
| $012 \square$ | 14th March-13th April |
| $888 \square$ | Don't Know |

MULT-SELECT: ORDERED I12 PB

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

E I3 $\mathrm{PB}=1$
$111 \square$ Available all year
$001 \square$ 13th April-13th May
$002 \square$ 14th May-14th June
$003 \square$ 15th June-15th July
$004 \square$ 16th July-16th August
$005 \square$ 17th August-16th September
$006 \square$ 17th September-16th October
$007 \square$ 17th October-15th November
$008 \square$ 16th November-15th December
$009 \square$ 16th December-13th January
$010 \square$ 14th January-11th February
$011 \square$ 12th February-13th March
$012 \square$ 14th March-13th April
$888 \square$ Don't Know


| I3.In the last 12 months, did your house-hold use this Biogas? | single-select <br> 01 O Yes <br> 02 O No | I3_BG |
| :---: | :---: | :---: |
| I4.In the last 12 months, what did your household use Biogas for? $\text { I3_BG }==1$ |  | I4_I10_BG |
| I11. In the last 12 months, in which months did you use this Biogas? <br> I3_BG == 1 | MULT-SELECT $111 \square$ Used all year $001 \square$ $002 \square$ 002 13th April-13th May May-14th June $003 \square$ 004 $\square$$\quad$ 15th June-15th July | I11_BG |
| I12.In the last 12 months, in which months was this Biogas scarce and significantly more expensive? <br> I3_BG $==1$ | muLti-SELECT $111 \quad \square$ Available all year $001 \square$ 13th April-13th May $002 \square$ 14th May-14th June $003 \square$ 004 $\square$ 15th June-15th July 16 th July-16th August | I12_BG |

I. HOUSEHOLD FUEL CONSUMPTION FOR COOKING
R. GARBAGE

I2.Contains (18)

I3.In the last 12 months, did your house-hold

01 O Yes
02 O No

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

E I3_GP == 1

```
MULTI-SELECT
0 1 \square ~ L I G H T I N G ~
\square\square COOKING
03 \square HEATING
\square FIRE STARTER/ IGNITION
05 BOILING WATER
06
    \square \mp@code { H O M E - B A S E D ~ I N C O M E }
    ACTIVITY
```


## J. USE OF COOKING SOLUTIONS

| Enumerator: Record Respondent name for this | SINGLE-SELECT: LINKED |
| :--- | :--- |
| section |  |
| J1A.How many cookstoves does your | NUMERIC: INTEGER |
| household use? |  |
| I Number of cookstoves |  |
| V1 self < 11 |  |
| M1Too 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?

[^1]$05 \square$ Kerosene stove
$06 \square$ Solar Cooker
$07 \square$ LPG/Natural gas stove
08 Electric/Induction/rice cooker

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




|  | Read aloud options $\text { J20_B != } 16 \text { \&\& I2.Length > } 1$ | $\begin{aligned} & 02 \text { 〇 } \\ & 03 \text { Mostly available } \\ & 03 \\ & 04 \bigcirc \\ & \text { Rometimes available } \\ & \text { Rarely available } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
|  | 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]? <br> Minutes, per Meal <br> self < 500 <br> Value too large. Please check. | NUMERIC: INTEGER | J22 |
|  | J23.In the last 7 days, how many days did you use \%rostertitle\%? <br> self < 8 <br> Please enter less than 8. | NUMERIC: INTEGER | J23 |
|  | 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? <br> Minutes <br> self < 361 <br> It took too long. Please check. | NUMERIC: INTEGER | J25 |
|  | 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 <br> Minutes <br> self < 361 <br> It took too long. Please check. | NUMERIC: INTEGER | J26 |
|  | 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? <br> Minutes <br> self < 361 <br> It took too long. Please check. | NUMERIC: INTEGER | J27 |
|  | 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)? <br> Minutes <br> self < 1441 <br> Value too large. Please check. | NUMERIC: INTEGER | J28 |
|  | J29.In the last 7 days, on average, how much time did your household use this cookstove | NUMERIC: INTEGER | J29 |

[^2]|  | J30.Do you also use \%rostertitle\% for space heating? | $\begin{aligned} & 01 \text { O Yes } \\ & 02 \bigcirc \text { No } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: |
|  | J31.In the last 12 months, during which of the following months did you use \%rostertitle\% for heating? | ```multi-SELECT 111 \square Used all year 001``` <br> ```13th April-13th May ``` | J31 |
| E | J30 $=1$ | $002 \square$ 14th May-14th June |  |
|  | (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)) | $\begin{array}{ll} 003 \\ 003 & \text { 15th June-15th July } \\ 004 & \text { 16th July-16th August } \end{array}$ |  |
|  | Error ! If response is used all year, don't select other options. | 005   <br> 0 $\square$ 17th August-16th September <br> 006 $\square$ 17th September-16th October <br> 007 $\square$ 17th October-15th November <br> 008 $\square$ 16th November-15th <br> 009 December  |  |
|  | J32.In a typical month, how many hours do you use \%rostertitle\% for heating each day? | NUMERIC: INTEGER | J32 |
|  | NUMBER OF HOURS $\begin{aligned} & \text { J30 }==1 \\ & \text { self }<25 \end{aligned}$ <br> Please enter less than 25. |  |  |
|  | J33.In the last 12 months, what type of harm/injury did your household face from \%rostertitle\%? | ```MULTT-SELECT 09 \square None``` <br> ```Death or permanent damage ``` <br> ```Burns/fire ``` <br> ```Severe cough/respiratory problem ``` <br> ```Other major injury ``` <br> ```Minor injury ``` <br> ```Fire with no injury ``` <br> ```Itchy/watery eyes ``` <br> ```Light cough \\ 10 ``` <br> ```Poisoning ``` | J33 |
| E | J33A.What are the reasons for this injury? <br> J33. ContainsAny (1,2,3, 4, 5, 6, 7, 8, 10) | SINGLE-SELECT <br> 001 Carelessness or human error <br> 002 Problem with the stove or malfunction Problem with fuel Other, specify | J33A |
|  | J33A. Specify Others | TEXT | J33A_SO |
|  | J33A $=555$ |  |  |
|  | J34.Is this \%rostertitle\% is your main cookstove? | SINGLE-SELECT <br> 01 O Yes <br> 02 No | J34 |
|  | J35.Why do you not use \%rostertitle\% most of the time? <br> J34 == 2 | multi-select <br> $001 \square$ Electricity/fuel for this stove unavailable | J35 |

$001 \square$ Electricity/fuel for this stove unavailable
$002 \square$ Electricity/fuel for this stove too expensive
$003 \square$ Certain type of cooking is not possible with this stove
$004 \square$ Cookstove does not have enough burners
$005 \square$ Cookstove flame is too weak
$006 \square$ Stove takes a long time to cook food
$007 \square$ Electricity/fuel takes a long time to prepare
$008 \square$ Stove is difficult/inconvenient to use
$009 \square$ I prefer another energy source but the electricity/fuel is too expensive or often not available
$010 \square$ Certain type of meals taste better with another stove
$555 \square$ Other, specify

| J35. Specify Others | TEXT | J35_SO |
| :--- | :--- | :--- |
| J35.Contains (555) | $-\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |  |

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\% | NUMERI: INTEGER | J37_A |
| :--- | :--- | :--- | for \%rostertitle\% in the last month/in a typical month when you use the stove?-MOST USED

I ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF TH E FUEL.
E J34 == $1 \& \& ~ J 20 \_$A != 16
J37_B. How much do you spend on the \%J20_B\% for \%rostertitle\% in the last month/in a typical month when you use the stove?-B. Second most used

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

J39.Record the rough shape of the cooking space

E $\mathrm{J} 38=1$

## SINGLE-SELECT

J38
$001 \bigcirc$ Yes
002 No
888 Don't Know

## SINGLE-SELECT

J39
01 O Roughly square
02 〇 Roughly rectangular

|  | $\begin{aligned} & 03 \bigcirc \text { Roughly Circular } \\ & 04 \bigcirc \text { None of the above } \end{aligned}$ |  |
| :---: | :---: | :---: |
| 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 |
| $\begin{aligned} & \text { I Feet } \\ & \text { E J39.InList }(1,2,3) \end{aligned}$ |  |  |
| J41.Record the dimensions of the cooking space Rectangle, record side 2 | NUMERIC: INTEGER | J41 |
| $\begin{aligned} & \text { I Feet } \\ & \text { E J39 == } \end{aligned}$ |  |  |
| J42. Record the type of roof covering the cooking space <br> E J39. InList (1,2,3) | SINGLE-SELECT <br> 01 Flat Roughly Conical Gable (triangular crosssection) <br> 04 None of the above | J42 |
| J43.Estimate the height of the highest point of the ceiling relative to your own height | NUMERIC: INTEGER | J43 |
| ```I Feet E J42.InList \((1,2,3)\)``` |  |  |
| J44. How many doors and windows (opening to the outside) does the cooking space have? | NUMERIC: INTEGER | J44 |
| E J42.InList (1,2,3) |  |  |

## K. SPACE AND WATER HEATING

| K1. Do you heat water for washing (either for washing dishes and clothes or for bathing)? | single-select <br> 01 O Yes <br> 02 O No | K1 |
| :---: | :---: | :---: |
| K2. What is the main source you use to heat water? $\mathrm{E} \text { K1 }=1$ | SINGLE-SELECT Electric heater/boiler Electric kettle/coil Electric stove Gas heater Gas stove Solar thermal system <br> 07 Same solid fuel stove used for cooking <br> Separate solid fuel stove Kerosene stove | K2 |
| K3.What is the MAIN fuel you use in this stove? <br> F I2.Contains(@optioncode) <br> E K2.InList (8,9) | ```SINGL--SELECT 001 O LPG/cooking gas 0 0 2 ~ O ~ W o o d ~ p u r c h a s e d 003 O Wood collected 004 O Solar 005 O Kerosene``` | к3 |



## L. WILLINGNESS TO PAY FOR AN IMPROVED COOKSTOVE

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

## L1.CAPI/ Enumerator: Recall responses to

 Section H (HOUSEHOLD FUEL CONSUMPTION) and record the most frequently used fuel. If not sure, ask respondent.SINGLE-SELECT
01 O HH uses more fuelwood or crop residues than charcoal
02 O HH uses more charcoal than fuelwood or crop residues
03 O HH does not use any solid biomass (no charcoal, fuelwood or crop residues)

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_I |
| :---: | :---: | :---: |
|  |  |  |

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 <br> SCOPE: IDENTIFING |
| :--- | :--- |
|  |  |

STATIC TEXT
E Eco_Reg == $31 \mid$ (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 <br> SCOPE: IDENTIFYING$\quad$ Prefilled_L2 |
| :--- | :--- |

SCOPE: IDENTIFYING

STATIC TEXT
E (Eco_Reg.InList $(1,2))$
\%Prefilled_L1\%
static text
E Eco_Reg == 3
\%Prefilled_L2\%

Enter the amount for cookstove displayed above．

E L1．InList（1，2）
V1 self＝＝Prefilled＿L1｜｜self＝＝Prefilled＿L2
M1 Error！Please enter the amount displayed above．

NUMERIC：INTEGER

L3．Would you be willing to purchase this cookstove at \％CF＿Stove\％？

E L1．InList（1，2）
L4．Would you be willing to pay \％CF＿Stove\％for this stove，if you were given 6 months to make the payment？

E L1．InList $(1,2) \& \& \operatorname{L3}==2$

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

E L4．InList $(2,888) \& \& \mathrm{~L} 3=2$
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 $==2$

L7．Why would you not accept the offer？
E
L6．InList $(2,888)$
L7．Specify Others
E L7 $=555$

| L8．What is the most important attribute for |
| :--- |
| you in a cook stove？ |
| E L6．InList $(2,888)$ |

SINGLE－SELECT
$01 \bigcirc$ Yes
02 ○ No

## SINGLE－SELECT

001 O Yes
$002 \bigcirc$ No
888 D Don＇t Know

SINGLE－SELECT
001 ○ Yes
002 ○ No
888 O Don＇t Know

SINGLE－SELECT
001 ○ Yes
002 ○ No
888 Don＇t Know
SINGLE－SELECT L7

001 〇 Cannot afford the payment
002 〇 Do not need an improved cookstove
$003 \bigcirc$ Fuel for this stove is unreliable
004 O Do not have sufficient information about this stove
555 ○ Other，specify
TEXT L7＿SO
$\qquad$

SINGLE－SELECT
01 O Cleanliness（less emission）
02 〇 Speed of cooking（time saving）
$03 \bigcirc$ Fuel saving
$04 \bigcirc$ Cost of stove
$05 \bigcirc$ Aesthetic value
06 O Ease of use
07 ○ Durability
08 O Multiple pot option
09 O Ability to control fire power
10 O Portability
11 ○ Additional functions（mobile charging，lighting）
12 O Space heating（for high hills and mountains）

\begin{tabular}{|c|c|c|}

\hline SELECT ITEMS \& \begin{tabular}{l}

```
MULT-SELECT:YES/NO
01 \square/\square Vehicle (Car, pickup truck, etc)
02\square/\square Motorcycle
03 \square/\square Bicycle
05 \square/\square Boat
06 \square/\square Tractor
    \square/\square Domestic water pump
```

<br>

```Cow/bull/calves
```

<br>

```Water buffalo
```

<br>

```Horse/donkey
```

<br>

```Sheep
```

<br>

```Goat
```

<br>

```Pig
```

<br>

```/ Rabbit
```

<br>

```Fish (Aquaculture)
```

<br>

```Chicken \\
18
```

<br>

```Duck
```

\end{tabular} \& N_LIST1 <br>

\hline Specify Others \& text \& N_LIST1_SO <br>
\hline E N_LIST1.Yes.Contains (16) \& \& <br>
\hline
\end{tabular}

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

Roster: ROSTER-(N1-N16B)
generated by multi-select question N LIST1
R_NLIST1

\begin{tabular}{|c|c|c|}
\hline (N1-N16B) How many Vehicle \%rostertitle\% in (working condition or still healthy) does your household own? \& NUMERIC: DECIMAL \& N1 A <br>

\hline SELECT ITEMS \& \begin{tabular}{l}

```
MULT-SELECT: YES/NO
01 \square/\square Incandescent Light Bulb
02 \square/\square Fluorescent Tube
03 \square/\square Compact Fluorescent Light (CFL)
Bulb
04 \square/\square LED Light Bulb
05 \square/\square Radio/CD Players/sound system
06 \square/\square VCD/DVD
07 \square/\square Fan
08 \square/\square Refrigerator
\square/\square Hair dryer
```

```None
```

```None
```

```None
```

<br>

```Electric Iron
```

<br>

```/ \(\square\) Washing machine
\(\square\) \(\square\) Electric sewing machine
\(\square\)
\(\square\)None
```

\end{tabular} \& N LIST2 <br>

\hline Specify Others \& text \& _LIST2_SO <br>
\hline
\end{tabular}

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

Roster: ROSTER-(N17-N45)
generated by multi-select question N LIST2 R_LIST2

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

## 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 <br> 01 O Yes <br> 02 O No | P1_A |
| :---: | :---: | :---: |
| P2.Who was affected by the event? $P 1 \_A=1$ | SINGLE-SELECT Just this household Family members outside HH Several HHs in this village Most or all HHs in this village Several villages in this area |  |

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

\begin{tabular}{|c|c|c|}
\hline P1.In the last 12 months, have you been affected by (...)? \& $$
\begin{aligned}
& \text { Single-Select } \\
& 01 \bigcirc \text { Yes } \\
& 02 \bigcirc \text { No }
\end{aligned}
$$ \& P1_B <br>
\hline P2.Who was affected by the event?
\[
P 1 \_B=1

\] \& \begin{tabular}{l}
single-select
Just this household

Family members outside HH
Several HHs in this village <br>
Most or all HHs in this village <br>
05 Several villages in this area
\end{tabular} \& P2_B <br>

\hline
\end{tabular}

## Q. STREET LIGHTING

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

| Q1.Respondent name | SINGLE-SELECT: LiNKED | Q1 |
| :---: | :---: | :---: |
| Q2.Does your neighborhood have any form of street lighting? <br> "Neighborhood" means 0.5 KM from Household | single-select <br> 01 O Yes <br> 02 O No | Q2 |
| Q3.How satisfied are you by the brightness of the street lighting service in your neighborhood? $\mathrm{Q} 2=1$ | SINGLE-SELECT Very unsatisfied <br> 02 Somewhat unsatisfied Somewhat satisfied <br> 04 Very satisfied | 23 |
| Q4.What do you think are the risks/problems with street lighting in your neighborhood? $\mathrm{Q} 2=1$ | mULTT-SELECT $001 \quad \square$ Electrocution $002 \square$ Poor installation $003 \square$ Poor maintenance $004 \square$ Outages/blackouts of street $005 \square$ lighting $0 . \square$ Does not stay on all night $111 \square$ No risks/problems $555 \quad \square$ Other specify | Q4 |
| Q4. Specify, others <br> Q4. Contains (555) | TEXT | Q4_So |
| Q5.Do you have a light that you could turn on at night to provide light outside your home? <br> Instruction | SINGLE-SELECT <br> 01 ○ Yes <br> 02 ○ No | 25 |
| Q6.How many hours do you turn it on each night after it becomes dark? | NUMERIC: INTEGER | Q6 |

E $25=1$
V1 self <= 13
M1 Error. Please enter less than or equal to 13 .

## R.TIME USE

Please select the household member group".

E HH ROSTER.Any ( $x=>x . A 3==2$ \&\& $x . A 5>=15$ ) || HH ROSTER.Any ( $x$ $=>\bar{x} \cdot A 3==2$ \&\& x.A5<=15) || HH_ROSTER.Any ( $x=>\bar{x} . A 3==1$ \&\& $x$. $A 5>=15)|\mid$ HH_ROSTER.Any ( $x=>\bar{x} . A 3==1 \quad \& \& \quad x . A 5<=15$ )
V1 (self.Contains (1) \&\& HH_ROSTER.Any (x=>x.A3 $==2$ \&\& $x . A 5>=1$ 5) ) || (self.Contains $(\overline{2})$ \&\& HH_ROSTER.Any ( $x=>x . A 3==2$ \&\& $x . A 5<=15$ ) ) || (self.Contains (3) \&\& HH ROSTER.Any (x=>x.A $3==1$ \&\& x.A5>=15) ) || (self.Co And 52 other symbols [1]

M1 Error ! Please select member group by taking reference with househo d roster.
MULTI-SELECT
$01 \quad$ Women (Age 15 yrs and older)
$02 \square$ Girls(Under age 15 yrs)
$03 \square$ Men(Age 15 yrs and older
$04 \square$ Boys(Under age 15 yrs)

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

01 ○ Yes
02 ○ No
$\qquad$
R2.A. In a typical day, how many total minutes did \%rostertitle\% spend gathering, collecting or purchasing fuels including travel time?
$\begin{array}{ll}\text { I } & \text { minutes } \\ \text { E } & \text { R1_A }==1\end{array}$

| R3.A.How often does your household collect or purchase fuel? | SINGLE-SELECT | R3_A |
| :---: | :---: | :---: |
|  | 001 O Daily |  |
| R1 A == 1 | 002 O Weekly |  |
|  | 003 O Bi-Weekly |  |
|  | 004 O Monthly |  |
|  | 555 O Other, specify |  |


| R3.A Specify Others | TEXT |
| :--- | :--- |
| E R3_A $=555$ | $\ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ |


| R4.A.How many times do the household | NUMERIC: INTEGER |
| :--- | :--- |
| members go to collect/purchase fuels |  |

\%R3_A\%?
I Number of times
E R1_A $=1$

| R9.A.In a typical day, does anyone from your | Single-Select | R9_A |
| :--- | :--- | :--- |
| household spend time preparing fuel/energy | 01 〇 Yes |  |
| source (chopping, making pellets)? | 02 O No |  |


| R10.A.In a typical day, how many total minutes | NUMERI: INTEGER R10_A |
| :--- | :--- | did \%rostertitle\% spend preparing fuel/energy source (chopping, making pellets)?

I minutes
E R9_A $=1$

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

E R9_A. InList $(1,2)$
R12.A.In a typical day, how many total minutes did \%rostertitle\% spend cooking (food, tea, boiling water)?

| SINGLE-SELECT | R11_A |
| :--- | :--- |
| 01 Yes |  |
| 020 No |  |

I minutes
E R11_A == 1
R13.A. In a typical day, does anyone from your household spend other time in cooking area(s)?

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)?

## SINGLE-SELECT

$01 \bigcirc$ Yes
02 O No

I Minutes
E R13_A $==1$


R23_A == 1


## S. HEALTH IMPACTS

Please select the household member group".

E HH ROSTER.Any ( $\mathrm{x}=>\mathrm{x}$. $\mathrm{A} 3==2$ \&\& $\mathrm{x} . \mathrm{A} 5>=15$ ) || HH ROSTER.Any $(\mathrm{x}$ $\Rightarrow \bar{x} . A 3==2$ \&\& $x . A 5<=15)|\mid$ HH_ROSTER.Any ( $x=>\bar{x} . A 3==1$ \&\& $x$. A5>=15) || HH_ROSTER.Any ( $x=>\bar{x} . A 3==1 \& \& x . A 5<=15$ ) || HH_R OSTER.Any (x=>x.A5<= 4)
V1 (self.Contains (1) \&\& HH_ROSTER.Any ( $x=>x$.A3 $==2$ \&\& $x$.A5 $>=1$ 5) ) || (self.Contains ( $\overline{2}$ ) $\& \&$ HH ROSTER.Any ( $x=>x . A 3==2$ \&\& x.A5<=15) ) || (self.Contains (3) \&\& HH ROSTER.Any (x=>x.A $3==1 \& \& x . A 5>=15$ ) ) || (self.Co And 105 other symbols [2]
M1 Error ! Please select member group by taking reference with househol d roster.

MULTI-SELECT
MULTI HEALTH IMPACTS
$01 \square$ Women (Age 15 yrs and older)
$02 \square$ Girls(Under age 15 yrs)
$03 \square$ Men(Age 15 yrs and older
$04 \square$ Boys(Under age 15 yrs )
$05 \square$ Young Children (0-4 years)
S. HEALTH IMPACTS

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

S1.A. Has anyone from your household had an illness with a cough at any time in the last 14 days?

SINGLE-SELECT
$01 \bigcirc$ Yes
02 ○ No

S2.A. Number of \%rostertitle\% with an illness with a cough at any time in the last 14 days?

E S1_A $=1$

S3.A. Of \%rostertitle\% who had an illness with a cough, how many went to see a doctor/clinic?

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

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
breathing?
E S2_A > 0
V1 self <= S2 A
M1 Please enter less than or equal to \%S2_A\%.
S5.A. Please select the following for \%rostertitle\% suffering from short, rapid breaths or difficult breathing, experienced a problem in the chest or a blocked or runny nose?

E S4_A > 0
MULTI-SELECT
$01 \quad \square$ Chest only
$02 \square$ Nose
$03 \square$ Both
$04 \square$ Other
$05 \square$ Don't know

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

E S5_A.Contains (1)

| S5.A.Please enter the number of people who | NUMERIC: INTEGER | S5_A_NOSE |
| :--- | :--- | :--- | are suffering form rapid breathe or difficult breathing and problem in nose?

    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?

```
    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?
    E S5_A.Contains (4)

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

```
E S4_A > 0 || S1_A == 2
```

    S7.A. Number of \%rostertitle\% with eye
    irritation or eye problems in the last 14 days?
    E S6A $A=1$
S8.A. Has anyone from your household had any
poisoning from liquid fuel?
E S6_A.InList (1,2)

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

E S8_A $=1$
S10.A.Has anyone from your household had any burns related to cooking or heating or fuel?

E S8_A.InList (1,2)

S11.A. In the last 12 months, how many
\%rostertitle\% have experienced burns related to cooking or heating or fuel?

E
S10_A ==

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

E S11_A > 0

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

$01 \bigcirc$ 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?

E S13_A $==1$
S15.A.Has anyone from your household had any electrical injuries (e.g. shocks) that prevent attendance in school/work?

E S13_A.InList $(1,2)$
S16.A.In the last 12 months, how many \%rostertitle\% have experienced electrical injuries (e.g. shocks) that prevent attendance in school/work?

E S15_A == 1
S17.A.Has anyone from your household had any other minor electrical injuries?

E S15_A. InList $(1,2)$
S18.A.In the last 12 months, how many \%rostertitle\% have experienced other minor electrical injuries?

SINGLE-SELECT
S15 A
$01 \bigcirc$ Yes
$02 \bigcirc \mathrm{NO}$

S17 A == 1

## SINGLE-SELECT

$01 \bigcirc$ Yes
02 ○ No

NUMERIC: INTEGER

## T. ATTITUDES

| T2.How has the price of electricity changed | SINGLE-SELECT | T2 |
| :---: | :---: | :---: |
| over the last 12 months? | 001 O It has gotten much higher |  |
| pe 888 if | 002 O Stayed about the same |  |
| elevant.) | 003 ○ It has gotten cheaper |  |
| $\mathrm{C} 2=1$ | 888 ○ Don't know |  |
| T3. How has the frequency of black out or | Single-select | T3 |
| brown out changed over the last 12 months? | 001 O It has gotten worse |  |
| Read options aloud (Do not read option Don't know aloud, type 888 if $r$ | 002 O Stayed the same |  |
| elevant.) | $003 \bigcirc$ Better |  |
| C2 == 1 | 888 ○ Don't know |  |
| T4.What are the main reasons you experience | multi-SELECT | T4 |

power shortages?

E C2 == 1

01Demand for electricity exceeds supply
$\square$ Damage to critical infrastructure due to conflict / fighting
03
Lack of investment in the sector (and/or new power generation assets)
04Lack of general maintenance of critical infrastructure by the central government
05Lack of general maintenance of critical infrastructure by the regional / local government
06 Electricity theft
07Other (please specify)


T7.If you could use your \%C175\% to power an appliance that you do not currently own, what would it be?

I Instruction
E C175 != 111 \&\& C175 != 4

|  | 111 No additional appliances required <br> 555 Other, specify |  |
| :---: | :---: | :---: |
| T7. Specify Others | text | T7_So |
| E T7.Contains (555) |  |  |
| T8.Why do you not yet own one of these | multi-select | T8 |
| appliances? | $001 \square$ Too expensive |  |
| E !T7.Contains(111) | $002 \square$ No products available |  |
|  | ```003 \square Products require too much energy, cannot power them with my system 5 5 5``` <br> ```Other, specify ``` |  |
| Specify Others | TEXT | T8_SO |

E T8．Contains（555）

## SINGLE－SELECT

01 〇 Very satisfied
02 〇 Somewhat satisfied
$03 \bigcirc$ Neutral
04 O Unsatisfied
05 〇 Very unsatisfied

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

## static text

## Electricity

T10．It is important for my household to
conserve electricity．

|  | $\begin{aligned} & 02 \bigcirc \text { Disagrees } \\ & 03 \bigcirc \text { No Opinion } \end{aligned}$ |  |
| :---: | :---: | :---: |
| T11．I am concerned with the reliability of public electricity supply（i．e．，frequent power shortages） | SINGLE－SELECT <br> 01 〇 Agrees Disagrees <br> 03 No Opinion | T11 |
| T12．I would be willing to pay more for public electricity if supply was more reliable | SINGLE－SELECT Agrees <br> 02 Disagrees <br> 03 No Opinion | T12 |
| T13．Higher public electricity prices would lead to a better service． | SINGLE－SELECT Agrees <br> 02 Disagrees <br> 03 No Opinion | T13 |
| T14．The current price for public electricity is fair． | single－select Agrees <br> 02 Disagrees <br> 03 No Opinion | T14 |
| T15．The monthly electric bill is or would be a financial burden for my family． | SINGLE－SELECT Agrees <br> 02 Disagrees <br> 03 No Opinion | T15 |
| T16．The electricity makes it easy to have information and the news． | SINGLE－SELECT <br> 01 〇 Agrees Disagrees <br> 03 No Opinion | T16 |
| T17．Watching TV provides my household with great entertainment． | SINGLE－SELECT <br> 01 〇 Agrees Disagrees <br> 03 No Opinion | T17 |

T18.News and information from radio and television provide good information relevant for conducting business and agricultural activities.

SINGLE-SELECT
T18
01 ○ Agrees
02 〇 Disagrees
03 ○ No Opinion
$\left.\begin{array}{l|ll}\begin{array}{l}\text { T19.News and information from radio and } \\ \text { television provide good knowledge on family } \\ \text { health issues. }\end{array} & \begin{array}{l}\text { SINGLE-SELECT } \\ 01 ~ \bigcirc ~ A g r e e s ~\end{array} \\ & 02 \text { O Disagrees } \\ 03 \bigcirc \text { No Opinion }\end{array}\right]$

STATIC TEXT
Energy Subsidies

| T21.The current public electricity prices reflect the cost of production. | SINGLE-SELECT Agrees <br> 02 Disagrees <br> 03 No Opinion | T21 |
| :---: | :---: | :---: |
| T22.The amount I pay to \{UTILITY\} for electricity covers the real cost of providing me with electricity. | SINGLE-SELECT <br> 01 〇 Agrees Disagrees <br> 03 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 Agrees <br> 02 Disagrees <br> 03 No Opinion | T23 |
| 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 <br> 01 Agrees <br> 02 Disagrees <br> 03 No Opinion | T24 |
| T25.Why is energy conservation important to your household? (Up to 3 options) <br> Upto 3 responses. | MULTI-SELECT$001 \quad$To save money for my family <br> 002 <br> 003 <br> $\square$ To help the planetTo burn fewer fossil fuels sothat our air is cleaner004$\square$Because my neighbors areworking hard to conserveenergy | T25 |
| Specify Others <br> T25. Contains (555) | text |  |

001 O Tariffs should remain unchanged
002 O Tariffs should be increased
${ }_{0} 03$ Tariffs should be decreased
888 O Don't know

| T27.[Provide information on extent of subsidies.] Do you think that greater awareness of the extent of the cost of energy subsidies will make you more likely to support a reduction of these subsidies? | ```SINGLE-SELECT 001 \bigcirc Yes 0 0 2 \bigcirc ~ N o 8 8 8 \text { O Don't know}``` | T27 |
| :---: | :---: | :---: |
| T28.How would you cope if electricity prices increase? | ```SINGLE-SELECT 001 O Consume less electricity 0 0 2 \bigcirc ~ C u t ~ d o w n ~ o n ~ o t h e r ~ c o s t s ~ i n your budget 0 0 3 ~ \bigcirc ~ D o ~ n o t h i n g , ~ i t ~ w i l l ~ c o m e ~ o u t ~ o f savings or other monies Other, (specify)``` |  |
| T28. Specify Othes $\mathrm{T} 28=888$ | text | T28_SO |
| T29.If public electricity tariffs are to increase, who should pay higher prices? | SINGLE-SELECT Wealthy households Middle income households Poor + near poor households <br> Government agencies Industry <br> Urban households <br> Rural households <br> Everyone | T29 |


| T30. If you had to pay increased tariffs for electricity, how would you like government to utilize this additional money? | SINGLE-SELECT <br> 001 O Healthcare schemes Education Jobs <br> Pension plans <br> Transport <br> Urban/Rural development Electricity Other, please specify | т30 |
| :---: | :---: | :---: |
| T30. Specify Others | text | T30_S0 |
| E T30 $==888$ |  |  |
| T31. What do you think is the top concern for the country's energy sector? Single response. | SINGLE-SELECT | T31 |
|  | $01 \bigcirc$ Corruption in the sector |  |
|  | 02 O Investing in new infrastructure |  |
|  | $03 \bigcirc$ Energy security |  |
|  | 04 O Energy theft (illegal connections) |  |
|  | $05 \bigcirc$ Tariffs |  |

## U. WOMEN'S EMPOWERMENT

Respondents should be a female headed household or female spouse of the household head/member in the household.

STATIC TEXT
MOBILITY STATEMENT Can you do the following activities alone or you have to go with your husband: Mark who decides about each of the activities below.

| U1.Visiting parents/relatives/friends within or outside the village | SINGLE-SELECT Can do herself <br> 02 Can do with husband <br> 03 Can do with others <br> 04 Other Specify | U1 |
| :---: | :---: | :---: |
| U1. Specify Others | TEXT | U1_So |
| U1 $=4$ |  |  |
| U2. Going to markets/banks/commercial centers/places of work. | single-select | U2 |
|  | 01 O Can do herself |  |
|  | 02 O Can do with husband |  |
|  | $03 \bigcirc$ Can do with others |  |
|  | $04 \bigcirc$ Other Specify |  |
| U2. Specify Others | text | U2_S0 |
| U2 $=$ = 4 | -............................... |  |
| U3.Going outside the village | single-Select | U3 |
|  | 01 O Can do herself |  |
|  | 02 O Can do with husband |  |
|  | $03 \bigcirc$ Can do with others |  |
|  | 04 O Other Specify |  |
| U3. Specify Others | TEXT | U3_So |
| U3 $=4$ |  | ...- |

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

U4.If you are a member of a women's group, which type of group are you a member of/do you belong to?

| multi-SELECT | U |
| :---: | :---: |
| $001 \square$ Not a member |  |
| $002 \square$ Mother's Group |  |
| $003 \square$ Agricultural Cooperatives |  |
| $004 \square$ Producer Group |  |
| $005 \square \begin{aligned} & \text { Female Community Health } \\ & \text { Volunteers (FCHVs) }\end{aligned}$ |  |
| ```006 \square Commodity/Community User Group (Forest, Water etc.)``` |  |
| $007 \square$ Single Women Group |  |
| $\begin{aligned} & 008 \text { Saving/Saving and Credit } \\ & \text { Cooperatives } \end{aligned}$ |  |
| $009 \square$ Other Sef Help Groups |  |
| $555 \square$ Other specify |  |
| text | U4_So |

E U4.Contains(555)


## M. CONSUMPTION / EXPENDITURE

## STATIC TEXT

Interviewer Instructions: The Respondent should be the head of household.
M. Please select items

## M. CONSUMPTION / EXPENDITURE

## Roster: ROSTER COMSUMPTION

| generated by multi-select question M ITEMS |  | ROSTER_M |
| :---: | :---: | :---: |
| (M1-M11).A.Value of Consumption (local currency) during last 7 days: Purchased. | NUMERIC: INTEGER | M_A |
| I 888=Don't know |  |  |
| (M1_M11).B.Value of Consumption (local currency) during last 7 days Produced/Acquired. | NUMERIC: INTEGER - --------- | M_B |
| I 888=Don't know |  |  |
| (M1-M11).C. Value of Consumption (local currency) during last 7 days Received as a gift/ Donation. | NUMERIC: INTEGER - - - ----- - - | M_C |
| I 888=Don't know |  |  |

## M. CONSUMPTION / EXPENDITURE <br> EXPENDITURE-VALUE OF EXPENDITURE (LOCAL CURRENCY) DURING LAST 7 DAYS -888=DON'T KNOW

M. CONSUMPTION / EXPENDITURE / EXPENDITURE-VALUE OF EXPENDITURE (LOCAL CURRENCY) DURING LAST 7 DAYS -888=DON'T KNOW GOODS AND SERVICES MONTHLY EXPENDITURE

| M12.Medical/pharmacy expenses (e.g.: tablets/syrups, insecticide, condoms, pharmacy/chemist, traditional/herbal medicine) | NUMERIC: InTEGER | M12 |
| :---: | :---: | :---: |
| M13.Soaps, disinfectants and cleaning supplies; cosmetics and toiletries | NUMERIC: INTEGER | M13 |
| M14.Water supply for drinking and other uses (tanker services, pipe-borne, metered, borehole, well, purchased water) | NUMERIC: INTEGER | M14 |
| M15.Mobile phone top-up | NUMERIC: INTEGER | M15 |
| M16.Internet, land phone, dish, cable, and other household communication | NUMERIC: INTEGER | M16 |
| M17.House Rent | NUMERIC: Integer | M17 |
| M18.Transportation costs (fuel for own vehicles, cost of public transportation, buses, taxis) | NUMERIC: INTEGER | M18 |
| M19.Other recurring monthly expenditure | NUMERIC: INTEGER | M19 |

(wage of domestic workers, entertainment, etc.)
$\qquad$
$\qquad$
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 | M20 |
| :---: | :---: | :---: |
| I NPR |  |  |
| M21.Clothing, shoes, and accessories | NUMERIC: INTEGER | M21 |
| I NPR |  |  |
| M22.Celebrations (e.g. funerals and expenses, weddings, festivals, naming ceremony, engagement) | 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, public hospital, traditional healer) | NUMERIC: INTEGER | M24 |
| I NPR |  |  |
| M25.Furniture (e.g.: mattresses, room furniture, furnishing items, floor mats, carpets) | 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 | NUMERIC: INTEGER | M28 |
| I NPR |  |  |
| M29.Appliances \& tools (e.g.: electric iron, electric fans, refrigerators, lanterns, brooms) | NUMERIC: INTEGER | M29 |
| NPR |  |  |
| M30.Vehicles \& motorcycle \& bicycle (purchase or repair of own car/moto/ car battery) | NUMERIC: INTEGER | M30 |


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

## O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

STATIC TEXT
Instruction: Enter the total values of following assets owned by the household. If some assets are owned by members, report aggregate values for all members. The Respondent should be the head of household.
O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

AGRICULTURAL LAND (INCLUDING CULTIVATED LAND, RESTING LAND, PREPARATION LAND AND OTHERS LIKE LAND FOR ANIMAL FOOD)
$\left.\begin{array}{l|l}\hline \hline \begin{array}{l}\text { O1. Do you own agricultural land (including } \\ \text { cultivated land, resting land, preparation land } \\ \text { and others like land for animal food)? }\end{array} & \begin{array}{l}\text { SINGLE-SELECT } \\ 01 ~ O ~ Y e s ~\end{array} \\ 00 \text { N No }\end{array}\right]$

CONTROL SHEET - INTERVIEW STATUS
mobile or landline number?

STATIC TEXT
Thank You very much for your time.

CONTROL SHEET - INTERVIEW STATUS
VISIT 1 : STATUS

| Gps Location | GPS LOCATION |  |
| :---: | :---: | :---: |
|  | $\bar{N}$-------------------------------- |  |
|  | $\overline{\mathrm{w}}$-------------------------------- |  |
|  |  |  |
| End time of Interview | DATE: CURRENT TIME | TIME_END_VISIT1 |
| Disposition Code | Single-select | DISP1 |
|  | 01 ○ No Household Member at home or no competent respondent at home |  |
|  | 02 O Entire household absent for extended period |  |
|  | $03 \bigcirc$ Dwelling vacant or address not a dwelling |  |
|  | $04 \bigcirc$ 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 a new time scheduled) |  |
|  | 07 O Partial Complete/Will Return (interview was stopped but will continue later) |  |
|  | 08 ○ Partial Complete/Interview Finished (interview was stopped and will not continue) |  |
|  | Final Refusal (interview was refused/no interview completed): |  |
|  | $\begin{aligned} & 10 \text { Temporary Refusal (interview } \\ & \text { was refused, FS will follow-up) } \\ & 11 \text { Other Non-Interview (specify) } \end{aligned}$ |  |
| Other Non-Interview (specify) | TEXT | OTHER1_SPECIFY |
| DISP1= $=11$ | -............................................................................... |  |
| [ENUMERATOR : Record date on when respondent can be contacted | TEXT | RESCHD_2 |
| $\begin{aligned} & \text { DISP1==1 \|\| DISP1==6 \|\| DISP1==7 \|\| DISP1==10 \|\| DISP1== } \\ & 11 \end{aligned}$ |  |  |
| [ENUMERATOR : Record time on when respondent can be contacted | TEXT | RESCHD_2_T |
| DISP1==1 \|| DISP1==6 || DISP1==7 || DISP1==10 || DISP1== 11 |  |  |
|  | text | RESCHD_2_D |

[ENUMERATOR : Record contact number of respondent

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 3 with respondent | date | DATE_VISIT3 |
| :---: | :---: | :---: |
| Disposition Code | SINGLE-SELECT <br> 01 O No Household Member at home or no competent respondent at home extended period Dwelling vacant or address not a dwelling <br> Out of Scope (the household is not within the sample) complete) <br> Postponed/Rescheduled (interview was postponed and a new time scheduled) <br> Partial Complete/Will Return (interview was stopped but will continue later) <br> Partial Complete/Interview Finished (interview was stopped and will not continue) Final Refusal (interview was refused/no interview completed): Temporary Refusal (interview was refused, FS will follow-up) Other Non-Interview (specify) | DISP3 |
| Other Non-Interview Specify | text | OTHER3_SPECIFY |

[1] MULTI_TIME_USE: Please select the household member group".
Validation Condition:


Validation Message: Error ! Please select member group by taking reference with household roster.
[2] MULTI_HEALTH_IMPACTS: Please select the household member group".
Validation Condition:

```
(self.Contains(1) && HH ROSTER.Any (x=>x.A3==2 && x.A5>=15) ) ||
(self.Contains(2) && HH-ROSTER.Any (x=>x.A3==2 && x.A5<=15) ) |
(self.Contains (3) && HH_ROSTER.Any (x=>x.A3==1 && x.A5>=15) ) |
(self.Contains(4) && HH_ROSTER.Any(x=>x.A3==1 && x.A5<=15) ) ||
(self.Contains(5) && HH_ROSTER.Any(x=>x.A5<= 4) )
```

Validation Message: Error ! Please select member group by taking reference with household roster.
[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 and structure of information in this file


"I" - Question instruction
"E" - Enabling condition
"V1" - Validation condition №1
"M1" - Message for validation №1
" F " - Filter in Categorical questions

## Breadcrumbs



01 Ward Livestock Officer
02 Village Livestock Officer
99 Other (specify)


List items


[^0]:    STATIC TEXT

[^1]:    I List upto 5

[^2]:    I Minutes
    V1 self < 1441
    M1 Value too large. Please check.

