

Energy Survey

A. COMMUNITY IDENTIFICATION

| | | | |
|-----|------------------------------------|-----------------------------------|------------------------------------|
| A.1 | Province | Name | See codebook |
| A.2 | District | Name | See codebook |
| A.3 | Sector | Name | See codebook |
| A.4 | Cell | Name | See codebook |
| A.5 | Village | Name | |
| A.6 | Locality: Urban/Rural | Urban.....1 Rural.....2 | |
| A.7 | Interview Language | Kinyarwanda = 1 English = 2 | <input type="checkbox"/> |
| A.8 | Community ID | | See codebook |
| A.9 | GPS Coordinates of health facility | a. Latitude ° . 's | b. Longitude ° . 'e |

***RESPONDENT SHOULD BE THE ADMINISTRATOR OR THE PERSON TASKED WITH PAYING THE BILLS**

****THE HEALTH FACILITY SELECTED SHOULD BE WITHIN 5KM OF THE COMMUNITY CENTER**

B. COMMUNITY HEALTH FACILITY

Provide information on the informant for the Health Facility questionnaire.

[illegible]

| | B.12 | B.13 | B.14 A. | B.14 B. | B.15A | B.15 | B.16 | B.17 | B.18 | B.19 |
|----------------------|--|--|---|---|--|---------------------------------------|--|----------------|---|--|
| HEALTH FACILITY CODE | What type of facility is this? | How many people are employed at this facility? | How many patients visit this facility per day on average when the facility is open? | How many patient beds does the facility have? | How many months does this facility operate for the last 12 months? | Does this facility operate for 24hrs? | What time does this facility usually open and close? | | Does this facility have electricity from any source, including grid connection, generator, solar power, mini-grid, or rechargeable batteries? | What is the primary (most commonly used) lighting source for the facility? |
| | CODE Public/Government facility.....1 Private facility.....2 Religious group affiliated facility.....3 NGO/Non-profit affiliated facility.....4 Other, specify.....555 | Number of employees (Include health-care and non-health care staff, & full-time and part-time staff) | Number | Number | Months | Yes...1→B.18 No.....0 | a. Opening time b. Closing time | a. AM b. PM | Yes.....1→B.20 No.....0 | CODE No source of lighting....1→ B.97 Solar Device.....2→B.33 Fuel-based lighting.....3→ B.97 Kerosene lamps.....4→ B.97 Candles.....5→ B.97 Dry cell battery.....6→ B.97 Other, specify.....555→ B.97 |
| | | | | | | | a. AM b. PM | a. AM b. PM | | |

| | ALL | GRID/MINI-GRID/GEN | | | | |
|----------------------|---|---|--|---|--|--|
| | B.20 | B.21 | B.22 | B.23 | B.24 | B.25 |
| HEALTH FACILITY CODE | What is the primary source of electricity in the facility? | In the last year, during the hours the facility is open, how many hours is electricity available each day (out of 24 hours) on average? | In the last year has the facility experienced situations in which appliances could not be used or were damaged because of <u>low voltage</u> or <u>voltage fluctuations</u> from the primary electricity source? | How severely do the issues of low or fluctuating voltage disrupt service delivery? | CAPI: Is the response to question B.20 “National grid” (Code 1) or “Local mini-grid” (Code 2) or “Generator” (Code 3)? | How many <u>unscheduled interruptions</u> of electricity did you experience in a typical week? |
| | CODE National grid (Utility Company).....1 Local mini-grid.....2 Generator.....3 Solar home system.....4 Solar lighting system.....5 Solar lantern6 Rechargeable battery system.....7 Other, specify.....555 | Hours | Yes.....1 No.....0→ B.24 | Code Little or None.....1 Moderate.....2 Severely.....3 Don't know.....888 | Yes.....1 No.....0→B.27 | <i>(Enumerator – Timeframe is within the last year)</i> Number of interruptions per week If “0” → B.28 A |

| | GRID/MINI-GRID/GEN | | GRID/MINI-GRID/GEN | | | INTERVIEWER: REMEMBER TO PROMPT FOR BILL (IF ANY) | | | |
|----------------------|--|---------|---|---|--|---|---|--|---|
| | B.26 | | B.27 | B.28 A | B.28B | B.29 | B.30 | B.31 | B.32 |
| HEALTH FACILITY CODE | What was the average duration of each individual <u>unscheduled interruption</u> ? | | CAPI/Interviewer: Is the response to B.20 "Solar Devices Codes 4, 5, 6)"? | In the last year, who regularly paid for the [Primary source] electricity in the facility? | What is the facility's monthly electricity budget? | Who gets paid for the [Primary Source] electricity? Code Local representative/official of energy company.....1 Pre-paid meter card seller.....2 Community/village/municipality...3 Relative.....4 Neighbor.....5 Landlord.....6 Shopkeeper for fuel purchase to power generator.....7 No need to pay (paid for equipment only).....8 →B.33 Other, specify.....555 | In the last 12 months, how much did the facility spend on the [Primary Source] electricity (including fuel) in a typical month? (Enabling condition: Only if B20=1,2,3, or 7) | What is the current unit cost the facility pays for electricity? | /Interviewer: Did the respondent use a recent electricity bill to assist in answering B 30 and B 31 ? |
| | a. Hours | b. Mins | | | | | | | |

| SOLAR | | | | | | | | | | | | | | |
|----------------------|--|--|--|--|---|---|---|--|--|--|----------------------------------|---|-------------------------------------|--|
| | B.33 | B.34 | B.35 | B.36 | B.37 | B.38 | B.39 | B.40 | B.41 | B.42 | B.43 | B.44 | B.45 | B.46 |
| HEALTH FACILITY CODE | Which solar devices does the facility own? | How many solar lanterns are owned by the facility? | What is your most frequently used solar [DEVICE]? | When was the device installed or acquired? | Is the device still working? | When did it stop working? | Is the device still working in the same capacity as when it was installed/acquired? | How did you obtain the device? | Who gave you this device, or sponsored you to acquire this device? | Have batteries been changed on this device? | When were the batteries changed? | Who paid for the new batteries? | What was the cost of the batteries? | How much did the facility spend in purchasing the solar device in total? |
| | | <i>Include lanterns of different models/ makes acquired by the facility on different dates</i> | Code Solar Home system.....1 Solar lighting system.....2 Solar lantern.....3→ B Not applicable...4 | [month, year] | Code Yes....1→ B 39 No.....0 | [month, year] All skip→B 40 | Code Yes.....1 No.....0 | Code Purchased.....1→ B 42 Partially-sponsored.....2 Free.....3 | Code Local private organizations (NGO).....1 Private Commercial Seller.....2 Local government3 Central government.....4 Politician.....5 Relative/Friend...6 Other, specify.....555 | Code Yes.....1 No.....0 → B 46 | <i>[month, year]</i> | Code Facility.....1 Local gov't.....2 National gov't.....3 NGO/Donors.....4 Other, specify...555 Don't know.....888 | Local currency | <i>If B 40 = Purchased (code 1)</i> Local currency Don't know.....888 |
| | a. Solar Home systems _ _ → B 35 b. Solar lighting systems _ _ → B 35 c. Solar Lanterns _ _ | | | | | | | | | | | | | |

| | | SOLAR | | | | | | | | | |
|----------------------|--|---|---|---|--------------------------------------|---|--|--|---|--|---|
| | B.47 | B.48 | B.49 | B.50 | B.51 | B.52 A | B.52 B | B.53 | B.54 | B.55 | B.56 |
| HEALTH FACILITY CODE | Who currently maintains the solar device? | Did the company/ organization that installed/ provided the device provide training for maintenance? | Whom do you call when the device is not working properly? | How many times did you call them since the device was installed / acquired? | Did they fix the problem? | Are there any contracts covering operations and maintenance of the facility's primary electricity system? | How is operations & maintenance and spare parts paid for? | Are the working hours of the facility limited by the electricity supply available? | In the last year, has the [Primary source] electricity in the facility caused any accidents which resulted in human injury (including minor injury)? | [Enumerator's observation] Can you see the bare wire from the electric pole to households? | What is the highest level of damage caused by the [Primary source] electricity in the last year? |
| | Code Facility staff.....1 Technician from the company that installed the system.....2 Local government.....3 NGO.....4 Nobody/system does not need maintenance.....6 Other, specify.....555 | Code Yes.....1 No.....0 | Code Facility staff.....1 Technician from the company that installed the system.....2 Local government.....3 NGO.....4 Nobody.....5→B 52A Other, specify.....555 | Times <i>If 0 then skip to B.52A</i> | Code Yes.....1 No.....0 | Code Yes.....1 No.....0→B 53 | Code Regular budget of the facility.....1 Special budget for maintenance.....2 By local gov't.....3 By national gov't.....4 No funds available/no need.....5 Other, specify.....555 | Code Yes.....1 No.....0 | Code Yes.....1 No.....0→B 58 | Code Yes.....1 No.....0→B.58 | Code Death or permanent limb damage.....1 Other major injury.....2 Minor injury.....3 |
| | | | | | | | | | | | |

| | B.57 | B.58 | B.59 | B.60 |
|----------------------|--|---|---|--|
| HEALTH FACILITY CODE | Was this injury due to faulty wiring/connection? | Does the facility have a back-up source of electricity to use when the [Primary source] fails? | What is the back-up source of electricity in the facility? <i>[CAPI check for no overlap with primary source B.20]</i> | What is the most important constraint that the facility experiences with the [Primary source] electricity? |
| | Code Yes.....1 No.....0 | Code Yes.....1 No.....0 → B 60 | Code National grid.....1 Local mini-grid.....2 Generator.....3 Solar home system.....4 Solar lighting system5 Solar lantern.....6 Rechargeable battery system.....7 No back-up source111 Other, specify.....555 | Duration of supply (hours per day).....1 Low voltage problems or voltage fluctuations...2 Unpredictable interruptions.....3 Unpredictable bills.....4 Too expensive.....5 Cannot power large appliances.....6 No constraints.....7 Other, specify.....555 |
| | | | | |

| Item Number | Item | a. In the last year, does the facility own any... in working condition? Code Yes.....1 No.....0 →Next item | b. How many of the appliance/Item does the facility use? Number | c. Is it AC, DC, or portable? (CAPI: Only for the health facility and the items from B.60 to B.93) Code AC.....1 DC.....2 Portable.....3 Don't know....888 | d. Of the items owned in working condition and not used, which of them would most significantly enhance the quality of the services in the facility? Code Yes.....1 No.....0 |
|-------------|--------------------------------------|--|--|--|---|
| B.61 | Incandescent Light Bulb | | | | |
| B.62 | Fluorescent Tube | | | | |
| B.63 | Compact Fluorescent Light (CFL) Bulb | | | | |
| B.64 | LED Light Bulb | | | | |
| B.65 | Television | | | | |
| B.66 | Projector | | | | |
| B.67 | Computer | | | | |
| B.68 | Printer | | | | |
| B.69 | Internet modem/router | | | | |
| B.70 | Fans | | | | |
| B.71 | Air Conditioning | | | | |
| B.72 | Electric space heaters | | | | |
| B.73 | Refrigeration | | | | |
| B.74 | Drinking Water Coolers | | | | |
| B.75 | Mobile money agents/kiosks | | | | |
| B.76 | Mobile Phone Charging kiosks | | | | |
| B.77 | Water Pump | | | | |
| B.78 | Water Tank | | | | |
| B.79 | Sterilizer | | | | |
| B.80 | X-Ray Machines | | | | |
| B.81 | Microscope | | | | |
| B.82 | Centrifuge | | | | |
| B.83 | Refrigerator for vaccination | | | | |
| B.84 | Ultrasound | | | | |
| B.85 | Nebulizer and Pulse Oximeter | | | | |
| B.86 | ECG machine | | | | |
| B.87 | Blood glucose monitor | | | | |
| B.88 | Suction apparatus, Anesthesia | | | | |
| B.89 | Operation Theatre | | | | |
| B.90 | Oxygen Concentrator | | | | |
| B.91 | Blood Banks | | | | |
| B.92 | Maternity Ward | | | | |
| B.93 | TB Machine | | | | |

| | B.94 | B.95 | B.96 | B.97 | |
|-----------------------------|---|---|---|--|------------|
| HEALTH FACILITY CODE | Of the items owned in working condition and NOT USED, which of them would significantly enhance the quality of the services in the facility? | What is the main reason why the facility does not use this item? (Refer to the item mentioned in B.94) | Is the capacity of the primary source of electricity sufficient to run simultaneously all electrical appliances needed in the facility? | CATI: Record the end time of interview | |
| | Code (see codebook) Report the code of the item. If "0" → B 97 | Code Electricity is unavailable.....1 Electricity is too expensive.....2 Electricity system does not have adequate capacity.....3 Other, specify.....555 | Code Yes.....1 No.....0 | a. Hour | b. Minutes |