Household Questionnaire: FROM ACCESS TO ADOPTION

0. Background information

000. ID of interviewer

001. Name of interviewer

002. Name of supervisor

003. Date of interview (dd/mm/yyyy) __ / __ / 2018

004. Interview start time (hh:mm on a 24 hr scale)

005. GPS code _____ (in code)

006. State _____ (2011 Census code)

007. State name _____

008. District _____ (2011 Census code)

009. District name _____

010. Block name _____

011. Village _____ (in 2011 census code)

012. Village name _____

013. Hamlet name _____

1. Introduction to the Household Head

[Show your ID card to the respondent and ask to interview the household head or primary household decision maker. If that person is not present, ask for the other adult person in the household. If no adult present, terminate the interview.]

Good morning! I work with MORSEL, an organization based in Lucknow that conducts surveys in India. Your household has been selected to participate in a short survey.

This survey is being conducted by John Hopkins University and Smart Power India (Gurgaon). It is aimed to understand the situation of electricity in your hosehold.

This survey has no relation to any government body or private company. It will take no more than 45 minutes. Please note that all the information collected will be kept confidential and you will be free to stop the survey anytime.

Would you like to participate? *[Interviewer to record response]*

101. 1 Yes 0 No **(If No, then terminate the interview)**

If Yes,

102. Are you the primary decision maker? 1 Yes 0 No

103. Name of the respondent _____

104. Mobile phone for contact _____
105. Landmark [Neighbour's name] _____
106. Name of the household head _____

2. Household Profile

[* Enumerator observes – male or female ***]**

201. Gender 1 Female 0 Male

202. What is your age? _____ (NUMBER)

203. Are you married? 1 Yes 0 No

204. How many adults (18+ years) live permanently in your household? _____ (NUMBER)

205 How many adult female members live permanently in your household? _____ (NUMBER)

IF ONE OR MORE:

205a. Does any female in your household engage in paid work? 1 Yes 0 No

206. How many children (0-18 years) live permanently in this household? _____ (NUMBER)

IF ONE OR MORE:

206a. How many of them are male? _____ [NUMBER]

206b. How many children are above 14? _____ [NUMBER]

207. How many people in the household are currently studying? _____ (NUMBER)

208. What is the highest level of education received by the primary decision maker in the household?

1. Illiterate
2. Literate but no formal school/ School up to 4 years
3. School 5 to 9 years
4. SSC/HSC (10^{th}/12^{th})
5. Some college (including diploma but not graduate)
6. Graduate/PG

209. What is your religion?

1. Hindu
2. Muslim
3. Christian
4. Buddhist
5. Jain
6. Other (specify): _____

210. What is the caste group of your household?

1. General
2. Other Backward Caste
3. Scheduled Caste
4. Scheduled Tribe
5. Other (specify): _____

211. Which ration card does the household have?

1. Antodaya (red) card
2. BPL (white) card
3. Priority card
4. APL (yellow) card
5. None

212. What is the primary source of income of your household?

1. Agriculture on own land
2. Agriculture on leased land
3. Agricultural labour
4. Non-agricultural labour
5. Livestock
6. Salaried job
7. Self-employed/business
8. Other (specify): _____

213. Does your household have a bank account? 1 Yes 0 No

214. What is your household's monthly expenses ? _____ [RUPEES/MONTH]

215. What is the average annual income of your household? _____ [RUPEES/YEAR]

216. Is your household currently indebted? 1 Yes 0 No

[Enumerator: Ask for all debts]

IF YES:

216a. How much is your current debt? _____ [RUPEES]

[Ask for all kinds of debts]

217. Who in your household makes important financial decisions? **[Read aloud all options]**

1. Male head of household
2. Female head of household
3. Jointly
4. Others, specify:

218. Does your household own any agricultural land? 1 Yes 0 No

IF YES:

218a. How much land do you have? _____ [NUMBER] _____[UNITS]

[ENUMERATOR: TRY TO GET ANSWER IN BIGHA]

House Characteristics _____

[Enumerator reads out: now I am going to ask about some characteristics of your house]

219. Does your family own this house? 1 Yes 0 No

220. Type of house: **[Enumerator observes and mark]**

1 Pucca
2 Mixed (Semi-pucca)
3 Kaccha

221. How many of the following does your household have?

a. Room _____[NUMBER]
b. Bicycle _____[NUMBER]
c. Motorcyle/scooter_____[NUMBER]
d. Tractor/cars_____[NUMBER]
e. Toilets_____[NUMBER]

222. Which fuels are used in your household for cooking? **[CHECK ALL THAT APPLY]**

1. Firewood and chips
2. Dung cakes
3. LPG
4. Others (specify)

223. How many cattle and livestock do you own? **[ASK FOR EACH OPTION]**

a. Cows/buffaloes (including calves) _____ [NUMBER]
b. Fowls/chicken _____ [NUMBER]
c. Goats _____ [NUMBER]

224. In future, would anyone in your household be interested in running any business activity?

1 Yes 0 No

IF YES:

224a. What is preventing you from pursuing that business? (CHECK ALL THAT APPLY)

1. Do not have capital/money to start the business
2. Do not have required equipment
3. Do not know how to start
4. Do not have adequate electricity
5. Others (specify):

3. Current Sources of Power and Electricity

[Enumerator reads out: Now I am going to ask you about the source of electricity in your household]

Source 1: Grid Electricity

301. Does your house get grid electricity?

1 Yes 0 No 99 Have connection, but no electricity

[Instruction for enumerators: In case the respondent says he uses private electricity, confirm whether it is from diesel generator or solar mini-grid. If it is from neither, then it is grid electricity only. In that case, mark yes and proceed.]

[Have connection, but no electricity**, SKIP TO 316]**

IF NO:

301a. Does your hamlet have grid-electricity? 1 Yes 0 No **[IF NO SKIP TO 316]**

301b. Why do you not have grid-electricity? **[CHECK ALL THAT APPLY]**

1. Cannot afford (or do not earn enough)
2. Do not need electricity
3. Could not get connection
4. It is expensive
5. Service is not good/reliable
6. Power supply is inadequate
7. Do not have residential certificate
8. Don't know how to get the connection
9. Other [SPECIFY]: _____

301c. How far is the nearest electricity pole from your house? _____[METERS]
[Enumerator: physically confirm the distance of the electric pole from the house]

[SKIP TO 316]

IF YES:

302. How many years ago did your house first connect to the grid? _____ [YEARS] _____[MONTHS AGO]

303. What was the initial cost of getting the grid-electricity connection? _____ [RUPEES]

304. Do you have a meter installed for the grid-electricity connection?

1 Yes 0 No 99 Yes, but not working

[ENUMERATOR: PHYSICALLY VALIDATE THE PRESENCE OF METER]

305. How frequently do you receive your electricity bill?

1. Never **[SKIP TO 308]**
2. Every Month
3. Every two months
4. Irregular
5. New connection, so no experience **[SKIP TO 308]**
6. Others (specify): _____

305a. Do you receive fixed or variable bill? 1 Fixed 2 Variable

306. Do you have your latest electricity bill? 1 Yes 0 No

CODING: IF THE BILL IS AVAILABLE AND VARIABLE (i.e. 1 in 306 and 2 in 305)
[Enumerator: request the respondent to see the latest electricity bill. If the bill is available, note down the units of electricity consumed, bill amount and other details below in 306a – 306d]

306a. Month/Year of the bill: ____ __/__ [MM/YY]

306b. No of billing days: _____ [DAYS]

306c. Billed amount: _____ [RUPEES]

306d. No of units of consumption: _____ [UNITS in kWh]

[CODING: IF BILL IS NOT AVAILABLE OR IT IS FIXED, i.e. 0 in 306 OR 1 in 305]

307. What is your average expense on using grid-electricity? ____ [RUPEES IN] _____[MONTHS]

308. On average, how many hours a day do you get electricity? _____ [0-24 hours]

[Enumerator: Ask about electricity hours, from morning till evening. Carefully count the total hours of supply and confirm again with the respondent.]

309. How many hours of electricity do you get between 6 in the evening and 12 midnight? _____ [0 – 6 HOURS]

310. How many days in the last month was there no power throughout the day? _____[0-30 DAYS]

311. How many days in the last month, did your appliance get damaged because of voltage fluctuations? _____(0-30 DAYS)

312. How many days in the last month, was the voltage too low to run appliances? _____[0-30 DAYS]

Source-2: Solar Home Systems सोलर होम सिस्टम_____

316. Have you heard about solar home systems? 1 Yes 0 No

IF NO: [* ENUMERATOR: READ THE TEXT BELOW AND SHOW PICTURE***]**

Solar home systems contain solar panels which are installed on rooftop of a house. These can convert sunlight into electricity, which is stored in a battery. Thus, solar home system can provide electricity in the household, whenever needed, even after sunset. There is no recurring cost to use it. But the battery needs to be replaced every 3-5 years.

317. Do you use solar home system for electricity? 1 Yes 0 No **[IF NO, SKIP TO 324]**

318. Which brand do you use? _____
319. For how long have you been using it? _____ [YEARS] _____[MONTHS]

320. How much is the Wattage (WATT) of your solar panel (plate)? _____ [WATT]
321. How much did the solar home system cost you? _____ [RUPEES]

322. On average, how many hours of daily electricity do you use from it? _____ [0-24 HOURS/DAY]

Source 3: Rechargeable Battery

324. Do you use rechargeable battery?

[If the respondent uses solar home system, then mark yes only if he owns more than one battery.]

1 Yes 0 No **(IF NO SKIP TO 334)**

[ENUMERATOR: REQUEST TO SEE THE BATTERY AND NOTE ITS CAPACITY FROM THE PRODUCT SPECIFICATIONS]

325. Is the battery branded or local? 1 Branded 0 Local

326. What is the capacity of the battery in Ampere-hour (AH)? _____ [AH]

327. How much did it cost you? _____ [RUPEES]

328. How do you charge it? **[CHECK ALL THAT APPLY]**
1. Own electricity connection at shop/household
2. Own solar plate
3. Electricity connection of neighbor/relative
4. In the village market
5. Nearby village
6. Others (specify) _____

[IF CHARGING BY OWN ELECTRICITY CONNECTION OR SOLAR PLATE, SKIP TO 331]

329. How many times in a month do you charge it? _____ [NUMBER]

330. How much do you spend for charging it once? _____ [RUPEES]

331. On average, how many hours of daily electricity do you get from it? _____ [HOURS/DAY]

Source 4: Solar Mini Grid _____

[* ENUMERATOR: READ THE TEXT BELOW, SHOW PICTURE***]**

Solar mini-grids are small solar plants that generate electricity from solar energy. From there electricity connection is given to local customers for household or business purposes.

334. Have you heard about solar mini-grid systems for electricity? 1 Yes 0 No (**IF NO SKIP TO 345**)

IF YES:

334a. How did you hear about mini-grid systems? **[CHECK ALL THAT APPLY]**
1. Radio
2. TV
3. News paper
4. Company representative
5. Neighbors / relatives / acquaintances
6. Village representative / Sarpanch
7. It is present in our village
8. Someone in the neighboring village has it
9. Others (specify): _____

. Do you have a mini-grid connection? 1 Yes 0 No

IF NO:

335a. Is there a mini-grid available in your hamlet? 1 Yes 0 No **[IF NO SKIP TO 345]**

335b. Did you ever have a mini-grid connection? 1 Yes 0 No

335c. For what reasons you do not have mini-grid connection? **[CHECK ALL THAT APPLY]**

1. Happy with existing options
2. Cannot afford (or do not earn enough)
3. Do not need electricity
4. Could not get connection
5. It is expensive
6. Service is not good/reliable
7. Power supply is inadequate
8. Don't know how to get the connection
9. Mini-grid is not available in my area
10. Other [SPECIFY]: _____

[SKIP TO 345]

336. How many years ago did your household first take the mini-grid connection? _____ [YEARS] _____[MONTHS AGO]

337. What was the initial cost of getting the mini-grid connection? _____ [RUPEES]

338. Do you have a meter installed for the mini-grid connection?
1 Yes 0 No 99 Yes, but not working
[Enumerator: physically validate the presence of meter]

339. Do you receive fixed or variable bill? 1 Fixed 2 Variable

340. Do you have your mini-grid electricity bill? 1 Yes 0 No

CODING: IF THE BILL IS AVAILABLE AND VARIABLE (1 in 340 and 2 in 339)
[Enumerator: request the respondent to see the latest mini-grid electricity bill. If the bill is available, note down the units of electricity consumed, the bill amount and other details below in 340a-d:]

340a. Month/Year of the bill: ____ MM/201Y

340b. No of billing days: _____[DAYS]

340c. Billed amount: _____[RUPEES]

340d. No of units of consumption: _____ [UNITS in kWh]

[SKIP TO 341]

[IF THE BILL IS NOT AVAILABLE OR FIXED, i.e 0 in 340 and 1 in 339]

340e. What is your average monthly expense on mini-grid electricity? ___ [RUPEES/MONTH]

341. How many hours of electricity per day do you get from it? _____ [0-24 HOURS/DAY]

Source 5: Diesel Generator _____

345. Do you use electricity from diesel generator f? 1 Yes 0 No **(IF NO SKIP TO 352)**

346. How many hours of electricity do you use from it in a day? _____ [0-24 HOURS/DAY]

347. Do you use a personal diesel generator or have you taken a connection from any generator operator?

1 Personal 2 Connection

IF CONNECTION:

347a. How much do you spend on this per month?_____[RUPEES/MONTH] **[SKIP TO 352]**

347b. How much did it cost you? _____ [RUPEES]

348. How much diesel do you buy per month? _____ [LITRE/MONTH]

349. At what price do you purchase diesel? _____ [RUPEES/LITRE]

350. How far do you have to travel to purchase diesel? _____ [KM]
[ENUMERATOR: ASK FOR ONE WAY DISTANCE]

351. How much do you spend on repair/maintenance of diesel generator? _____ [RUPEES/MONTH]

Satisfaction

[*** Electrified Households]

[HOUSEHOLDS THAT HAVE GRID, SOLAR HOUSEHOLD SYSTEM, DIESEL GENERATOR, RECHARGEABLE BATTERY, OR MINI GRID, i.e. YES RESPONSE IN ANY ONE OF THE QUESTIONS: 301, 317,324,335,345]

352. Overall, what is the primary source of electricity for you?
1. Grid electricity
2. Mini-grid electricity
3. Solar home system
4. Rechargeable battery
5. Diesel generator

353. How satisfied are you with the overall situation of electricity in your household?
1 Very Unsatisfied
2 Unsatisfied
3 Neutral
4 Satisfied
5 Very Satisfied

4. Lighting

[*ALL HOUSEHOLDS]**

Use of Kerosene:

401. Do you use kerosene in your household? 1 Yes 0 No

IF NO:

401a. Why do you not use kerosene? **[CHECK ALL THAT APPLY]**

1. Quality of light is not good
2. Expensive to use
3. Unsafe to use
4. Bad for health
5. The house gets dirty with the soot
6. Do not have ration card
7. Don't need – other sources available
8. Other (specify) _____

[SKIP TO 411]

IF YES:

402. For what purposes do you use kerosene? **[CHECK ALL THAT APPLY]**

1. Lighting
2. To lit the stove/wood
3. To run water/irrigation pump
4. To run generator
5. To run vehicle
6. Others (specify):

403. How many litres of kerosene do you buy from PDS per month? _____ [LITERS/MONTH]

404. What is the price you pay for PDS kerosene? _____ [RUPEES/LITER]
[DO NOT USE ZERO HERE]

405. Do you also buy kerosene from the market? 1 Yes 0 No

IF YES:

405a. How many litres of kerosene do you buy from market per month? _____ [LITERS/MOMTH]

405b. What price do you pay for market kerosene? _____ [RUPEES/LITER]
[DO NOT USE ZERO HERE]

406. How many kerosene wick lamps do you use? _____ [NUMBER]

407. How many kerosene lanterns do you use? _____ [NUMBER]

408. How many hours a day do you use kerosene lamps for lighting at your home? ___ [HOURS/DAY]
[**Enumerator: ask the respondent for cumulative sum of all lamps and lanterns combined]**

409. How many litres of kerosene per month do you use for purposes other than lighting? _____ [LITERS/MONTH]

410. In your opinion, do kerosene fumes have an effect on your health? 1 Yes 0 No

Use of Solar Lanterns

411. Have you heard about solar lanterns? 1 Yes 0 No

IF NO: [* enumerator: read the text below, show picture***]**
Solar lanterns or solar lights are LED lights powered by batteries, which are charged by solar panels during the day. They can provide high quality light for 4-5 hours daily, even during the night.

412. Do you use solar lantern for lighting at your household or outside? 1 Yes 0 No
[IF NO, SKIP TO 417]

413. Since when are you using solar lanterns? _____ [YEARS] _____[MONTHS AGO]

414. How many solar lanterns do you have? _____ [NUMBER]

415. How much did the lanterns cost you (all solar lanterns combined)? _____ [RUPEES]

416. How many hours a day do you use all solar lanterns, combined? [**Enumerator: ask the respondent for total sum of all lanterns]**

a. At home: _____ [HOURS]
b. Outside home: _____[HOURS]

417. Do you use any other source for lighting at your home? [Read aloud all options]

1. Rechargeable lamps
2. Torch lights
3. Candles
4. Others (specify):_____
5. None

[IF NONE SKIP TO 420]

418. How many hours a day do you use these lighting sources? _____ [Hours/day]

419. How much is your monthly spending on these? ___[RUPEES/MONTH]

Satisfaction _____

420. What is the main source of lighting at your household?

1. Grid electricity
2. Mini-grid
3. Diesel genset
4. Solar home system
5. Rechargeable battery
6. Solar lantern
7. Battery powered torch
8. Kerosene lamp/lantern
9. Other (specify) _____

421.How satisfied are you with your lighting arrangement?

1 Very Unsatisfied
2 Unsatisfied
3 Neutral
4 Satisfied
5 Very Satisfied

[IF UNSATISFIED OR VERY UNSATISFIED**]**

421a. Why are you unsatisfied with your current lighting? **[CHECK ALL THAT APPLY]**

1. Quality of light is not good
2. Do not get light for enough duration
3. Expensive to use
4. Unsafe to use
5. Bad for health
6. The house gets dirty with the soot
7. Appliances get burnt or bad too quickly
8. Other (specify): _____

5. Electric Appliances and satisfaction with electricity

***** Electrified Households**

[HOUSEHOLDS THAT HAVE GRID, SOLAR HOUSEHOLD SYSTEM, DIESEL GENERATOR, RECHARGEABLE BATTERY, OR MINI GRID, i.e. YES RESPONSE IN ANY ONE OF THE QUESTIONS: 301, 317,324,335,345]

501. Which electric appliances do you use at home?
[Ask for appliances used for household purposes. Do not include appliances used for business]

S.No.	List of appliances	501. Appliance X? 1 Yes 0 No	501.a. How many X do you use?	501.b. What are their ratings or size? **[ENTER THE MOST COMMON RATING]**		501.c. What is the brand of the appliance X you use? **(MARK L IF THE PRODUCT IS LOCAL)**	501.d. During what time in the day do you use them the most? 1 Morning (5 am-11 am) 2 Afternoon (11am-5 pm) 3 Evening (5 pm-11 pm) **[CHECK ALL THAT APPLY]**	501.e. For how many hours do you use each of these per day? ____[HOURS] __[MINUTES] **[ASK HOURS OF USE FOR ALL APPLIANCES COMBINED]**	
			***THESE QUESTIONS TO BE ASKED ONLY FOR THOSE APPLIANCES WHICH ARE BEING USED						
A	Incandescent bulbs				WATT				
B	CFL bulbs				WATT				
C	LED lights				WATT				
D	Tube light				WATT				
E	Mobile phones		NA	NA	WATT	NA	NA	NA	NA
F	Ceiling Fan				WATT				
G	Table Fan				WATT				
H	TV (television)				INCHES				
I	Cooler				WATT				
J	Electric stove				WATT				
K	Computer/Laptop			NA	WATT				
L	Refrigerator			NA	LITRES				

M	Electric iron				WATT				
N	Mixer Grinder				WATT				
O	Electric radio/ music system			NA	WATT				
P	AC (Air conditioner)				TON				
Q	Washing Machine			NA	WATT				
R	Electric Fodder cutting machine				WATT				
S	Submersible pump (for dometic water)				HP				
T	Others (specify): _____				WATT				

502. Are there any appliances that you want to buy or use, but you are not using it only because you get electricity for fewer hours? 1 Yes 0 No

[If No SKIP TO 510] [यदि नहीं तो प्रश्न 510 पर जाइए]

	List of appliances	503. Which additional appliances would you like to use? **[DON'T READ ALOUD, MARK THE RESPONSES]**	504. For how many hours per day would you like to use this appliance? _____[HOURS] _____ [MINUTES] **[Ask these only for those appliances which are specified in 503]**	
A	Incandescent bulbs			
B	CFL bulbs			
C	LED lights			
D	Tube light			
E	Mobile phones		NA	NA
F	Ceiling Fan			
G	Table Fan			
H	TV (television)			
I	Cooler			
J	Electric stove			
K	Computer/Laptop			

L	Refrigerator			
M	Electric iron			
N	Mixer Grinder			
O	Electric radio/ music system			
P	AC (Air conditioner)			
Q	Washing Machine			
R	Electric Fodder cutting machine			
S	Submersible pump (for dometic water)			
T	Others (specify): _____			

*** Un-Electrified Households

[HOUSEHOLDS THAT DONOT HAVE GRID, SOLAR HOUSEHOLD SYSTEM, DIESEL GENERATOR, RECHARGEABLE BATTERY OR MINI GRID, i.e. NO response to questions 301, 317, 324, 335, 345]

505. Would you like to take grid-electricity connection? 1 Yes 0 No

506. If you could get electricity, what appliance would you use it for? **[DON'T READ ALOUD] [CHECK ALL THAT APPLY]**

A. Light bulbs
B. Tube light
C. Mobile phone
D. Fan
E. TV (television)
F. Cooler
G. Electric stove
H. Computer/Laptop
I. Refrigerator
J. Electric iron
K. Mixer Grinder
L. Electric radio/ music system
M. AC (Air conditioner)
N. Washing Machine
O. Electric Fodder cutting machine
P. Submersible pump (for dometic water)
Q. Others (specify): _____

PRODUCTIVE USES OF POWER

[ALL HOUSEHOLDS]**

510. Do you use any water pump or tube-well for irrigation? 1 Yes 0 No [**IF NO SKIP TO 601]**

511. Do you use electric pump? 1 Yes 0 No

IF YES:

511a. What is the rating of the pump? _____ [HP]

511b. On average, how many days do you use it in a year? _____ [0-365 NUMBER]

511c. On average, how many hours do you use it in a day? _____ [HOURS/DAY]

511d. Overall, how much money did you spend last year for using the pump? _____ [RUPEES/ YEAR]

512. Do you use diesel pump? 1 Yes 0 No

If YES:

512a. What is the rating of the pump? _____[HP]

512b. On average, how many days do you use it in a year? _____ [0-365 NUMBER]

512c. On average, how many hours do you use it in a day? _____ [HOURS/ DAY]

512d. Overall, how much money did you spend last year for using this pump? _____ [RUPEES/ YEAR]

6. Awareness and attitude

[*ALL HOUSEHOLDS]**
[ENUMERATOR: Now I will ask you questions related to your perceptions about electricity]

601. Do you agree or disagree with the following statements about grid electricity?

Perception questions

a. Grid-electricity is reliable.
   1. Disagree 2. Neutral 3. Agree

b. Grid-electricity is adequate for my needs.
   1. Disagree 2. Neutral 3. Agree

c. Grid-electricity is of good quality.
   1. Disagree 2. Neutral 3. Agree

d. Grid-electricity is affordable.
   1. Disagree 2. Neutral 3. Agree

e. It is easy to get grid-electricity connection.
   1. Disagree 2. Neutral 3. Agree

f. If there is a problem, it is easy to get grid-electricity connection repaired.
   1. Disagree 2. Neutral 3. Agree

g. I know where to get electric appliances I would like to use.
   1. Disagree 2. Neutral 3. Agree

h. I know many people who use grid-electricity.
   1. Disagree 2. Neutral 3. Agree

Satisfaction with grid-electricity
[HOUSEHOLDS HAVING GRID ELECTRICITY]**

602**.** How satisfied are you with grid electricity?
1 Very Unsatisfied
2 Unsatisfied
3 Neutral
4 Satisfied
5 Very Satisfied

Perception questions
[*HOUSEHOLDS WHO HAVE HEARD OF MINI-GRID ELECTRICITY]**

603. Do you agree or disagree with the following statements about mini-grid electricity?

a. Mini-grid electricity is reliable.

1. Disagree 2. Neutral 3. Agree

b. Mini-grid electricity is adequate for my needs.
1. Disagree 2. Neutral 3. Agree

c. Mini-grid electricity is of good quality.
1. Disagree 2. Neutral 3. Agree

d. Mini-grid electricity is affordable.
1. Disagree 2. Neutral 3. Agree

e. I know how to get mini-grid electricity connection.
1. Disagree 2. Neutral 3. Agree

f. It is easy to get mini-grid-electricity connection.
1. Disagree 2. Neutral 3. Agree

g. If there is a problem, it is easy to get mini-grid electricity connection repaired 1. Disagree
2. Neutral 3. Agree

h. I know many people who use mini-grid electricity.
1. Disagree 2. Neutral 3. Agree

Satisfaction with mini-grid electricity

[* HOUSEHOLDS HAVING MINI-GRID CONNECTION]**

604 . How satisfied are you with mini-grid electricity?
1 Very Unsatisfied
2 Unsatisfied
3 Neutral
4 Satisfied
5 Very Satisfied

605. Would you like to continue using mini-grid electricity in future? 1 Yes 0 No
IF YES:
605a. Would you like to use mini-grid electricity for running additional appliances, even if you had to pay more? 1 Yes 0 No

606. Would you recommend your friends and relatives to get mini-grid electricity? 1 Yes 0 No
If No
606a. Why not? _____

Awareness and attitude towards mini-grid electricity

[*HOUSEHOLDS WHO HAVE HEARD OF MINI-GRID BUT DO NOT HAVE MINI-GRID CONNECTION]**

607. According to you, mini-grid electricity can be used for what purposes? **[CHECK ALL THAT APPLY]**

1. Lighting
2. Mobile Charging
3. Running Fans
4. Watching TV
5. Running computer/laptop/printers
6. Running refrigerator
7. For running motor or heavy appliances
8. Others (SPECIFY): _____

608. Do you know any households/businesses, which use electricity from mini-grids? 1 Yes 0 No

609. Would you like to take mini-grid electricity connection? 1 Yes 0 No

IF NO:

609a. Why not? [CHECK ALL THAT APPLY]

1. Cannot afford (or do not earn enough)
2. Do not need electricity
3. Am happy with existing options
4. It is expensive
5. Service is not good/reliable
6. Power supply is inadequate
7. Do not have residential certificate
8. Don't know how to get the connection
9. Mini-grid is located far away
10. Other [SPECIFY]: _____

7. Willingness to Pay for Electricity

701. Now I will propose to you few electricity packages. You have to tell me, what is the maximum monthly amount that you are willing to give for each package?

[Enumerator: Use show card to clarify each option. Code 0, if the respondent says he is not interested or doesn't want any particular option]

701a. Suppose you get uninterrupted electricity for 6 hours per day, which allows you to charge your mobile phone and use two LED lights. What is the maximum monthly amount that you would give for this? _____ [RUPEES/MONTH]

701b. Suppose you get uninterrupted electricity throughout the day, which allows you to charge your mobile phone and use two LED lights. What is the maximum monthly amount that you would give for this? _____ [RUPEES/MONTH]

701c. Suppose you get uninterrupted electricity for 6 hours per day, which allows you to use all of your electric appliances. What is the maximum monthly amount that you would give for this? _____ [RUPEES/MONTH]

701d. Suppose you get uninterrupted electricity throughout the day, which allows you to use all of your electric appliances. What is the maximum monthly amount that you would give for this? _____ [RUPEES/MONTH]

8. Pertaining to market segmentation

[ENUMERATOR READS: NOW I WILL ASK YOU SOME QUESTIONS AIMED AT UNDERSTANDING YOUR PERSONALITY.]

800. Do you agree or disagree with the following statements?

a. When working in a group, I prefer to lead the group.
   1. Disagree 2. Neutral 3. Agree

b. I like to participate in discussion on community issues, say in gram sabha
   1. Disagree 2. Neutral 3. Agree

c. I do not like to take risks.
   1. Disagree 2. Neutral 3. Agree

d. I regularly take stock of my monthly expenditures.
   1. Disagree 2. Neutral 3. Agree

e. I prefer cheap products over those with better quality.
   1. Disagree 2. Neutral 3. Agree

f. I usually buy well-known brands.
   1. Disagree 2. Neutral 3. Agree

END OF THE INTERVIEW

ENUMERATOR THANKS THE RESPONDENT: On behalf of the John Hopkins research team, I would like to thank you for participating in this survey.