Energy Survey
Household Questionnaire
Medium Version
Version 58
English

HOUSEHOLD IDENTIFICATION			
1.	Province	CODE: |__|__|	NAME:
2.	District	CODE: |__|__|	NAME:
3.	Township/Compound/Village		NAME:
4.	Locality		**CODE:** Urban…….1 Rural……2
5.	Enumeration Area (EA)	CODE: |__|__|__|__|__|	
6.	Household ID		
7.	Name of Household Head		
8.	Language of interview	Options to be edited	
9.	Household Head Phone Num.		
10.	GPS Coordinates of the Dwelling	a. Latitude (S) |__|__|°|__|__| . |__|__|__| ' S	b. Longitude (E) |__|__|°|__|__| . |__|__|__| ' E
INTERVIEW DETAILS			
11.	Enumerator	ID: |__|__|	NAME:
12.	Supervisor	ID: |__|__|	NAME:
13.	Date of Interview DD/MM/YY	|__|__| / |__|__| / |__|__| D D M M Y Y	
14.	Start Time	|__|__| : |__|__| ***Use 24 hour clock***	
15.	Date of Second Interview DD/MM/YY	|__|__| / |__|__| / |__|__|	
16.	Second Interview Start Time	|__|__| : |__|__| ***Use 24 hour clock***	
17.	Date of Third Interview DD/MM/YY	|__|__| / |__|__| / |__|__| D D M M Y Y	
18.	Third Interview Start Time	|__|__| : |__|__| ***Use 24 hour clock***	

Include Introductory note

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 (A2 – A4). 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 A2 – A4.
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 A2 – A4.
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 A2 – A4.
DO NOT LIST HOUSEHELP WHO HAVE A HOUSEHOLD ELSEWHERE, AND GUESTS WHO ARE VISITING TEMPORARILY AND HAVE A HOUSEHOLD

A. HOUSEHOLD ROSTER

A.1	A.2	A.3	A.4	A.5	A.6	A.7	A.8	A.9	A.10	A.11	A.12
Individual ID	Name ***First then Last Name*** ***Make a complete list of all individuals who normally live and eat their meals together in this household, starting with the head of household.***	Is [NAME] male or female? Male…..1 Female..2	What is the relationship of [NAME] to household head? Head……..…1 Wife/Spouse……..2 Child/adopted child…….3 Grandchild……..……..…4 Niece/Nephew…..5 Father/Mother……..…..6 Sister/Brother……..…..7 Son/Daughter-in-law.....8 Brother/Sister-in-law…….9 Father/Mother-in-law…….10 Grandfather/mother……11 Other relative……12 House help/House help's relative...13 Other non-relative…….....14	How old is [NAME]? ***Record "0" if infant below 1 year old.*** YEARS	***ENUM/ CAPI:*** Is [NAME] 5 years old or older? Yes….1 No…..2→ NEXT PERSON	Has [NAME] ever attended school? Yes……1 No…….2→A.10	Is [NAME] currently attending school? Yes……1 No…….2	What is the highest educational level [NAME] completed? NONE.....0 N1.....1 N2.....2 P1.....11 P2.....12 P3.....13 P4.....14 P5.....15 P6.....16 JS1.....21 JS2.....22 JS3.....23 SS1.....24 SS2.....25 SS3.....26 LOWER 6.....27 UPPER 6.....28 TEACHER TRAINING.....31 VOCATIONAL/TECHNICAL...32 MODERNSCHOOL.....33 NCE.....34 POLY/PROF.....41 1ST DEGREE.....42 HIGHER DEGREE.....43 QUARANIC.....51 INTEGRATED QUARANIC....52 ADULT EDUCATION.....61	***Enum/CAPI:*** Is [NAME] 12 years or older? Yes...1 No....2→NEXT PERSON	What is [NAME]'s marital status? Married, Monogamous…1 Married, Polygamous…..2 Cohabitating, Single Partner...3 Never Married…..4 Divorced……...5 Separated……..6 Widowed……...7	How frequently does [NAME] cook food for the household? Everyday……1 A few times in a week…...2 Once a week…...3 A few times in a month……4 Once a month….5 Never……..6
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											

	A.13	A.14	A.15	A.16	A.17	A.18	A.19	A.20
Individual ID	***Interviewer/ CAPI:*** Is [NAME] 15 years or older? Yes…1 No…2→ NEXT PERSON	What was [NAME]'s main occupation for the last 12 months? Salaried Employee, Non-Farm……1 Salaried Employee, Farm…….....2 Self-Employed Non-Farm-Business enterprise.....3 Self-Employed Non-Farm-Independent contractor, technician, professional, etc. …….4 Self-Employed Agriculture/Livestock ……...5 Assistance in family enterprise…….6→**A.16** Casual/Day Laborer……..7 →**A.16** Intern/free labor/voluntary work……..8 Student…….9→**B.1** Retired/pensioner……10→**B.1** **Not working/unemployed…11→ B.1** **Housewife……..12 Skip to A 19** Other (specify)…….….555	Please describe the kind of trade or business [NAME]'s main occupation best fits from the list of industries. INDUSTRY CODE 1 - Agriculture, forestry and fishing 2 - Mining and quarrying 3 - Manufacturing 4 - Electricity, gas, steam and air conditioning supply 5 - Water supply; sewerage, waste management and remediation activities 6 - Construction 7 - Wholesale and retail trade; repair of motor vehicles and motorcycles 8 - Transportation and storage 9 - Accommodation and food service activities 10 - Information and communication 11 - Financial and insurance activities 12 - Real estate activities 13 - Professional, scientific and technical activities 14 - Administrative and support service activities 15 - Public administration and defense; compulsory social security 16 - Education 17 - Human health and social work activities 18 - Arts, entertainment and recreation 19 - Other service activities 20 - Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use 21 - Activities of extraterritorial organizations and bodies	Out of the last 12 months, how many months were [NAME] engaged in this activity? ***Max 12*** MONTHS	How many days per month does [NAME] work in this activity? DAYS	Please indicate the typical monthly income from this activity Local currency 1. <= 850 2. 851-2000 3. 2001-3500 4.3501-6500 5. 6501-8500 6. 8501-12000 7. 12001-15000 8. 15001+ 9. Not Known	If [NAME] has other occupation, what is the total monthly receipts from that occupation? Local currency	Does [NAME] operate any non-agricultural/ business/ enterprise within this household or compound? Yes…1 No….2→**B.1**
1								
2								
3								
4								
5								
6								

7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

A. [CONTINUATION OF A] HOUSEHOLD BUSINESS/ENTERPRISE

A.21 A	***CAPI CHECK: Does this household or any member in the household own a non-farm enterprise/ business activity? (any YES response in A19)***		Yes……..1 No……2→ **B.1**
A.22	Who are the business owners/decision makers for the household non-farm enterprise? ***If more than one enterprise, only respond for the most important enterprise.***		Individual ID(s) from Household Roster
A.23	***Enumerator:*** Who is responding for this section? ***The respondent for this section should be the business owner/operator for this enterprise. If not present, the best-informed household member.***		Individual ID from Household Roster
A.24	In the last 12 months, in which months did this enterprise operate? ***Multiple responses possible***	a. |__|__| b. |__|__| c. |__|__| d. |__|__| e. |__|__| f. |__|__| g. |__|__| h. |__|__| i. |__|__| j. |__|__|	January……1 February……..2 March……...3 April……4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12

		k. |__|__|	All year…….111
A.25	What is the main activity of this enterprise?		Manufacturing (food or other processing)….1 Cottage industry/handicrafts……..2 Shops/trading…….3 Service (mobile phone recharge or repair/ tailoring/barber/eatery)……4 Other, specify…….555
A.26	How long has this enterprise been in operation?		In years
A.27	Is this enterprise registered?		Yes……..1 No……..2
A.28	What was the total revenue of this business or activity in the last month that it was operating?		Local Currency
A.29	What was the total monthly (Last month) operating cost i.e. business -related expenditure, for example buying raw materials?		Local Currency
A.30	Could you please estimate total revenue for this business or activity in a **regular month**, that is, a month that is neither the busiest nor the slowest of the year?		Regular month's total sales
A.31	In a regular month, how many hours does your enterprise operate **on an average day (max 24 hours)**?		Number of Hours
A.32	In a typical month, how many hours does your enterprise operate each night **(max 12 hours)**?		Number of hours
A.33	Are your working hours limited by the supply of energy in your enterprise?		Yes……..1 No……..2
A.34	What are all the different sources of energy that you use in your enterprise? Multiple response		National Grid connection…….1 Local Mini Grid……...2 Electric Generator (connecting one or more households/businesses)……...3 Solar Lantern……4 Other Solar Lighting product……5 Solar home system System …….6 Rechargeable Battery……..7 Dry cell batteries……..8 Liquid Fuel (kerosene, diesel, gasoline)……9 Coal……10 Charcoal……11 Biomass……..12 None……..13→**B.1** Other specify.....555
A.35	Which sources are used ONLY for the enterprise (and NOT for household use)?		National Grid connection…….1 Local Mini Grid……...2 Electric Generator (connecting one or more households/businesses)……...3 Solar Lantern……4 Other Solar Lighting product……5 Solar Multi-Light Product ……6

			Solar Multi-Light System …….7 Rechargeable Battery……..8 Dry cell batteries…….9 Liquid Fuel (kerosene, diesel, gasoline)……9 Coal……10 Charcoal…….11 Biomass……..12 None……..13→**B.1** Other specify.....555
A.36 A	***Interviewer/CAPI check:*** Is the electricity connection for the enterprise national or mini-grid response 1 or 2 from **A.34**)?		Yes……..1 No……2→**A53a**
A36	***Is the electricity connection for the enterprise the same the household?***		Yes……..1 No……2→**A.72**
A.37	Does the enterprise have a separate electricity bill from household use?		Yes……..1 No……2 →**A.43**
A.38	How are you billed for electricity? ***Read options aloud***		Per kWh based on the meter reading……1 Fixed monthly fee……..……2 Pay based on lights and appliances used……....3 Utility estimates consumption……..……4 Other, specify……..….555 No bill for electricity……..…….111→**A.43**
A.39	What is the most common way to make your electricity bill payment?		Cash…….1 Vouchers/tokens/pre-paid card from local store……2 Credits using mobile money……3 Pay at the utility office……4 Pay at the bank/post office……..5 Other, specify……555
A.40	***Enumerator:*** Ask 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 A.41 and A.42.***	☐	Respondent has energy bill and shows it……....1 Respondent has energy bill but refuses to show it or could not locate it……..…..2 Respondent does not have an energy bill……3
A.41	In the last month, how much did you spend on the electric bill? ***Calculate amount paid from the last bill.***	☐	Local Currency Don't Know……888
A.42	In the last month how much electricity did your enterprise use? ***Calculate usage from the last bill.***	|__|__|__| kWh	Quantity in Kilowatt Hour (kWh) Don't Know……888
A.43	In a typical month, how many hours of electricity are available each day from the grid? (Cannot exceed hours of operation in **A.31**)		Hours of supply Don't Know…….888
A.44	Out of [**A.32** HOURS] nighttime hours your business is usually open during the night, how many hours of electricity are available from the grid?		Hours of supply Don't know……..888

A.45	In a typical month, how many outages/blackouts does the enterprise experience **each week**?		Number of outages/blackouts Record "0" if none → A.53a
A.46	In a typical week, what was the **total duration** of all the outages/blackouts?		Minutes
A.47	During a typical month, what are the three main ways your business was affected by an electricity power outage? ***Do not prompt. Multiple responses possible.***	a. |__|__| b. |__|__| c. |__|__|	Continue all operations on backup supply……..1 Continue reduced operations on backup supply……..2 Had to turn customers away……3 Had to send workers home for the day without pay……4 Had to send workers home for the day with pay……..5 Used more expensive alternate energy sources to run operations/ keep perishables cold…….....6 Wasted perishable products/discarded damaged goods.....7 Machines/appliances were damaged in the process……8 Meetings/transactions were delayed……..9 Provided backup electricity to others……10 Stop operations and waited for power to return……11 Not affected by last outage……12 Other, specify……..555
A.48	Was there a loss of revenue in a typical month due to power outages?		Yes……1 No……..2→ A.50
A.49	Estimate the loss of revenue in a typical month due to power outages?		Local currency Don't know……888
A.50	How much was the extra costs of operating during the outage (e.g. wasted products, paid workers, running a backup generator etc.)?		Local currency Don't know……..888
A.51	If machinery/appliances were damaged because of the grid, what were the extra costs for fixing/replacing?		Local currency Don't know……888
A.52	What are the back-up sources for lighting for the enterprise? (***Multiple responses possible***)		Generator……..…..1 Battery and Storage Devices (e.g.: car battery)…….....2 Solar Lantern……3 Other Solar Lighting product……4 Solar Multi-Light Product ……5 Solar Multi-Light System …….6 Kerosene lamp……..…..7 Candle……...8 Torch/flashlight……9 No backup sources……111 Other, specify……..….555 ***All responses →B.1***
A.53 .a	***Interviewer/CAPI check:*** Is the electric generator the main source of electricity for the enterprise? (response 3 from **A.34)**?		Yes……..1 No……2→**A.72a**
A.53	Is the MAIN electric generator for the enterprise the same as the MAIN generator for the household?		Yes……..1 →**A.72a** No……2
A.54	How many generators does your enterprise use to supply electricity?		Number of generators Don't know……888

	If multiple generators, ask following questions about main generator.		
A.55	Do you share this generator with other households or enterprises?		Yes……..…..1 No……..….2→**C.87**
A.56	How many households or enterprises are sharing electricity from this generator?		Number of households Don't know……..888
A.57	***Enumerator Observation:*** What is the capacity of the generator? ***Read name plate of the generator.***		Volt /Amps (kV) Don't know…….888
A.58	How many days per month did you typically use this generator?		Number of days Don't know…….888
A.59	How many years have you used this generator? ***Record in years, if less than 1 year record 1***		Number of Years Don't know…….888
A.60	Does your enterprise own the generator?		Yes……1→**A.65** No…….2
A.61	Who owns the generator?		Other Household……..……..…..…...1 Community organization…….2 Private person/entity ……...3 Other, specify……..555 Don't know…….888
A.62	Do you rent the generator or use it for free?		Rent…….1 Use for free…….2→**A.66**
A.63	How do you pay for electricity services from the generator?		Fixed payment (per month or week)……1 Charge by number of lights/appliances……2 Charge per hour……...3 Pay for fuel only……..4→**A.66** Other, specify……..555
A.64	In the months that you use it, how much did you pay to use the generator each month? ***Do not include any cost of fuel, only fee for using the GENERATOR.***		Local currency Don't know…….888 ALL→A.66
A.65	How much did you pay to purchase the generator?		Local currency Don't know…….888
A.66	In the last 12 months, how much did you pay for repairs/parts/maintenance of the generator?		Local currency Don't know…….888
A.67	What fuel is used to power the generator?		Diesel……1 Gasoline/petrol……2 Other, specify……555 Don't know……888
A.68	In the last 30 days, what was the total quantity of fuel used to power the generator?	a. Amount |__|__|__|	Liters Don't know……..888
A.69	Do you pay for the fuel used to power the generator?		Yes……..1 No……2→**A.71**

A.70	In the last 30 days, how much did your household spend on fuel for this generator?		Local currency Don't know…….888
A.71	In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the generator?		Yes…….1 No……..2 Don't know……888
A.72 .A	***Interviewer/CAPI check:*** Is solar device the source of energy to the enterprise (responses 4, 5, 6 or 7 from **A.34**)?		Yes…….1 No……...2→**B.1**
A72	Is this solar device used in the enterprise the same as the household?		Yes…….1 No……...2
	Devices enterprise uses	**Number**	**Cumulative Size (Wp) if known**
A.73	How many Solar lanterns does your enterprise use?		Indicate '0' if enterprise uses none 0 If unknown indicate -8
A.74	How many Solar lighting systems does your enterprise use?		Indicate '0' if enterprise uses none 0→**A.76**
A.75	What is the capacity of the solar panels for this solar lighting systems?		Watt peak (wp) Don't know….888
A.76	How many Solar home systems does your enterprise use?		Indicate '0' if enterprise uses none and go to **A.77**
A.76a	What is their cumulative size in watts?		If unknown indicate '888'
A.77	What is the capacity of the solar panels for this solar home systems?		Watt peak (wp) Don't know….888
A.78	What are the solar devices used for? ***Multiple responses possible***		**Code** Lighting……..1 Cell phone charging – for the enterprise……2 Cell phone charging – as a charging station……...3 Operating laptop/computer/tablet……...4 Operate photocopy machine/scanner……..5 Providing entertainment (e.g. playing movies)……...6 Refrigeration……7 Powering other appliances – please list specifically (e.g. solar pump, milling machine, electric hair dryer, sewing machine etc.)..8 Other……555
A.79	How long has your business been using solar energy?		In months (Enumerator, if respondent answers in years, convert to months) Don't know……888

B. HOUSEHOLD CHARACTERISTICS

Interviewer Instructions: The Respondent should be the head of household or any other knowledgeable household member

#	Question	Response	Response Code
B.1	***Enumerator:*** Record Respondent ID for this section		Individual ID from Household Roster
B.2	Does your household live in this dwelling for the entire year?		Yes……1→**B.4** No…….....2
B.3	Is this your main dwelling? ***The dwelling that you live in for most of the year.***		Yes……1 No……2
B.4	How many years have you been living in this community? ***Record 1 if less than 1.***		Number of years
B.5	What is the type of dwelling? *(Enumerator, check with observation)*		A single house occupied by one household ……..1→**B.7** A house occupied by multiple households…….2 Multi-storied building with one household.....3→**B.7** Multi-storied building with more households.....4 Group of enclosed dwellings: multiple households….5 Group of enclosed dwellings occupied by a single household……6 →**B.7** Other, specify…….....555
B.6	How many households share your dwelling?		Number of households
B.7	Do you own this dwelling?		Yes……..…..1 → ***B.10*** No……..…2
B.8	Do you use it for free or rent it?		Free……..……..1 Rented……...2
B.9	How many rooms (excluding the kitchen, toilet, and bathroom) does the household occupy?		Record number of rooms
B.10	The walls of the dwelling are mainly made of what material? ***Check with observation***		Wood and mud.....1 Wood and thatch.....2 Wood only.....3 Stone only.....4 Stone and mud.....5 Stone and cement.....6 Blocks, plastered with cement.....7 Blocks, unplastered…....8 Concrete…….....9 Mud bricks (traditional)…….....10 Steel…….....11 Cargo container…….....12 Parquet or polished wood…….....13 Chip wood…….....14 Corrugated iron sheet.....15 Asbestos.....16 Reed/bamboo.....17 Other, specify…… 555
B.11	The roof of the dwelling is mainly made of what material? ***Check with observation***		Wood and mud…….....1 Wood and thatch.....2 Stone and Cement…….....3 Bricks…….....4 Corrugated iron sheet…….....5 Asbestos…….....6 Reed/bamboo…….....7 Plastic/ canvas…….....8 Other, specify…….....555
B.12	The floor of the dwelling is mainly made of what material? ***Check with observation***		Mud/Dung…….....1 Reed/bamboo…….....2 Wood planks…….....3 Parquet or polished wood…….....4 Cement floor.....5 Plastic tiles…….....6 Cement tiles…….....7 Brick tiles…….....8 Ceramic/Marble tiles…….....9 Other, specify…….....555
B.13	What type of toilet facility does your household use? ***Multiple responses possible.***		None (open field)……1 Flush to sewage……..2 Flush to septic tank……....3 Pail/Bucket……..4 Covered pit latrine……5 Uncovered pit latrine……6 Community latrine……...7 Aqua privy……8 Other, specify……...555

B.14	What is your household's main source of drinking water?		Piped water……1 Bore hole ……3 Well/spring protected……5 Well/spring unprotected……6 River/spring……..7 Lake/reservoir……..8 Rain water…….....9 Tanker/truck/vendor……10 Sachet water……11 Bottle water…….12 Other, specify…….555
B.15	Is your drinking water treated (chemical treatment)?		Yes……...…..1 No……..….2 Don't know…….8
B.16	Does anyone in the household have a bank account at a formal institution?		Yes…….1 No……..2→**B.18**
B.17	At which institution is this account or savings? ***Read options aloud***		Commercial bank……1 Cooperative credit union…….2 Microfinance institution……...3 Other, specify……..555
B.18	Does anyone in the household use an informal savings groups (adashi/esusu/ajo) to save money?		Yes…….1 No……..2→**B.20**
B.19	What type of informal savings group do members of this household use? ***Multiple responses possible***		Group savings (rotational)……1 Group savings (one-time disbursement)……2 Other, specify……555
B.20	If you can get a loan/credit, what are the sources of credit/loans? ***Multiple responses possible***		Commercial/government bank……...1 Cooperative credit union/SACCO……2 Microfinance institution……3 Rural bank……4 State loan……5 NGO……...…6 Business firm……7 Employer……8 Moneylender/Shylock……9 Shop……...10 Relative/friend/neighbor……11 Mobile money services ……..…12 Cannot get a loan/credit……..13 Other, specify…….555
B.21	Do you have a mobile money account?		Yes…….1→B.23 No……..2
B.22	Do you use mobile money to make payments over the mobile phone?		Yes…….1 No……..2→ **C.1**
B.23	Have you used the account in the past 90 days?		Yes……1 No……..2
B.24	How do you use the mobile money services? (Mark all that apply)		Receive money from family/friends/other…..1 Transfer credit to family/relatives……..…2 Top up credit……3 Receive NGO/State support……4 Pay for Electricity……...5 Pay for Water……..6 Internet top-up/credit…….7 Commercial purchases……..8 Insurance……...9 Loan payments……...10 Savings……..11 Get small loans from mobile provider ……..12 Other, specify…….555

C. SUPPLY OF AND DEMAND FOR ELECTRICITY

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

C.1	***Enumerator:*** Record Respondent ID for this section	☐	Individual ID from Household Roster
Electricity from National Grid			
C.2	Is the household connected to the national grid?		Yes……..……..1 → **C.7** No……..2
C.3	How far is your house from the nearest national grid line?		Km [ ] Do not know… 888
C.4	What is the MAIN reason why your household is not connected to the grid? ***Record the MAIN reason.***		Grid is too far from household/not available…….....1 Cost of initial connection is too expensive…..…….2 Monthly fee is too expensive……3 Satisfied with current energy solution……4 Renting, Landlord decision……5 Service Unreliable……..6 Administrative procedure is too complicated……7 Submitted application and waiting for connection..…8 Company refused to connect the household……9 Other, specify……555
C.5	Do you expect to get grid connection?		Yes……..……....1 Don't expect to get grid connection……2→ **C.43** Don't know……8→**C.43**
C.6	What month and year do you expect to get grid connection?		Up to 6 months…1 6 months to 1 year….2 1 year to 2 years….3 More than 2 years…4 Don't know….-8 ***ALL RESPONSES*→ C.43**
C.7	How many years have you had this grid connection? ***Record in years, if less than 1 year record 1(Cannot be greater than B.4)***	☐	Number of Years
C.8	How much did your household pay for the grid connection fee? ***Refer to connection fee ONLY.***	☐	Local currency Don't know……888-→ **C.12** Household was already connected……..-111→ **C.12**
C.9	How much did your household pay for the internal wiring fee? ***Do not include the connection fee from C.8 here***	☐	Local currency Don't know……888
C.10	How many days after you applied for the grid connection did your household get connected? **(Insert 0 if immediate)**		Number of days Don't know……888 Did not apply/not applicable….999
C.11	How many days after you were connected were you able to use electricity in your home? **(Insert 0 if immediate)**		Number of days Don't know……888
C.12	Who receives the payment for your electricity service?		Energy company (PHCN/NEPA)……..…1 Pre-paid meter card seller……...2 Community/village/municipality……..…3 Relative……..4 Neighbor……5 Landlord……6 Local store .....7 Utility office .....8 Bank .....9 Post office.....10 No one/received for free……..….11→**C.24** Other, specify……..555
C.13	How frequently do you make your payment?		Weekly….1 Every 2 weeks…2 Monthly….3 Every 6 months…4 Other, specify……555
C.14	Does your household have an electricity meter?		Yes……1 No……2→**C.19**
C.15	What is the capacity of the meter? ***Enumerator check the meter box or the bill***		Ampere
C.16	Is this a pre-paid meter?		Yes……1

			No……2
C.17	Are you sharing the electricity meter with another household?		Yes……1 No……2→**C.20**
C.18	How many households are sharing the meter?		Number of Households ***ALL*→C.20**
C.19	How are you billed for electricity? ***Read options aloud***		Fixed monthly fee……..……1 Pay based on lights and appliances used……....2 Utility estimates consumption……..……3 Other, specify……555 No bill for electricity……111→→**C.24**
C.20	How do you make your electricity bill payment?		Cash……1 Vouchers/token/pre-paid card from local store..……2 Credits using mobile money……3 Credit, using other ways……4 Other, specify……555
C.21	***Enumerator:*** Ask 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.22 and C.23 .***	☐	Respondent has energy bill and shows it……....1 Respondent has energy bill but refuses to show it or could not locate it……2→**C.24** Respondent does not have an energy bill……3→**C.24**
C.22	In a typical month, how much did you spend on the electricity bill? ***Calculate amount paid from the last bill.***	☐	Local Currency Don't Know……888
C.23	In a typical month how much electricity did your household consume? ***Calculate the consumption from the last bill.***	|__|__|__| kWh	Quantity in Kilowatt Hour (kWh) Don't Know……888 ***ALL*→C.205**
C.24	In a typical month, how much did you spend on electricity?		Local Currency Don't Know……888
C.25	Is the quality of electricity service the same all year?		Yes……1→ **C.28** No……2
C.26	What are the **worst months** for service from the grid? ***Multiple responses are possible.*** ***Record all months when household has the lowest number of hours of electricity supply.***	a. |__|__| b. |__|__| c. |__|__| d. |__|__| e. |__|__| f. |__|__| g. |__|__| h. |__|__| i. |__|__| j. |__|__| k. |__|__| l. |__|__|	January……1 February……2 March……3 April……4 May……5 June……6 July……7 August……8 September……9 October……10 November……11 December……12 Don't Know……888
C.27	Do you receive information about a "load-shedding" schedule (load shedding is the set hours of electricity NOT available from the grid)?		Yes all the time……1 Yes sometimes……2 No……3

Ask respondent first about the worst months and then about a typical month for C.28 to *Error! Reference source not found.* ***If no seasonal changes, ask only about a typical month. Ask questions by ROW.***		**A. WORST MONTHS**	**B. TYPICAL MONTH**	
C.28	How many hours of electricity are available **each day and night** from the grid? (max 24 hours)	☐ hours	☐ hours	Hours of supply Don't know……-8
C.29	How many hours of electricity are available **each evening, from 6:00 pm to 10:00 pm from** the grid**?** (max 4 hours)	☐ hours	☐ hours	Hours of supply Don't know……-8
C.30	How many hours of electricity do you **use** each day and night from the grid? ***Cannot exceed number of available hours in C.29***	☐ hours	☐ hours	Hours of supply Don't know……-8

C.31	How **many** outages/blackouts occur in a week?	☐	☐	Number of outages/blackouts No outages/blackouts…..0→**C.33** Don't know……-8
C.32	What is the **total duration** of all the outages/blackouts in a week?	a. Hours |__|__|__| b. Minutes |__|__|__|	a. Hours |__|__|__| b. Minutes |__|__|__|	Don't know……..888
C.33	What is your main **back-up source of lighting** during outages/blackouts of the grid?			Local mini grid connection.……..…..1 Electric generator……..……..…2 Rechargeable battery and storage devices (e.g.: car battery)…….....3 Solar Lantern……4 Other Solar Lighting product……5 Solar Multi-Light Product ……6 Solar Home System …….7 Kerosene/paraffin lamp……..……9 Fuel-based lighting…….10 Dry-cell (non-rechargeable) battery/ Torch/ Flashlight……..11 Candle……12 Other, specify…….....555 No back-up source……111
C.34	What is your main **back-up source of electricity** for appliances (including mobile phone charging) during outages/blackouts of the grid?			Local mini grid connection……..1 Electric Generator……2 Rechargeable battery and storage devices (e.g.: car battery)…….....3 Solar Lantern……4 Other Solar Lighting product……5 Solar Multi-Light Product ……6 Solar Home System …….7 Other, specify……...….555 No back-up source……111
C.35	How do you request for repairs in electricity service or file a complaint?			Call/Visit/ SMS utility company……1 Call a local technician……..2 Send a letter/email…….....3 Social media……4 Talk to community representative……...5 No system to request repairs/file complaint……6 Other, specify……555
C.36	When there is a blackout in your community, who do you usually approach for assistance?			The power company……1 Someone not from power company……2 No-one: we wait until power returns……..…..3→**C.38**
C.37	The last time you asked for assistance, how many days after yo/*968u contacted [**C.36** response] did they come to fix the problem? ***Enumerator: Response under 24 hours can be recorded as 0***			Number of days
C.38	In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the grid?			Yes……..1 No……..2 Don't know…….888
C.39	What are the most serious problems you experience with your grid electricity? ***Record up to 2 responses.***	a. First |__|__|__| b. Second |__|__|__|		Supply shortage/not enough hours of electricity...……1 Low/high voltage problems or voltage fluctuations……..…2 Unpredictable interruptions……3 Unexpectedly high bills……..4 High cost of electricity..……5 Do not trust the supplier……6 Cannot power large appliances……..7 Maintenance/service problems……..8 Other, specify……555 No problems……111
C.40	Is any of your electric wiring exposed (not insulated and not concealed)			Yes……..1 No……..2
C.41	In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the grid electricity?			Yes……...…..1 No……..…2→**C.43**
C.42	What was the reason for this injury?			Carelessness or error…..1 Lack of knowledge about the use of the appliance…2 Faulty wiring/connection…..3 Other, specify……555

Electricity from Mini Grid

C.43	Is the household connected to a mini-grid?		Yes……1 No……..2→**C.83**
C.44	What is the name of the local mini-grid company?		Name of company
C.45	Is there a limit for the load and/or appliances you are allowed to power from this mini-grid		Yes……..…..1 No……..…2 Don't Know……8
C.46	How many years have you had this mini-grid connection? ***Record in years, if less than 1 year record 1***		Number of Years
C.47	How much did your household pay for the mini-grid connection fee? ***Refer to connection cost ONLY.***		Local currency Don't know……888 **Skip to C.51** Household was already connected……..111→**C.51**
C.48	How much did your household pay for the internal wiring? ***Do not include the connection fee from C.47 here***		Local currency Don't know……888
C.49	How many days after you applied for the mini-grid connection did your household get connected? **(Insert 0 if immediate)**		Number of days
C.50	How many weeks after you were connected were you able to use electricity in your home? **(Insert 0 if immediate)**		Number of weeks
C.51	Have you applied for an upgrade of service since you connected to the mini-grid?		Yes……..1 No……2
C.52	Who receives the payment for your electricity service?		Energy company……..…1 Pre-paid meter card seller……...2 Community/village/municipality……..…3 Relative……..4 Neighbor……5 Landlord……..…6 No one……7→**C.63** Other, specify……..555
C.53	Does your household have an electric meter?		Yes……1 No……2→**C.57**
C.54	Is this a pre-paid meter?		Yes……1 No……2
C.55	Does your household share the electric meter?		Yes……1 No……2→**C.58**
C.56	How many households are sharing the meter?		Number of Households ***ALL*→C.58**
C.57	How are you billed for electricity? ***Read options aloud***		Fixed monthly fee……..……1 Pay based on lights and appliances used.……...2 Utility estimates consumption……..……3 Other, specify……555 No bill for electricity……111→**C.63**
C.58	How do you make your electricity bill payment?		Cash……1 Vouchers from local store……2 Credits using mobile money……3 Credit, using other ways……4 Other, specify……555
C.59	Were you involved in setting the tariff for the mini-grid?		Yes……1 No……2→**C.61**
C.60	How were you involved in the tariff setting?		Community meeting……..1 Contacted by mini-grid company…..2 Member of electricity committee…..3 Member of cooperative……4 Other, specify……555
C.61	***Enumerator:*** Ask ***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.62 and C.63.***	☐	Respondent has energy bill and shows it……....1 Respondent has energy bill but refuses to show it or could not locate it……..2→**C.64** Respondent does not have an energy bill……3→**C.64**
C.62	In the last month, how much did you spend on the electric bill? ***Calculate amount paid from the last bill.***	☐	Local Currency Don't Know……888
C.63	In a typical month, how much did you spend on electricity?		Currency Don't Know……888
C.64	In the last month how much electricity did your household use? ***Calculate the consumption from the last bill.***	|__|__|__| kWh	Quantity in Kilowatt Hour (kWh) Don't Know……888

C.65	Is the quality of electricity service the same all year?		Yes……1→**C.67** No……..2	
C.66	What are the worst months for service from the mini-grid? ***Multiple responses are possible.*** ***Record all months when household has the lowest number of hours of electricity supply.***	a. |__|__| b. |__|__| c. |__|__| d. |__|__| e. |__|__| f. |__|__| g. |__|__| h. |__|__| i. |__|__| j. |__|__| k. |__|__| l. |__|__|	January……1 February……..2 March……..3 April……4 May……..5 June……..6 July……..7 August……..8 September……9 October……10 November……11 December……...12 Don't Know……888	
Ask respondent first about the worst months and then about a typical month for C.67- C.72 ***If no seasonal changes, ask only about a typical month. Ask questions by ROW.***		**A. WORST MONTHS**	**B. TYPICAL MONTH**	
C.67	Do you receive information about a "load-shedding" schedule (load shedding is the set hours of electricity not available from the mini grid)?			Yes all the time……1 Yes sometimes……2 No……2
C.68	How many hours of electricity are available **each day** from the mini-grid? (max 24 hours)	☐ hours	☐ hours	Hours of supply Don't know……888
C.69	How many hours of electricity are available **each evening, from 6:00 pm to 10:00 pm from** the mini-grid**?** (max 4 hours)	☐ hours	☐ hours	Hours of supply Don't know……888
C.70	How many hours of electricity do you **use** each day from the mini-grid? ***Cannot exceed number of available hours in C.68***	☐ hours	☐ hours	Hours of supply Don't know……888
C.71	How **many** outages/blackouts occur in a week?	☐	☐	Number of outages/blackouts No outages/blackouts…..0→**C.73** Don't know……888
C.72	What is the **total duration** of all the outages/blackouts in a week?	c. Hours |__|__|__| d. Minutes |__|__|__|	a. Hours |__|__|__| b. Minutes |__|__|__|	Don't know……..888
C.73	What is your main back-up source of lighting during outages/blackouts of the grid?			Electric generator……..…..1 Rechargeable battery and storage devices (e.g.: car battery)…….....2 Solar Lantern……3 Other Solar Lighting product……4 Solar Multi-Light Product ……5 Solar Home System …….6 Kerosene/paraffin lamp……..7 Dry-cell (non-rechargeable) battery/ Torch/ Flashlight……8 Candle……..9 Other, specify……..……..…555 No back-up source……111
C.74	What is your main back-up source of electricity for appliances during outages/blackouts of the mini-grid?			Electric generator……..…..1 Rechargeable battery and storage devices (e.g.: car battery)…….....2 Solar Lantern……3 Other Solar Lighting product……4 Solar Multi-Light Product ……5 Solar Home System …….6 Other, specify……..….555 No back-up source……111
C.75	How do you request for repairs in electricity service or file a complaint?			Call/SMS mini-grid operator……1 Call a local technician……..……2 Send a letter/email……..……..3 Social media……...4 Talk to community representative……...5 No system to request repairs/file complaint……6 Other, specify……555

C.76	When there is a blackout in your community, who do you usually approach for assistance?		The power company…….1 Someone not from power company…….2 No-one: we wait until power returns……..3→**C.78**
C.77	The last time you asked for assistance, how many days after you contacted [**C.76** response] did they come to fix the problem?		Number of days Don't know…….888
C.78	In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the mini grid?	☐	Yes…….1 No……..2 Don't know…….888
C.79	What are the most serious problems you experience with your mini grid electricity? ***Record up to 2 responses.***	a. First |__|__|__| b. Second |__|__|__|	Supply shortage/not enough hours of electricity...……1 Low/high voltage problems or voltage fluctuations……2 Unpredictable interruptions……3 Unexpectedly high bills……..4 Too expensive……..5 Do not trust the supplier……6 Cannot power large appliances……..7 Maintenance/service problems……...8 Unpredictable bills……9 Other, specify…….555 No problems…….111
C.80	Is your electric wiring insulated or concealed?		Yes…….1 No……..2
C.81	In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the mini grid electricity?		Yes……...…..1 No……..…2→**C.83**
C.82	What was the reason for this injury?		Carelessness or error…..1 Lack of knowledge about the use of the appliance…2 Faulty wiring/connection…..3 Other, specify……555

Electric Generator set			
C.83	In the last 12 months, did the household use a generator to supply electricity?		Yes……...…..1 No……..…2→**C.114**
C.84	How many generators does your household use to supply electricity? ***If multiple generators, ask following questions about main generator.***		Number of generators
C.85	Do you share this generator with other households? ***Ask about main generator.***		Yes……...…..1 No……..…2→**C.87**
C.86	How many households are sharing electricity from this generator? ***Ask about main generator.***		Number of households Don't know……..888
C.87	***Enumerator Observation:*** What is the capacity of the generator? ***Read name plate of the MAIN generator.***		Kilo Volts(kVA) Don't know…….888
C.88	In the last 12 months, in which months did you use this generator or did you use it all year? ***Multiple responses possible***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__| e. |__|__|__| f. |__|__|__| g. |__|__|__| h. |__|__|__| i. |__|__|__| j. |__|__|__| k. |__|__|__| l. |__|__|__|	January……1 February……..2 March……...3 April……4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12 Used all year……...111
C.89	How many days per month did you typically use this generator?		Number of days Don't know…….888
C.90	In the last 12 months, what did your household use this generator for? ***Multiple responses possible***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Lighting……1 Appliances……..2 Home-based income activity……3 Other, specify…….555 Don't know…….888
C.91	How many years have you used this generator? ***Record in years, if less than 1 year record 1***		Number of Years Don't know…….888

C.92	Does your household own the generator?		Yes……1→**C.97** No……2
C.93	Who owns the generator?		Other Household……..……..…..…...1 Community organization……2 Private person/entity ……...3 Other, specify……..555 Don't know……888
C.94	Do you rent the generator or use it for free?		Rent……1 Use for free……2→**C.99**
C.95	How do you pay for electricity services from the generator?		Fixed payment (per month or week)……1 Charge by number of lights/appliances……2 Charge per kWh……...3 Pay for fuel only……..4→**C.99** Other, specify……..555
C.96	In the months that you use it, how much did you pay to use the generator each month? ***Do not include any cost of fuel, only fee for using the GENERATOR.***		Local currency Don't know……888 **ALL→C.99**
C.97	How much did you pay to purchase the generator?		Local currency Don't know……888
C.98	In the last 12 months, how much did you pay for repairs/parts/maintenance of the generator?		Local currency Don't know……888
C.99	What fuel is used to power the generator?		Diesel……1 Gasoline/Petrol……2 Other, specify……555 Don't know……888
C.100	In the last 30 days, what was the total quantity of fuel used to power the generator?	a. Amount |__|__|__|	Liters Don't know……..888
C.101	Do you pay for the fuel used to power the generator?		Yes……..1 No……2→**C.103**
C.102	In the last 30 days, how much did your household spend on fuel for this generator?		Local currency Don't know……888
C.103	Is the generator the household's main source of electricity?		Yes……1 No……2→**C.109**

C.104	Are there certain months/seasons of **the year** when less fuel is available to power the generator?		Yes……1 No……..2→**C.106**
C.105	What are the worst months of fuel availability for the generator? ***Multiple responses are possible.*** ***Record all months for the worst fuel availability.***	a. |__|__| b. |__|__| c. |__|__| d. |__|__| e. |__|__| f. |__|__| g. |__|__| h. |__|__| i. |__|__| j. |__|__| k. |__|__| l. |__|__|	January……1 February……..2 March……...3 April……4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12 None……..111 Don't know……..888

Ask respondent first about the worst months and then about a typical month for C.106-C.108 ***If no seasonal changes (C.104) or not the main source (C.103) ask only about a typical month. Ask questions by ROW.***		**A. WORST MONTHS**	**B. TYPICAL MONTH**	
C.106	How many hours could you use this generator **each day and night** if you wanted to? (max 24 hours)	☐ hours	☐ hours	Hours of supply Don't know……888
C.107	How many hours could you use this generator **each evening, from 6:00 pm to 10:00 pm** if you wanted to**?** (max 4 hours)	☐ hours	☐ hours	Hours of supply Don't know……888

C.108	How many hours do you actually use this generator **each day**? (Cannot be more than **C.106**.)	☐ hours	☐ hours	Hours of supply Don't know……888
C.109	In the last 12 months, did any of your appliances get damaged because the voltage was going up and down from the generator?		Yes……1 No……..2 Don't know……888	
C.110	What are the most serious problems you experience with the generator? ***Record up to 2 responses.***	a. First |__|__|__| b. Second |__|__|__|	Limited power supply……1 Cannot power large appliances……2 Too expensive to use (including high cost of fuel/rent)……..3 Availability of the fuel……4 Hard to maintain/service……..5 Loud/Noisy……6 Unpredictable interruptions……7 Other, specify……555 No problems……111	
C.111	Is your electric wiring insulated or concealed?		Yes……1 No……..2	
C.112	In the last 12 months, did any household members experience serious body injuries because of the generator?		Yes……1 No……..2→**C.114**	
C.113	What was the reason for this injury?		Carelessness or error…..1 Lack of knowledge about the use of the appliance…2 Faulty wiring/connection…..3 Other, specify……555	

Externally Recharged Battery (Car Battery, etc)			
C.114	In the last 12 months, did the household use any rechargeable batteries, such as car batteries, for electricity **as the main source of electricity**?		Yes……1 No……..2→ **C.135**
C.115	In the last 12 months, in which months did you use rechargeable batteries or did you use it all year? ***Multiple responses possible***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__| e. |__|__|__| f. |__|__|__| g. |__|__|__| h. |__|__|__| i. |__|__|__| j. |__|__|__| k. |__|__|__| l. |__|__|__|	January……1 February……..2 March……...3 April……..4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12 Used all year……...111 Don't know……888
C.116	In the last 12 months, what did your household use rechargeable batteries for? ***Multiple responses possible***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Lighting……1 Appliances……2 Home-based income activity……3 Other, specify……555
C.117	Does your household have an inverter that allows you to use AC appliances?		Yes……1 No……..2→**C.119**
C.118	What is the capacity of the inverter?		Watts (W)
C.119	What is the total number of rechargeable batteries that you use in a typical month?		Total number of rechargeable batteries. Don't know……888
C.120	What is the capacity of the rechargeable batteries? ***If multiple batteries, record capacity for each.***	Capacity a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Ampere-hour Don't know……888
C.121	What is the voltage of the rechargeable batteries? ***If multiple batteries, record voltage for each.***	Voltage a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Volts Don't know……888
C.122	How much did you pay for the rechargeable battery(ies)?***If multiple batteries, record costs for each***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Local currency Don't Know……888

C.123	How many recharges for all batteries does your household have in a typical month? ***If multiple batteries, record the number of recharges for each battery in a typical month.***	a. |__|__|__| b. |__|__|__| c. |__|__|__| d. |__|__|__|	Number of Recharges Don't know……888
C.124	Do you pay someone/some entity outside the household to recharge the battery on a regular basis?		Yes……1 No……2→**C.126**
C.125	How much does your household spend in a typical month to recharge the batteries (in total)?		Local currency Don't Know……888 ALL RESPONSES →**C.12628**
C.126	What is the electricity source used to recharge the battery?		National grid……..1 Local mini-grid……..2 Electric generator……..3 Solar……4 Other, specify……..555
C.127	Is battery recharging limited by availability of electricity from [**SOURCE FROM** C.126]?		Yes……1 No……2 Don't know……888
C.128	How many hours can you use rechargeable batteries for electricity supply **each day when fully charged** if you wanted to? (max 24 hours)		Hours Don't Know……888
C.129	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**?** (max 4 hours)		Hours Don't Know……888
C.130	How many hours do you actually use rechargeable batteries for electricity supply **each day**? ***Cannot exceed number of hours in C.128***		Hours Don't Know……888
C.131	How many hours do you actually use rechargeable batteries for electricity supply **each evening, from 6:00 pm to 10:00 pm**? ***Cannot exceed number of hours in C.130***		Hours Don't Know……888
C.132	What are the most serious problems you experience with the rechargeable batteries? ***Record up to 2 responses.***	a. First |__|__|__| b. Second |__|__|__|	Supply shortage/not enough hours of electricity…..1 Too expensive.....2 Cannot power large appliances……...3 Recharging is not convenient……...4 Maintenance & repair is difficult……..5 Cannot recharge battery to full capacity……..6 Other, specify……555 No problems……..…111
C.133	In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the rechargeable batteries?		Yes…….1 No……..2→**C.135**
C.134	What was the reason for this injury?		Carelessness or error…1 Lack of knowledge about the use of the appliance …2 Faulty wiring or wiring with exposed wires…3 Other, specify……555

SOLAR BASED DEVICES

C.135	In the last 12 months, did the household use any of the following solar based devices? ***Multiple responses possible.***		Solar Lantern……1 Solar Lighting product (with multiple lights and/or cell phone charger and/or radio)……..2 Solar Home System (with cell phone charging, and TV/fan/fridge)…….3 None…….....4→ **C.182**
C.136	How many solar lanterns do you have?		Number of solar lanterns
C.137	How many solar lighting products (with multiple lights and/or cell phone charger and/or radio)do you have?		Number of solar lighting products
C.138	How many solar home systems (with cell phone charging, and TV/fan/fridge) do you have?		Number of solar home systems

C.139	C.140	C.142	C.143	C.144	C.145	C.146	C.147	C.148	C.149	C.150	C.151	C.153	C.154	C.155
SOLAR DEVICE	Ask about all devices in order of importance (Example: Main Solar System is Device 1) Do you use this solar [DEVICE]? Solar Lantern……1 Solar Lighting product……2 Solar Home System 3	Is this your main solar device? Yes...1 No…2	Who is the manufacturer and model of the [DEVICE]?	Does this [DEVICE] have a mobile charger? Yes...1 No…2	Does this [DEVICE] have a radio? Yes...1 No…2	**CAPI:** What is the type of solar device? Solar Lantern…1→ **C.147** Solar Lighting product……2 Solar Home System …3	How many light bulbs are there? NUMBER OF LIGHT BULBS	What is the power rating of the solar panel? ***If unknown, enter "888" → skip to next*** ***Read the name plate of the solar panel*** QUANT. in Watt-Peak (Wp)	What is the estimated size of the solar panel? SIZE CODE 20cm x20cm or smaller……..1 40cm x 40cm……..2 50cm x 100cm……3 75cm x150cm or larger……4 Other, specify (in width and length)……..555	What is the capacity of the battery? Amp-hours (Ah)	Does this [DEVICE] have an inverter? Yes...1 No…2	How many years have you had this [DEVICE]? ***Record in years, if less than 1, record 1*** NUMBER OF YEARS	Who decided to purchase/ acquire this [DEVICE]? MEMBER ID	How did you get this [DEVICE]? Bought, fully paid…..……1→**C.157** Bought, under installment..2→**C.157** Rent/pay fee to use……..3→**C.162** Received for free….4
1														
2														
3														
4														
5														

SOLAR DEVICE	C.156	C.157	C.156.A	C.158	C.159	C.160	C.161	C.162	C.163	C.164	C.165	C.166
	Who gave you this [DEVICE]?	How much did you pay for this [DEVICE] upfront?	Was this amount you paid for this [DEVICE] ***Full amount….1→ C.163*** ***Partial amount…..2***	How much was the down payment for this [DEVICE]?	What is the term period for the payment?	What is the rate of interest?	What payment system did you use?	What is the monthly payment for this [DEVICE] (installment/ fee to rent/use)?	Did/do you borrow money to make your payment for [DEVICE]?	Did you receive information and training on this [DEVICE]?	How many hours **do you use** [DEVICE] for lighting and other applications each day?	What is the most serious problem you experience with [DEVICE]?
	Local private organizations (NGO)…….1 Chief of village…….2 Local government …3 Relative/Friend…….4 Other, specify…….555 ***ALL→C.163***	LOCAL CURRENCY		LOCAL CURRENCY	In years	Percentage…… Don't know…888	Mobile Pay-as-you-go…….1 Other Pay-as-you go (scratch card, etc.)……2 Fixed fee……..3	LOCAL CURRENCY	Yes….1 No…..2	Yes…1 No….2	HOURS Don't know……888 (Cannot exceed 24 hours)	Duration of service too short……..……..1 Too expensive.....2 Cannot power large appliances…….....3 Breaks too often…..4 Maintenance and availability of spare parts……..5 Quality of light…..6 Battery problems…7 Other, specify…….555 No problems……..111
1												
2												
3												
4												
5												

MAIN SOLAR-BASED DEVICE

Record information for the MAIN solar-based device, the device listed in C.140-C.141 in the previous table.

C.166A	*Please select the main solar device from the list C.140 and 141.*		
C.167	Are there certain months/seasons **every year** when the service is not as strong from [DEVICE]?		Yes……1 No……..2 →**C.169**
C.168	What are the worst months for service from [DEVICE]? ***Multiple responses are possible.*** ***Record all months for the lowest hours of service.***	a. |__|__| b. |__|__| c. |__|__| d. |__|__| e. |__|__| f. |__|__| g. |__|__| h. |__|__| i. |__|__| j. |__|__| k. |__|__| l. |__|__|	January……1 February……..2 March……...3 April……..4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12 Don't Know……888

Ask respondent first about the worst months and then about a typical month for C.168-C.181 If no seasonal changes, ask only about a typical month. Ask questions by ROW.		**A. WORST MONTHS**	**B. TYPICAL MONTH**	
C.169	How many hours do you receive service from this [DEVICE] **each day and night**? (max 24 hours)	☐ Hours	☐ hours	Hours of supply Don't know……888
C.170	How many hours is service available from this [DEVICE] **each evening, from 6:00 pm to 10:00 pm?** (max 4 hours)	☐ Hours	☐ hours	Hours of supply Don't know……888
C.171	How many hours do you actually use the [DEVICE] **each day** for lighting and other applications? (max 24 hours) ***Cannot exceed hours in C.169***	☐ Hours	☐ hours	Hours of supply Don't know……888

C.172	In the last 12 months, did any household members die or have permanent limb (bodily injury) damage because of the [DEVICE]?		Yes……1 No……..2→**C.174**
C.173	What was the reason for this injury?		Carelessness or error…1 Lack of knowledge about the use of the appliance …2 Faulty wiring or wiring with exposed wires…3 Other, specify…… 555
C.174	Is there any appliance you do not have that you would like to have?		Yes……1 No……..2 → **C.176** Don't know……888
C.175	What appliances would you most like to have? ***Multiple response (Up to three devices)***		Television……..1 Fan……..2 Refrigerator……3 Radio……..4 Tablet/laptop/computer……..5 Mobile phone charger……..6 Other, specify……555 Don't know/refuse to answer……..888
C.176	Overall, how satisfied are you with the service provided by the main solar device?		Very satisfied……1 Somewhat satisfied……2 Neutral……3 Unsatisfied……4 Very unsatisfied……5
C.177	In what year did you get your first solar device?		Year Don't know……888
C.178	Has solar been your main source of lighting/electricity since [YEAR in C.177]?		Yes……..1→**C.180** No……2 Don't know……888

C.179	What was your main source of lighting/electricity when it was not a solar device?		National grid connection……..1 Local mini grid connection…….2 Electric generator……...3 Rechargeable battery and storage devices (e.g.: car battery)……4 Kerosene lamp……..5 Fuel-based lighting……6 Dry-cell (non-rechargeable) battery/ Torch/Flashlight…….7 Candle……..8 Other, specify…….555
C.180	Compared to the first time you used solar lighting, do you currently… **Do not read out**		Use more solar lighting……1 Use about the same solar lighting……2 Use less solar lighting……..3 Don't know……888
C.181	What appliances do you use today that you did not use with your first solar lighting device?		Mobile phone charger……..1 Radio……2 TV……3 Fan……4 Refrigerator……...5 No change…….6 Other, specify……555

Main Source of Electricity			
C.182	Of all the sources that you mentioned above, which is the source that you use the most in your household? ***This will be the MAIN (or hours most used) electricity source that is referred to later.***		National grid…1 Mini-grid……..2 Electric generator…….....3 Solar Lantern……..4 Other Solar Lighting product……5 Solar Home System……6 Rechargeable Battery……7 Dry-cell battery……..8 No electricity……...111
CHARGING MOBILE PHONE			
C.183	How many mobile phones do the household members own combined?		If none input "0" → **D.1**
C.184	Are members of your household able to charge all their mobile phones as often as they need inside your dwelling?		Yes……1 → **D.1** No…….2 Don't know……8
C.185	Can you charge at least one mobile phone to full charge everyday inside your dwelling?		Yes…….1→ **D.1** No……..2
C.186	Can you charge at least one mobile phone to full charge in 3 days inside your dwelling?		Yes……1 No…….2
C.187	How many mobile phones of your household members do you charge outside your dwelling?		Number of mobile phones ***If 0*** →Error! Reference source not found.
C.188	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?		Yes……..1 No……..….2
C.189	How much does your household spend each month (in total) on charging the mobile phone(s) outside your dwelling?		Local currency……. Don't pay…….111

D. WILLINGNESS TO PAY FOR A GRID CONNECTION

Respondent should be most knowledgeable member on household electricity.
For each household, CAPI will randomly assign one of the seven following amounts in the placeholder ${CF}: 0% of the connection fee in local currency and respectively 14%, 29%, 43%, 57%, 71%, 100%.

D.1	***Interviewer/CAPI check:*** Is the household connected to the national grid?		Yes……1→**F.1** No…….2
D.2	***Enumerator:*** Record Respondent ID for this section	☐	Individual ID from Household Roster
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.			
D.3	Would you be willing to pay ${CF} upfront for an electricity connection?		Yes……1→**D.9** No…….2
D3b.	Why would you not accept the offer?		Still cannot afford the wiring costs……1 Do not need electricity……..2 →**D.9** Electricity service is unreliable….3 Monthly fee is too expensive……4 Other, specify……555
D.4	Would you be willing to pay ${CF} for an electricity connection, if you were given 3 months to make the payment?		Yes……1→ **D.9** No…….2 Don't Know…….888
D4b.	Why would you not accept the offer?		Still cannot afford the wiring costs……1 Do not need electricity……..2 →**D.9** Electricity service is unreliable….3 Monthly fee is too expensive……4 Other, specify……555
D.5	Would you be willing to pay ${CF} for an electricity connection, if you were given 6 months to make the payment?		Yes……1→**D.9** No…….2 Don't Know…….888
D5b.	Why would you not accept the offer?		Still cannot afford the wiring costs……1 Do not need electricity……..2 →**D.9** Electricity service is unreliable….3 Monthly fee is too expensive……4 Other, specify……555
D.6	Would you be willing to pay ${CF} for an electricity connection, if you were given 12 months to make the payment?		Yes……1→**D.9** No…….2 Don't Know…….888
D6b.	Why would you not accept the offer?		Still cannot afford the wiring costs……1 Do not need electricity……..2 →**D.9** Electricity service is unreliable….3 Monthly fee is too expensive……4 Other, specify……555
D.7	If the connection fee were waived, would you get a grid connection?		Yes……1→**D.9** No…….2 Don't Know…….888
D.8	Why would you not accept the offer?		Still cannot afford the wiring costs……1 Do not need electricity……..2 Electricity service is unreliable….3 Monthly fee is too expensive……4 Other, specify……555
D.9	How much do you think it would cost to do all the internal electrical wiring in your house?		Local currency Don't Know…….888
D.10	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?		Local currency Don't Know…….888

E. WILLINGNESS TO PAY FOR SOLAR DEVICE

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

E.1	***ENUMERATOR/CAPI check:*** Is the main source of electricity for this household:		National grid…1→**F.1** Mini-grid……..2→**F.1** Electric generator…….....3→**F.1** Solar Lantern……..4 Other Solar Lighting product……5 Solar Home System……6→**F.1** Rechargeable Battery……7 Dry-cell battery……8 No electricity……...111
E.2	***Enumerator:*** Record Respondent ID for this section	☐	Individual ID from Household Roster
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.			
E.3	Would you be willing to pay ${CF} upfront for this solar device?		Yes……1→**F.1** No……2
E3b.	Why would you not accept the offer?		Cannot afford the payment……1 Do not need electricity……..2 →**F.1** Maintenance/servicing of device is not available……3 Other, specify……555
E.4	Would you be willing to pay ${CF} for this solar device, if you were given 6 months to make the payment?		Yes……1→**F.1** No……2 Don't Know……8
E4b.	Why would you not accept the offer?		Cannot afford the payment……1 Do not need electricity……..2 →**F.1** Maintenance/servicing of device is not available……3 Other, specify……555
E.5	Would you be willing to pay ${CF} for this solar device, if you were given 12 months to make the payment?		Yes……1→ **F.1** No……2 Don't Know……8
E5b.	Why would you not accept the offer?		Cannot afford the payment……1 Do not need electricity……..2 →**F.1** Maintenance/servicing of device is not available……3 Other, specify……555
E.6	Would you be willing to pay ${CF} for this solar device, if you were given 24 months to make the payment?		Yes……1→**F.1** No……2 Don't Know……8
E.7	Why would you not accept the offer?		Cannot afford the payment……1 Do not need electricity……..2 Maintenance/servicing of device is not available……3 Other, specify……555

F. KEROSENE/FUEL-BASED /CANDLE LIGHTING

The respondent should be most knowledgeable household member on household use of kerosene and candles.

F.1	***Enumerator:*** Record Respondent ID for this section		Individual ID from Household Roster

F.2	F.3	F.4	F.5	F.6	F.7	F.8	F.9	F.10	F.11	F.12	F.13	F.14
FUEL LAMP/ CANDLE/ TASK LIGHT	In the last 12 months, did you use [NAME FROM THE LIST] ***Use photo aid to identify lamp type*** Candle……1→**F.7** Open wick lamp…….2 Hurricane lamp with glass cover…..3 Pressurized mantle lamp…….4 None…….5→**G.1** Other, specify…555 ***Use a separate row for each TYPE of lamp/candle***	What is the main fuel source for [LAMP]? Kerosene/paraffin...2 Diesel.....3 Gasoline...4 Biogas.....5 Other, specify..555	How many of these lamps does your household have? NUMBER OF LAMPS	How much did you pay for each [LAMP]? ***If paying in installment, enter total value of payments*** LOCAL CURRENCY *If more than 1 device, input the average.*	In the last 12 months, how many months did you use [LAMP/ CANDLE]? NUMBER OF MONTHS	In the last month, how many days did you use [LAMP/CANDLE]? NUMBER OF DAYS	How many hours do you use [LAMP/ CANDLE] each day? HOURS Candle…1 Open wick lamp……2 → F.11 Hurricane lamp with glass cover…..3 →F.11 Pressurized mantle lamp….4→ F.11 Other, specify…555 → F.11 (If more than 1 device of the same type, then input the average)	What is the total quantity of [CANDLE] you use in a typical week? NUMBER OF CANDLES All skip to F.12	What is the total quantity of [FUEL] you use in a typical week for your [LAMP]? TOTAL LITERS OF FUEL	How much do you spend on [LAMP/CANDLE] in a typical week? TOTAL LOCAL CURRENCY	What don't you like most about using the [LAMP/CANDLE]? ***Record up to 2 responses*** Lantern too expensive…….1 Fuel too expensive.....2 Fuel not available……3 Accidents can happen.....4 Bad for health……..5 Time spent to collect fuel…6 Other, specify……555 No problems…….111	In the last 12 months, what type of harm/injury did any household members have from [LAMP/ CANDLE]? ***Multiple responses possible*** Death or permanent limb damage……...1 Burns/fire……...2 Poisoning……3 Eye problems……..4 Respiratory problem……..5 Other major injury…….6 Minor injury……..7 Fire with no injury……8 None……111
											a. |__|__|__| b. |__|__|__|	
											a. |__|__|__| b. |__|__|__|	
											a. |__|__|__| b. |__|__|__|	
											a. |__|__|__| b. |__|__|__|	
											a. |__|__|__| b. |__|__|__|	

F.15	What is the main source of lighting the children who are currently enrolled in school usually use for studying/doing homework? ***Single response***		Electric lighting/lamp……1 Solar powered light source……2 Battery-operated light source……3 Street lighting……4 Kerosene /paraffin lamp……5	Candles……...6 Biogas lamps……...7 Other, specify…….555 Studying and homework only during daylight hours….111

F.16	F.17	F.18	F.19	**F.20**	**F.21**
FUEL / CANDLE	**MAIN SOURCE OF FUEL**	What is the **total** quantity of [FUEL] you purchase at a typical time?	How long does this quantity of [FUEL] typically last?	**HOW MUCH DO YOU PAY** IN TOTAL **FOR THE AMOUNT OF FUEL YOU PURCHASED?**	**WHAT IS THE PERCENTAGE OF THIS [FUEL] YOU USE FOR LIGHTING?**
		LITERS OF FUEL/Number of Candles	DAYS	**LOCAL CURRENCY**	PERCENTAGE
1	Candle				
2	Kerosene/paraffin				
3	Diesel				
4	Gasoline/petrol				
5	Biogas				

G. DRY-CELL BATTERIES

G.1	***Enumerator:*** Record Respondent ID for this section		Individual ID from Household Roster

G.2	G.3	G.4	G.5	G.6	G.7	G.8	G.9
DEVICESOURCE	In the last 12 months, did you use dry cell batteries to power [NAME FROM THE LIST] ***Use photo aid to identify lamp type*** Lanterns……1 Flashlights....2 Task lights....3 Radio……4 None…….111→ H.1 Other, specify…555 ***Use a separate row for each TYPE of lighting***	How many of [ITEM] does your household power with dry cell batteries? NUMBER OF EACH DEVICE	How much did you pay for each [ITEM] on average? ***If paying in installment, enter total value of payments*** LOCAL CURRENCY *If more than 1 device, input the average.*	In the last 12 months, how many months did you use [ITEM]? NUMBER OF MONTHS	How many hours do you use [ITEM] each day on a typical day? HOURS *If more than 1 device, input the average.*	Do you use [ITEM] as a regular source of lighting or only as a back-up source when the main source is not available? Regular source of lighting….1 Back-up source of lighting…2 No light available……..3	How many of dry cell batteries do you purchase **each month**? NUMBER OF BATTERIES FOR EACH DEVICE
1							
2							
3							
4							
5							

G.10	How much do you spend each month on dry cell batteries?		LOCAL CURRENCY

H. HOUSEHOLD FUEL CONSUMPTION

Respondent should be household member who most frequently cooks food for the household.

First ask H.3 for all fuel types and then record the information in the following questions only for the fuel that is used.

H.1			***Enumerator:*** Record Respondent ID for this section										
H.2	H.3	H.4	H.5	H.6	**H.6A**	H.7	H.8	H.9	H.10	H.11	H.12	H.13	H.14
Fuel Type ***Read Aloud***	In the last 12 months, did your household use this [FUEL]? **CODE:** Yes...1 No...2→ **NEXT ROW**	In the last 12 months, what did your household use [FUEL] for? ***READ ALOUD the options below and Check "√" for each item the household uses it for.***								In the last 12 months, how many months did you use this [FUEL]?	In the last 12 months, in which months was this [FUEL] **scarce** and **significantly more expensive**? ***Multiple responses possible***	What unit do you purchase/collect [FUE]? Kg…1 Litre ..2 Other..3	How often you purchase/co [FUEL]? Daily..1 Weekly..2 Twice a week..3 Monthly..4 As need ari
		LIGHTING	**COOKING**	**HEATING**	**COOLING**	**FIRE STARTER/ IGNITION**	**BOILING WATER**	**HOME-BASED INCOME ACTIVITY**	**OTHER, SPECIFY**	***Number of Months***	***See Month Codes*** January……1 February……..2 March……...3 April……4 May……..5 June……..6 July……...7 August……..8 September……9 October……10 November……11 December……...12 Don't Know…….888 Available all year……111		
a. LPG/ cooking gas	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
b. Wood purchased	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
c. Wood collected	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
d. Charcoal	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
e. Solar	|__|	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|__|__|__|			

f. Kerosene	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
g. Piped Natural Gas	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
h. Coal/ Lignite	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
i. Animal waste/ Dung	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
j. Crop Residue/ Plant Biomass	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
k. Sawdust	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
l. Coal Briquette	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
m. Biomass Briquette	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
n. Electric	|__|	|__|	|__|	|__|	|__|	|__|	|__|	|__|	|__|					
o. Pellets/ processed biomass/ wood chips	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
p. Biogas (from animal waste or dung)	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
q. Ethanol	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|	|__|__|__|__|	|__|__|__|__|	|__|	|__|
r. Garbage/ plastic	|__|	|__|	|__|	|__|		|__|	|__|	|__|	|__|					

#	Question	PEOPLE			
		a. Women (Age 15 yrs and older) IF 0 GO TO NEXT ROW	**b. Girls (Under age 15 yrs) IF 0 GO TO NEXT ROW**	**c. Men (Age 15 yrs and older IF 0 GO TO NEXT ROW**	**d. Boys (Under age 15 yrs) IF 0 GO TO I**
H.19	**Enumerators: For each question add the total amount of minutes that all the individuals in that age and gender category spend in one day.** In a typical day, how many total minutes did [PEOPLE] **spend** gathering, collecting or purchasing fuels including travel time for the household and income generating activities-	|__|__|__| minutes	|__|__|__| minutes	|__|__|__| minutes	|__|__|__| minutes
H.20	How many times do [PEOPLE] usually collect/purchase fuel?				
H.21	What is the frequency of collection or purchase in H20?	Per day…1 Per week…2 Per month…4	Per day…1 Per week…2 Per month…4	Per day…1 Per week…2 Per month…4	Per day…1 Per week…2 Per month …4

I. USE OF COOKING SOLUTIONS

Instructions: The respondent should be the household member who most frequently cooks food for the household, as identified in A.12

I.1	***Enumerator:*** Record Respondent ID for this section		Individual ID from Household Roster

Record information for each stove that the household uses. List each stove in a separate row of the table. Ask I.3 first and record all types of stoves in household.

	I.2	I.3	I.4	I.5	I.6	I.7	I.8	I.9	I.10	I.11	I.12	I.13	I.14	I.15	I.16
Cookstove ID	Please list for me all the cookstoves that the household used <u>for preparing meals</u> in the past 12 months. ***List all cook stoves giving each a name. If more than one of a type of cookstove, record each stove on a separate line with a different name***	What type of cookstove is [STOVE]? **CODE:** 3-Stone/Open fire stove...1→**I.13** Biomass Self-Built Stove..2→**I.11** Manufactured stove traditional ……3 LPG/natural Gas stove…..5 Kerosene stove…6 Electric stove…7 Other, Specify..555	How did you obtain this [STOVE]? **CODE:** Purchased, upfront …1 Purchase, in installment.2 Receive for free….3→**I.7**	Who decided to purchase this [STOVE]? Member ID	How much did you pay for [STOVE]? **ALL → I.8**	Who gave [STOVE] to you? **CODE:** Local private organizations (NGO)...1 Chief of village…2 Local govt……3 Friend/ relative..4 Other, specify….555	Did you receive training or information on [STOVE?] **CODE:** Yes……1 No…….2	Who is the manufacturer and model of [STOVE]? ***See codes in codebook***	If you want to sell [STOVE] in your community today, how much would you receive? Amount in Local Currency Don't know…888 **All skip to I.12**	Is [STOVE] a metal stove? **CODE:** Yes…1 No….2	How many working burners does [STOVE] have? **NUMBER OF BURNERS**	How long have you been using [STOVE] for? ***YEARS and MONTHS***	In the last 12 months, during which of the following months did you use [STOVE]? ***Multiple response*** **CODE:** January……1 February…..2 March……..3 April……..4 May…….5 June…….6 July…….7 August…….8 September…9 October……10 November…11 December….12 Used all year.....111 Don't know…888	Is the [STOVE] fixed in one place or moveable? **CODE:** Fixed…….1 Moveable..2	In the l where c cook w **CODE:** In dwellin area…… In dwellin area…… In a separ In a veran at least tw Outdoors Other, sp
1															
2															
3															
4															
5															

	I.17	I.18	I.19		I.20		I.21	I.22	I.23	I.24	I.25	I.26
Cookstove ID	Do you use a chimney, hood, other exhaust system while using [STOVE] ? CODE: Yes….1 No…..2→**I.19**	Do you regularly clean a chimney, hood or other exhaust system? **CODE:** Yes…...1 No…...2	In the last 12 months, what are the fuels you used on [STOVE]? **CODE:** LPG/cooking gas…….1 Wood purchased…….2 Wood collected……..3 Charcoal……...4 Solar……5 Kerosene/paraffin……...6 Piped Natural Gas……7 Coal/lignite ……8 Animal Waste/Dung……9 Crop Residue/Plant Biomass…...10 Saw Dust……..11 Coal Briquette……..12 Biomass Briquette……..13 Electric……14 Processed biomass (pellets)/ woodchips….15 Biogas……16 Ethanol……...17 Garbage/plastic……..18 Charcoal briquettes……19 Not applicable……111→**I.21** Other, specify……..555		In the last 12 months, how often was the [FUEL TYPE] available? ***Read aloud options*** **CODE:** Always available……1 Mostly available…….2 Sometimes available…….3 Rarely available…...4 **Skip I.20 B. to I.21 if there is no 'Second Most Used' fuel.**		How much time do household members spend **preparing the [STOVE] 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]?	In the last 7 days, how many days did you use [STOVE]?	In the last 7 days, on average, how many times did you light [STOVE] **per day?**	In the last 7 days, on average, how much time did your household use [STOVE] **per day** to cook or reheat meals (do not include boiling water) in the…		
			A. Most Used ***Single response***	**B. Second Most Used** ***Single response***	**A. Most Used**	**B. Second Most Used**	**MINUTES**	**DAYS**	**NUMBER OF TIMES**	**MORNING** **MINUTES**	**AFTERNOON** **MINUTES**	**EVENING** **MINUTES**
1												
2												
3												
4												
5												

	I.27	I.28	I.29	I.30	I.31	I.32	I.33	I.34	I.35	I.36	
Cookstove ID	In the last 7 days, on average, how much time did your household use [STOVE] per day to boil water (washing, bathing and drinking)? **Minutes**	Do you also use [STOVE] for space heating? **CODE:** Yes…….1 No……..2→**I.31**	In the last 12 months, during which of the following months did you use [STOVE] for **heating**? ***Multiple response*** **CODE:** January……1 February…..2 March……..3 April……4 May…….5 June…….6 July…….7 August…….8 September…9 October……10 November…11 December….12 Used all year.....111	In a typical month, how many hours do you use [STOVE] for heating **each day**? **NUMBER OF HOURS**	In the last 12 months, what type of harm/injury/damage did your household experience from [STOVE]? ***Multiple responses possible.*** **CODE:** Death or permanent damage…..…1 Burns/fire/poisoning……..2 Severe cough/respiratory problem..3 Other major injury……..4 Minor injury……..5 Fire with no injury……6 Itchy/watery eyes……7 Light cough……...8 None……..……....9	What was the reason for the injury? **CODE:** Carelessness or error…1 Problem with stove….2 Other, specify….555	Do you use this [STOVE] most of the time? **CODE:** Yes…….1→**I.37** No……..2	Why do you not use [STOVE] most of the time? ***List up to 2 reasons*** **CODE:** Electricity/fuel for this stove unavailable……..1 Electricity/fuel for this stove too expensive……..2 Certain type of cooking is not possible with this stove…….3 Cookstove does not have enough burners……4 Cookstove flame is too weak……5 Stove takes a long time to cook food……..……..6 Electricity/fuel takes a long time to prepare……..7 Stove is difficult/inconvenient to use……8 I prefer another energy source but the electricity/fuel is too expensive or often not available……9 Certain type of meals taste better with another stove……10 Other, specify……..555 **All skip to I.36**	Is this [STOVE] your ***main*** cookstove? ***Take a picture of the stove and ask the next questions about only this cookstove.*** **CODE:** Yes……1 **NO……..2**	***Ask each question for the most used and second most used fuel for this cookstove as identified in I.19*** ***If no second fuel, only ask about the most used fuel. Skip for Electric stove.*** How much do you spend on the [FUEL TYPE] for [STOVE] in the last month/in a typical month when you use the stove? ENTER THE ACTUAL AMOUNT SPENT, NOT THE MARKET VALUE OF THE FUEL. **Amount in local currency** **A. MOST USED** **B. SECOND MOST USED**
1								a. |__|__|__| b. |__|__|__|			
2								a. |__|__|__| b. |__|__|__|			
3								a. |__|__|__| b. |__|__|__|			
4								a. |__|__|__| b. |__|__|__|			
5								a. |__|__|__| b. |__|__|__|			

MAIN COOKSTOVE

Enumerator: For households using any solid fuel, estimate the size of the cooking space by filling the following fields.			
I.37	***Enumerator: based on responses to I.16 and I.19 does the HH use any solid fuels indoors?***		Yes……1 No……2 → **J.1**
I.38	Record the rough shape of the cooking space		Roughly square……1 Roughly rectangular……2 Roughly circular……3 Other, estimate the size……4 → I.40
I.39	Record the dimensions of the cooking space in heel-to-toe paces or in other measurement units. Square, record one side Rectangle, record both sides Circle, record diameter		
I.40	Record the type of roof covering the cooking space		Flat……1 Roughly Conical……2 Gable (triangular cross-section)……3 None of the above……4 → **I.42**
I.41	Estimate the height of the highest point of the ceiling? Enumerator- record centi-meter		
I.42	How many doors and windows (opening to the outside) does the cooking space have?		Number of Openings

J. WATER HEATING

J.1	Do you heat water for washing (either for washing dishes and clothes or for bathing)?		Yes……1 No……2→Error! Reference source not found.
J.2	What is the main source you use to heat water? ***Select one***		Electric heater/boiler……..1→Error! Reference source not found. Electric kettle/coil……...2→ Error! Reference source not found. Electric stove……..3→ Error! Reference source not found. Gas heater……4→Error! Reference source not found. Gas stove……..…5→ Error! Reference source not found. Solar thermal system……...6→Error! Reference source not found. Same solid fuel stove used for cooking……....7→Error! Reference source not found. Separate solid fuel stove……...8
J.3	What is the MAIN fuel you use in this stove?		LPG/cooking gas……1 Wood purchased……2 Wood collected……..3 Charcoal purchased……..4 Charcoal produced……...5 Solar……6 Kerosene/paraffin……...7 Piped Natural Gas……8 Coal/lignite ……9 Animal Waste/Dung……10 Crop Residue/Plant Biomass…...11 Saw Dust……...12 Coal Briquette……..13 Biomass Briquette……..14 Electric……15 Processed biomass (pellets)/ woodchips……..16 Biogas……17 Ethanol……...18 Garbage/plastic……..19 Other, specify……..555

K. WILLINGNESS TO PAY FOR AN IMPROVED COOKSTOVE

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), charcoal or neither (based on responses in Section H). Then randomly assign one of the four following improved cookstoves:
Fuelwood users – (1) Aspirational wood ICS available in country (2) Popular affordable wood ICS available in local market.
Charcoal users – (1) Aspirational charcoal ICS available in country (2) Popular affordable charcoal ICS available in local market.
(After a type of improved cookstove is randomly chosen, price of this type of cookstove will be assigned based on one of the three percentages of the reference price: 33%, 66% or 100%.)

K1a Does the household have an improved cookstove?
Yes…1→ L1
No….2

K.1	***CAPI/ Enumerator:*** Recall responses to Section H (HOUSEHOLD FUEL CONSUMPTION) and record the most frequently used fuel. If not sure, ask respondent. ***Read options aloud***		HH uses more fuelwood or crop residues than charcoal……1 HH uses more charcoal than fuelwood or crop residues……2 HH does not use any solid biomass (no charcoal, fuelwood or crop residues)……3→ **L.1**
K.2	***Enumerator:*** Record Respondent ID for this section		Individual ID from Household Roster
Interview: [INSERT DESCRIPTION OF THE IMPROVED COOKSTOVE] Please, describe and explain the benefit of having ICS and the features of the assigned 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.			
K.3	Would you be willing to purchase this cookstove at [CAPI: Price]?		Yes……1 No……2
K.4	Would you be willing to pay ${CF} for this stove, if you were given 6 months to make the payment? This means that each month you will pay ${CF/6} per month for 6 months.		Yes……1 → **L.1** No……2 Don't Know……888
K.5	Why would you not accept the offer?		Cannot afford the payment……1 Do not need an improved cookstove….2→ **L.1** Fuel for this stove is unreliable….3→ **L.1** Other, specify……555
K.6	Would you be willing to pay ${CF} for this improved cookstove, if you were given 12 months to make the payment? This means that each month you will pay ${CF/12} per month for 12 months.		Yes……1 → **L.1** No……2 Don't Know……888
K.7	Why would you not accept the offer?		Cannot afford the payment……1 Do not need an improved cookstove….2→ **L.1** Fuel for this stove is unreliable….3→ **L.1** Other, specify……555
K.8	Would you be willing to pay ${CF} for this improved cookstove, if you were given 24 months to make the payment? This means that each month you will pay ${CF/24} per month for 24 months.		Yes……1→ **L.1** No……2 Don't Know……888
K.9	Why would you not accept the offer?		Cannot afford the payment……1 Do not need an improved cookstove…..2→ **L.1** Fuel for this stove is unreliable….3→ **L.1** Other, specify……555

L. CONSUMPTION / EXPENDITURE

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

Item #	Item	Value of Consumption (local currency) during last 7 days -8=Don't know. Record 0 if nothing is consumed.
CONSUMPTION (INCLUDE ITEMS PURCHASED, PRODUCED/ACQUIRED, AND RECEIVED AS A GIFT/DONATION)		
L.1	Cereals & cereal products (e.g.: rice, maize, wheat, flour, millet) and starchy staples (e.g.: cassava, plantain, yam, cocoyam)	|___|___|___|___|___|___|___|
L.2	Pulses & nuts (e.g.: beans, groundnuts, palm nuts, soya beans)	|___|___|___|___|___|___|___|
L.3	Milk & milk products (e.g.: powder, tinned, fresh)	|___|___|___|___|___|___|___|
L.4	Edible oil (e.g.: palm oil, groundnut oil, coconut oil)	|___|___|___|___|___|___|___|
L.5	Vegetables (e.g.: okra, tomato, onion, carrot, cabbage, garden egg) and Fruits (e.g.: bananas, coconut, pineapple, mango, orange, pawpaw)	|___|___|___|___|___|___|___|
L.6	Egg & poultry	|___|___|___|___|___|___|___|
L.7	Meat and meat products (excluding poultry and fish)	
L.8	Fish (smoked/fresh)	
L.9	Sugar & Salt	|___|___|___|___|___|___|___|
L.10	Other food items (e,g, pepper, salt, spices, butter, jam, bread, groundnut paste, **processed foods**, etc.) ***Include all processed foods not prepared by household using raw ingredients***	|___|___|___|___|___|___|___|
L.11	Meals/food bought outside home ***Include any meals purchased from outside that are not prepared by the household***	|___|___|___|___|___|___|___|
L.12	Beverages (e.g.: malt drinks, minerals, coffee/Lipton/Milo)	|___|___|___|___|___|___|___|
L.13	Alcohol, tobacco and cigarettes	|___|___|___|___|___|___|___|

Goods and Services Monthly Expenditure		
Item #	**Item**	**Value of Expenditure (local currency) during <u>last 30 days</u> -8=Don't know. Record 0 if none**
EXPENDITURE		
L.14	Medical/pharmacy expenses (e.g.: tablets/syrups, insecticide, condoms, pharmacy/chemist, traditional/herbal medicine)	|___|___|___|___|___|___|___|
L.15	Soaps, disinfectants and cleaning supplies; cosmetics and toiletries	|___|___|___|___|___|___|___|
L.16	Water supply for drinking and other uses (tanker services, pipe-borne, metered, bore-hole, well, purchased water)	|___|___|___|___|___|___|___|
L.17	Electricity and other fuels (Kerosene, LPG, firewood etc)	
L.18	Mobile phone top-up or bills	|___|___|___|___|___|___|___|
L.19	Internet, land phone, dish, cable, and other household communication	|___|___|___|___|___|___|___|
L.20	House Rent	|___|___|___|___|___|___|___|
L.21	Transportation costs (fuel for own vehicles, cost of public transportation, buses, taxis)	|___|___|___|___|___|___|___|
L.22	Other recurring monthly expenditure (wage of domestic workers, entertainment, etc.)	|___|___|___|___|___|___|___|

Goods and Services Expenditure in Last 12 Months		
Item #	**Item**	**Value of Expenditure (local currency) during <u>the last 12 months</u>** -8=Don't know. Record 0 if none
L.23	School fees and other educational expenses ***Include uniform, PTA dues, books, tutor, school supplies, transport, food, etc.***	|___|___|___|___|___|___|___|
L.24	Clothing, shoes, and accessories	|___|___|___|___|___|___|___|
L.25	Ceremonies (e.g. funerals and expenses, weddings, festivals, naming ceremony, engagement) ***Only include costs to host celebration or to give donations/gifts for attending celebrations.***	|___|___|___|___|___|___|___|
L.26	Gifts and donations (e.g.: donation to church made by the household, tithes) ***Only include gifts and donations not already included in L.25***	|___|___|___|___|___|___|___|
L.27	Hospital/Doctor visits and Diagnostic tests (e.g.: consultations at private hospital, public hospital, traditional healer) and medicines ***Do not include costs paid for by insurance***	|___|___|___|___|___|___|___|
L.28	Furniture (e.g.: mattresses, room furniture, furnishing items, floor mats, carpets)	|___|___|___|___|___|___|___|
L.29	Purchase, repair, maintenance, and building (e.g.: cement, roofing, paint, carpentry, labor for repairs, sewerage removal)	|___|___|___|___|___|___|___|
L.30	Utensils & kitchen equipment (e.g.: cups, plates, cutleries, cooking pots, buckets)	|___|___|___|___|___|___|___|
L.31	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	|___|___|___|___|___|___|___|
L.32	Appliances & tools (e.g.: electric iron, electric fans, refrigerators, lanterns, brooms)	|___|___|___|___|___|___|___|
L.33	Vehicles & motorcycle & bicycle (purchase or repair of own car/moto/ car battery)	|___|___|___|___|___|___|___|
L.34	Remittance sent to family members and relatives	|___|___|___|___|___|___|___|
L.35	Losses due to theft, robbery, accidents, natural disasters, etc.	|___|___|___|___|___|___|___|
L.36	Other major expenses not yet covered (specify)	|___|___|___|___|___|___|___|

M. SELECTED ASSETS: FARM EQUIPMENT AND ANIMALS

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

Item Number	Item	a. How many [ITEM] in (working condition or still healthy) does your household own? ***Write 0 if none 0→NEXT ROW***
M.1	Vehicle (Car, pickup truck, etc)	
M.2	Motorcycle	
M.3	Bicycle	
M.4	Motor boat	
M.5	Other boat	
M.6	Tractor	
M.7	Domestic water pump	
M.8	Cow/bull/calves	
M.9	Water buffalo	
M.10	Horse/donkey	
M.11	Sheep	
M.12	Goat	
M.13	Pig	
M.14	Rabbit	
M.15	Fish (Aquaculture)	
M.16	Ox cart	
M.17	Other, specify	

N. Household assets: Electrical Appliances

Item Number	Item	a. How many [ITEM] in working condition does your household own? ***Write 0 if none 0→NEXT ROW***	b. How many hours does your household use [ITEM] in a typical day? (Only for lights, fan, radio and TV) **Number of hours**
N.1	Incandescent Light Bulb		
N.2	Fluorescent Tube		
N.3	Compact Fluorescent Light (CFL) Bulb		
N.4	LED Light Bulb		
N.5	Torch/flashlight/lantern		
N.6	Radio/CD Players/sound system		
N.7	VCD/DVD		
N.8	Fan		
N.9	Refrigerator		
N.10	Microwave oven		
N.11	Electric Iron		
N.12	Hair dryer		
N.13	Electric food processor/blender		
N.14	Rice cooker		
N.15	Freezer		
N.16	Washing machine		
N.17	Electric sewing machine		
N.18	Indoor Air cooler		

N.19	Air Conditioner (AC)		
N.20	Space Heater		
N.21	Electric water heater		
N.22	Solar based water heater		
N.23	Computer		
N.24	Electric hot water pot/kettle		
N.25	Smartphone (internet phone) charger		
N.26	Regular mobile phone charger		
N.27	Black & White TV		
N.28	Regular Color TV		
N.29	Flat color TV		
N.30	Electric Water Pump		
N.31	Other, specify		

O. HOUSEHOLD LAND OWNERSHIP AND OTHER ASSETS

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.

	Type of land and other assets	a. Do you own [LAND TYPE]? Yes……1 No…….2→**next row**	b. What is the total size of the land? Quantity	c. What is the unit the land is measured in? Hectares.....1 Sq meters.....2 Acres.....3 Plots.....4 Ridges.....5 Other (specify)...555	d. If you were to sell, what is the total value? ***Local currency***
O.1	Agricultural land (Current Area of land being used for cultivation or animal grazing.)				

P. HOUSEHOLD ECONOMIC SHOCKS

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

Shocks	P.1 In the **last 12 months**, have you been affected by (…)? **CODE:** 1= Yes 2= No→**next shock**	P.2 Who was affected by the event? ***Read options aloud*** **CODE:** 1= Just this household 2= Family members outside HH 3= Several HHs in this village 4= Most or all HHs in this village 5= Several villages in this area
a. An income loss due to agriculture failure/loss (crop disease, livestock death, etc) and non-agriculture/farm business failures	|___|	|___|
b. An income loss due to loss of employment, imprisonment, illness/injury, or death of economically active household member.	|___|	|___|

c. Other, specify		

Q. STREET LIGHTING

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

Q.1	Respondent ID		Record ID from the Household Roster
Q.2	Does your neighborhood have any form of street lighting? ***"Neighborhood" means 0.5 KM from Household***		Yes……..1 No……..2→**Q.5**
Q.3	How satisfied are you by the brightness of the street lighting service in your neighborhood? ***Read options aloud***		Very unsatisfied……..1 Somewhat unsatisfied…….2 Somewhat satisfied…….3 Very satisfied……..4
Q.4	What do you think are the risks/problems with street lighting in your neighborhood? ***Multiple responses possible***	c. |__|__|__| d. |__|__|__| e. |__|__|__| d.|__|__|__|	Electrocution……..1 Poor installation…….2 Poor maintenance……..3 Outages/blackouts of street lighting……..4 Does not stay on all night……..5 No risks/problems…….111
Q.5	Do you have a light that you could turn on at night to provide light outside your home?		Yes…….1 No……..2→**S.1**
Q.6	How many hours do you turn it on each night after it becomes dark?		Number of hours

S. HEALTH IMPACTS

#	Question	PEOPLE				
		a. Women (Age 15 years and older)	**b. Girls (Under age 15 years)**	**c. Men (Age 15 years and older)**	**d. Boys (Under age 15 years)**	**e. Young Children (0-4 years)**
S.1	Number of [PEOPLE] with an illness with a cough at any time in the last 14 days?	____ people (with cough) If 0 →**S.1b**Error! Reference source not found.	____ people (with cough) If 0 → **S.1c**	____ people (with cough) If 0 → **S.1d**	____ people (with cough) If 0 → **S.1e**	____ people (with cough) If 0 → **S.5**
S.2	Of [PEOPLE] who had an illness with a cough, how many went to see a doctor/clinic?	____ people	____ people	____ people	____ people	____ people
S.3	Of the [PEOPLE] who had an illness with a cough, how many breathed faster than usual with short, rapid breaths or had difficulty breathing?	____ people *(with fast breathing)* If 0→**S.5**	____ people *(with fast breathing)* If 0→**S.5**	____ people *(with fast breathing)* If 0→**S.5**	____ people *(with fast breathing)* If 0→**S.5**	____ people *(with fast breathing)* If 0→**S.5**
S.4	How many of those [PEOPLE] with short, rapid breaths or difficult breathing, experienced a problem in the chest or a blocked or runny nose?	____Chest ____Nose ____Both ____Other ***If Don't know enter 88***	____Chest ____Nose ____Both ____Other ***If Don't know enter 88***	____Chest ____Nose ____Both ____Other ***If Don't know enter 88***	____Chest ____Nose ____Both ____Other ***If Don't know enter 88***	____Chest ____Nose ____Both ____Other ***If Don't know enter 88***
S.5	How many [PEOPLE] experienced eye irritation or eye problems in the last 14 days?	____ people	____ people	____ people	____ people	____ people

#	Question	PEOPLE				
		a. Women (Age 15 years and older)	**b. Girls (Under age 15 years)**	**c. Men (Age 15 years and older**	**d. Boys (Under age 15 years)**	**e. Young Children (0-4 years)**
In the last 12 months, how many [PEOPLE] have experienced…						
S.6	Poisoning from liquid fuel	____ people	____ people	____ people	____ people	____ people
S.7	Burns related to cooking or heating or fuel	____ people If 0 →**S.9**	____ people If 0 →**S.9**	____ people If 0 →**S.9**	____ people If 0 →**S.9**	____ people If 0 →**S.9**
S.8	Of the burns related to fuel--Burns that required a visit to the clinic/hospital	____ people	____ people	____ people	____ people	____ people
S.9	Back or neck problems from carrying fuel for cooking/heating	____ people	____ people	____ people	____ people	____ people
S.10	Electrical injuries (e.g. shocks) that prevent attendance in school/work	____ people	____ people	____ people	____ people	____ people
S.11	Other minor electrical injuries	____ people	____ people	____ people	____ people	____ people

T. WOMEN'S EMPOWERMENT

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

MOBILITY		
	STATEMENT Can you decide on the following activities by yourself or you have to consult your husband or other family members?	**RESPONSE CODE:** Decide only by myself ……...1 Decide together with my husband ……2 Decide together with other family members …….....3 Other Specify ……4
T.1	Visiting parents/relatives/friends within or outside the village/township/suburb	
T.2	Going to markets/banks/commercial centers/places of work.	
T.3	Going outside the village	
ACCESS TO INFORMATION, ORGANIZATION MEMBERSHIP, VILLAGE ELECTRIFICATION COMMITTEE, CAPACITY BUILDING AND ACCESS TO FINANCE		
T.4	If you are a member of a women's group, which type of group are you a member of/do you belong to? ***Multiple responses possible.***	**Code:** Not a member……1 Religious related activities….2 Health care related activities...3 Income generating activities…4 Self-help organization……. 6 Savings group……...7 Microfinance organization…...8 Cooperative……..9 Village administrative committee….10 Village electrification committee…..11 Other specify…….12
T.5	What do you think are the main constraints women face in participating in organizations or activities in the area?	**Code:** Limited time…….1 Lack of support from family…2 Limited confidence….3 Limited education….4 No organizations in my community….5 Other specify…….555
T.6	Are you a member of the village electrification committee?	**Code:** Yes……..1 No……..2→**T.8**
T.7	How many times do you meet in a month?	**[# of times]**
T.8	Do you as an individual own a bank account? ***Read options aloud***	**Code:** No account…1 Own account……..2 Joint account (with spouse)….....3 Joint account (with group)….....4

INTERVIEW DETAILS			
1.	Enumerator	ID: |__|__|	NAME:
Date of Interview DD/MM/YY	|__|__| / |__|__| / |__|__| D D M M Y Y		
End Time	|__|__| : |__|__| ***Use 24 hour clock***		
Date of Second Interview DD/MM/YY	|__|__| / |__|__| / |__|__| D D M M Y Y		
Second Interview End Time	|__|__| : |__|__| ***Use 24 hour clock***		
Date of Third Interview DD/MM/YY	|__|__| / |__|__| / |__|__| D D M M Y Y		
Third Interview End Time	|__|__| : |__|__| ***Use 24 hour clock***		
Comments from Enumerator			