Jharkhand Energy Access Survey

Introduction to the Household Head

*[*** NOTE: EACH ENUMERATOR MUST HAVE A SMALL BLACKBOARD FOR CONJOINT EXPERIMENT ***]*

[Interviewer shows ID card to the respondent]

Namaste, my name is ___. 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 a study from Johns Hopkins University. It will take around 45 minutes. Would you like to participate?

1. Did the household head agree to be interviewed? 1 Yes 0 No
2. If no, record the reason: _____

A. MetaData

1. Household ID _____
2. ID and Name of Interviewer ID ___ NAME _____
3. ID and Name of Supervisor ID ___ NAME _____
4. Date of Interview _____
5. Interview start time _____ Interview end time _____

Geographic Information

6. District _____
7. Block _____
8. Village _____
9. Habitation _____
   [ASK VILLAGE HEAD IF NEEDED]
10. Full Address _____
11. Mobile Contact Number _____
12. GPS Latitude _____
13. GPS Longitude _____

B. Household Head and Roster

Obtain the following information from the household head. If the household head is NOT available, interview another adult member of the household.

14. Relationship to household head: 1 Self 2 Spouse 3 Mother/father
    4 Son/Daughter 5 Son-in-law/Daughter-in-law
    6 Grandson/granddaughter
    7 Other, specify _____
15. Name _____
16. Age _____ [YEARS]
17. Gender 1 Male 0 Female
18. Native language _____
19. Read and write native language? 1 Yes 0 No
    19.1. Does the respondent speak Hindi? 1 Yes 0 No
    19.2. Does the respondent read/write in Hindi? 1 Yes 0 No
20. Level of education of the household head
    1 No formal schooling
    2 Up to 5th standard
    3 Up to 10th standard
    4 12th standard or diploma
    5 Graduate and above
21. Religion
    1 Hindu
    2 Muslim
    3 Christian
    4 Sarna
    5 Other, specify: _____
22. Government Caste
    1 Scheduled Caste

2 Scheduled Tribe

3 General

4 Other Backward Class

5 Other, specify: _____

22.1. **If 22 is "2 Scheduled Tribe" (skip to 23 if not):** Which tribe is it?

1 Munda 2 Ho 3 Oraon
4 Other [SPECIFY] _____

23. Number of adult (18+) men living in this household permanently (as of now) _____ [NUMBER]

24. Number of adult (18+) women living in this household permanently (as of now) _____ [NUMBER]

25. Number of children (0-18 years) permanently living in the household (as of now) _____ [NUMBER]

26. How many children are currently studying? _____ [NUMBER]

27. How many members in the family have a voter ID card? _____ [NUMBER]

28. Which ration card does your household have?

1 None 2 APL 3 BPL 4 Antyodaya

C. Economic Activity

29. What is the primary source of income in your family?

    1 Agriculture on own land
    2 Cultivation on leased land
    3 Casual agricultural labor
    4 Salaried job. Specify industry (write "Government" for government job): _____ [SPECIFY]
    5 Cattle rearing
    6 Own business
    7 Daily laborer. Specify industry: _____ [SPECIFY]
    8 Other _____ [SPECIFY]

30. In your own assessment, how easy would it be for you to find another job that would pay about the same as you currently earn?

    1 Very easy 2 Easy 3 Hard 4 Very hard
    NA Respondent doesn't work

31. How much is your expenditure on household needs in a typical month? _____ [RUPEES]

32. How many rupees did your household save last year? _____ [RUPEES]

    32.1. If your household did not save money, how much do you need to borrow in a typical year? _____ [RUPEES]

33. Does the woman in the household make income? [**If no women, skip to 34**]

    1 Yes; **If YES**, specify industry_____

    0 No

34. How much land does your household own? [0 IF NONE] _____ ☐[Katha] ☐[Dismile] [UNIT].

35. How many cattle and livestock do you own?

___ COWS	___ BUFFALOES	___ FOWLS/CHICKEN
___ COW CALVES	___ BUFFLOES CALVES	
___ GOATS	___ OTHER ANIMALS	

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

    36.1. **IF YES**: How much in total? _____ [RUPEES]

    36.2. **IF YES**: What is the monthly interest rate of your largest loan? _____ [PERCENT]

37. Who in your household makes decisions on purchase of durable goods?

    1 Male head of household

2 Female head of household
3 Jointly
4 Other, specify: _____

38. Is the house you live in *pucca*? 1 Pucca 2 Mixed 3 Kaccha
39. Does your household have a toilet? 1 Yes 0 No
40. Does your household have piped water? 1 Yes 0 No
41. How many rooms does your house have? ____ [NUMBER]
42. How many beds does your household own? ____ [NUMBER]
43. How many tables does your household own? ____ [NUMBER]
44. How many chairs does your household own? ____ [NUMBER]
45. How many bicycles does your household own? ____ [NUMBER]
46. How many motorcycles does your household own? ____ [NUMBER]
47. How many pressure cookers does your household own? ____ [NUMBER]
48. Do you own mechanized 3-4-wheeler agricultural equipment? 1 Yes 0 No
49. Do you own a motorized 2/3/4 wheeler/fishing boat? 1 Yes 0 No
50. Is any household member a government employee? 1 Yes 0 No
51. Is any household member paying income tax or a professional tax? 1 Yes 0 No

[*Only for those households who are in agriculture (skip to 53 otherwise) ***]**

52. Do you use pumps for irrigation? 1 Yes 0 No (**skip to 52.3**)

IF YES:

52.1. Do you own the pump? 1 Yes 0 No

52.2. What type of pump?

1 Diesel pump 2 Electric pumps 3 Both diesel and electric

IF NO:

52.3. Would you like to use an electric pump? 1 Yes 0 No

52.4. How satisfied are you with the current situation of electricity for your agriculture business?

1 Unsatisfied 2 Neutral 3 Satisfied NA/Don't use electricity for agriculture

[* For all households ***]**

53. Do you or any other member of your family running a business activity (other than agriculture)?

1 Yes 0 No **(Skip to 54)**

IF YES

53.1. Do you use electricity for your business? 1 Yes 0 No **(Skip to 54)**

IF YES:

53.1.1. How satisfied are you with the current situation of electricity for your business?

1 Unsatisfied 2 Neutral 3 Satisfied

IF UNSATISFIED (skip to 53.1.2 otherwise):

53.1.1.1.	Too expensive to consume	1 Yes	0 No
53.1.1.2.	Not available when you need it	1 Yes	0 No
53.1.1.3.	Poor quality (voltage fluctuations)	1 Yes	0 No
53.1.1.4.	Poor maintenance and repair services	1 Yes	0 No
53.1.1.5.	Other, SPECIFY: _____		

53.1.2. What equipment do you run with electricity? [DON'T PROMPT; SELECT ALL THAT APPLY]

1. Sewing machine	2. Dal/Rice/Oil Mill	
3. Motorised loom	4. Puncture repair/air compressor	5. Thrasher
6. Water pump	7.Water purifier	8. Fodder cutter
9. Milk chilling machine	10. Crop dryer	11. Other
12. Fridge	13. Fan	14. Light

54. Does any member of your family…

54.1.	… work for any local or national political party?	1 Yes	0 No
54.2.	… is a member of local governing body (gram panchayat)/committee?	1 Yes	0 No

55. Have you or any member of your family ever participated in any political movement or protest against/for the governing body/authority in the past 5 years?

1 Yes 0 No

56. Is any member of your household part of any worker's union? 1 Yes 0 No

1. Electricity Access

[* ALL HOUSEHOLDS ***]**

57. What is the primary source of lighting in your household?

1 Grid electricity 2 Kerosene lamp/lantern 3 Micro-grid
4 Solar home system or solar lantern 5. Other _____

58. This primary lighting source that you are using:

58.1. Does it meet your needs? 1 Yes 0 No

58.2. Is it expensive to use? 1 Yes 0 No

58.3. Is it safe to use? 1 Yes 0 No

58.4. For grid, micro-grid, solar home system, or solar lantern: is it reliable?
1 Yes 0 No

59. So, overall how satisfied are you with the primary source of lighting in your home?

1 Unsatisfied 2 Neutral 3 Satisfied

60. Do you use grid electricity for lighting? 1 Yes 0 No **(if NO, skip to 61)**

IF YES:

60.1. How many years ago was your house connected to the grid?

_____ [YEAR AGO] [*NA* if house already had electricity when the respondent moved in; DK if the respondent doesn't remember or doesn't know]

60.2. Did your household get connected under Saubhagya scheme?

0 No 1 Yes NA Don't know/n.a.

60.3. What was the connection fee? _____ [RUPEES] [*NA* if house already had electricity when the respondent moved in; DK if the respondent doesn't remember or doesn't know]

60.4. Do you pay a fixed or variable amount monthly?

0 Variable 1 Fixed 2 No Payment

60.5. How many rupees per month do you pay for your electricity?

60.5.1. Monthly fee (whether fixed or variable) _____ [RUPEES/MONTH]

60.5.2. Repairs/maintenance _____ [RUPEES/MONTH]

60.5.3. Informal payments to linemen _____ [RUPEES/MONTH]

60.5.4. Payment for non-grid electricity _____ [RUPEES/MONTH]

60.6. Do you have a meter? 1 Yes 0 No (**if NO, skip to 60.7**)

IF YES:

60.6.1. What is the nature of your meter? 1 Pre-paid 2 Post-paid

60.6.2. Do you share your meter with other households? 1 Yes 0 No

60.6.2.1. **If YES**, Specify number of households _____ [NUMBER]

60.7. Do you receive an electricity bill? 1 Yes 0 No **(Skip to 61)**

IF YES

60.7.1. How often do you receive an electricity bill?

1 More than once a month 2 Every month 3 Every two months
4 Every three months 5 Less often than every three months
6 No bill

IF HOUSEHOLD HAS A BILL (otherwise **skip to 61**)

60.7.2. How do you pay your electricity bill?

1. Paying to an official agent at home
2. Paying to an official agent at an office
3. Paying to an unofficial middleman
4. Paying to an unofficial middleman at an office
5. Online
6. Other: _____

60.7.3. How often do you pay your bill on time, within 10 days of the due date?

1 Never
2 Sometimes
3 Most of the time
4 Always

***** ALL HOUSEHOLDS *****

61. Do you use micro-grid for lighting? 1 Yes 0 No (**skip to 62)**

IF YES:

61.1. What is the micro-grid powered through?

1 Solar 2 Diesel
3 Biomass gasification 4 Micro-hydro
5 Hybrid systems

61.2. What is your total spending for micro-grid electricity per month? _____ [RUPEES/MONTH]

61.3. Do you have a meter? 1 Yes 0 No

61.4. Do you pay a fixed or variable amount monthly? 0 Variable 1 Fixe 2 No Payment

61.5. How much did you have to pay upfront for the micro grid connection? _____ [RUPEES] [*NA* if house already had electricity when the respondent moved in; DK if the respondent doesn't remember or doesn't know]

***** ALL HOUSEHOLDS *****

62. Do you use solar home systems? 1 Yes 0 No (if NO, **skip to 63**)

IF YES:

62.1. How many hours of lighting per day do you get from it? _____ [HOURS/DAY]

62.2. How many lights does your solar home system support? _____ [Number]

62.3. Could your solar home system support the following appliances (even if you don't have them)?

62.3.1. Mobile charger 1 Yes 0 No
62.3.2. Fan 1 Yes 0 No
62.3.3. Radio 1 Yes 0 No
62.3.4. Television 1 Yes 0 No
62.3.5. Fridge 1 Yes 0 No

62.4. How many rupees did it cost you? _____ [RUPEES]

62.5. How much subsidy did you receive? _____ [RUPEES]

62.6. How many rupees did you borrow for it? _____ [RUPEES]

62.7. What is the term (duration) of the loan? _____ [MONTHS]

62.8. What is the per-month installment? _____ [RUPEES/MONTH]

62.9. Does the company provide you with repair and maintenance service?

1 Yes 0 No

62.10. Did you ever require repair and maintenance service? 1 Yes 0 No

IF YES (if NO: **skip to 63**):

62.10.1. Who paid for the repair and maintenance?

0 Our household paid 1 Family/friends paid 2 The company paid

***** ALL HOUSEHOLDS *****

63. Do you use a solar lantern? 1 Yes 0 No (**if NO, skip to 64**)

63.1. How many solar lanterns do you use? _____ [LANTERNS]

63.2. How many hours of lighting per day do you get from it? _____ [HOURS/DAY]

63.3. Is it rented or owned? 0 Rented 1 Owned

63.3.1. **If Rented:** How much Rs. Does it cost you per month? _____ [RUPEES/MONTH]

63.3.2. **If Owned:** How many rupees did it cost you? _____ [RUPEES]

63.4. How much subsidy did you receive? _____ [RUPEES]

63.5. What is the loan did you take? _____ [RUPEES]

63.6. What is the term of the loan? _____ [MONTHS]

63.7. What is the per month installment? _____ [RUPEES/MONTH]

63.8. Can you charge your mobile with the lantern that you own? 1 Yes 0 No

***** ALL HOUSEHOLDS *****

64. Do you use kerosene lamps for lighting? 1 Yes 0 No **(IF NO, skip to 65)**

IF YES:

64.1. How many kerosene wick lamps do you use? _____ [LAMPS]

64.2. How many kerosene lanterns do you use? _____ [LANTERNS]

64.3. How many hours a day do you use kerosene lamps for lighting? [NUMBER OF HOURS DURING WHICH AT LEAST ONE LAMP IS ON] _____ [HOURS/DAY]

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

64.5. What is the price you pay for PDS kerosene? _____ [RUPEES/LITER] [DO NOT USE ZERO HERE – CODE "DK" IF DON'T KNOW]

64.6. How many liters of kerosene do you buy from the market per month? _____ [LITERS/MONTH]

64.7. What is the price you pay for market kerosene? _____ [RUPEES/LITER] [DO NOT USE ZERO HERE – CODE "DK" IF DON'T KNOW]

64.8. In your opinion, do kerosene fumes have an effect on your health?

0 No 1 Yes -99 Don't know

64.9. Do you use kerosene for anything other than lighting? 1 Yes 0 No **(IF NO, skip to 65)**

IF YES:

64.9.1. What for? SPECIFY [ONLY NON-LIGHTING USAGE]
_____

64.9.2. How many liters/month do you use for this? [LET RESPONDENT ANSWER; DON'T MAKE SUGGESTIONS] _____ [LITERS/MONTH]

[*ALL HOUSEHOLDS***]**

65. In general, how acceptable it is for people to have Kathiya connection?

1. Totally unacceptable
2. Somewhat unacceptable
3. Neutral
4. Somewhat acceptable
5. Totally acceptable

66. Is it acceptable for people to have kathiya connections if their village faces frequent blackouts?

1 Totally unacceptable 2 Somewhat unacceptable 3 Neutral
4 Somewhat acceptable 5 Totally acceptable

67. Is it acceptable for people to have kathiya connections if they are poor?

1. Totally unacceptable
2. Somewhat unacceptable
3. Neutral
4. Somewhat acceptable
5. Totally acceptable

68. Do you agree or disagree with "If people have a kathiya connection, they should be fined"?

1. Strongly agree
2. Agree
3. Neutral
4. Disagree
5. Strongly disagree

69. For how many hours is lighting from sources such as kerosene lamps, candles or electricity used for reading (reading books, newspapers, studying, etc.) on an average per day? [Insert values in hours not hours/minutes]

_____ Children [0-24 HOURS PER CHILD]

_____ Adults [0-24 HOURS PER ADULT]

70. How many hours per day do you listen to the radio? _____ [0-24 HOURS]

71. How many hours per day do you watch television? _____ [0-24 HOURS]

72. Do you own a mobile phone? 1 Yes 0 No **(If NO, skip to 73)**

IF YES:

72.1. How many mobile phones does your household have? _____ [NUMBER]

72.2. How much per month do you pay for charging the phone battery? _____ [RUPEES]

72.3. How many hours do you spend on your phone per day? _____ [0-24 HOURS]

[ENUMERATOR: FILL IN WITHOUT ASKING RESPONDENT ***]***

*73. [*** Does the household have any electricity (whether from the grid, from a solar household system, from a diesel generator, or from a micro grid) ***]* 1 Yes 0 No **(if NO, skip to 81)**

IF YES:

74. How many hours a day is electricity usually available? _____ [HOURS/DAY]

75. For how many hours is electricity usually available between sunset and midnight (till 12 o' clock)? _____ [0-6 HOURS]

76. How many days in the last month has there been no power throughout the day? ____ [0-30 DAYS]

77. How many days in a month have you experienced that electric equipment suffered because of voltage fluctuation? _____ [0-30 DAYS]

78. How many days a month have you experienced that voltage was too low to run appliances? _____ [0-30 DAYS]

79. How many of the following items/ appliances do you USE?

79.1. Incandescent bulbs? ____ [NUMBER]

79.2. CFL bulbs ____ [NUMBER]

79.3. LED lights? ____ [NUMBER]

79.4. Tube light? ____ [NUMBER]

79.5. Fans? ____ [NUMBER]

79.6. Electric iron? ____ [NUMBER]

79.7. Refrigerator? ____ [NUMBER]

79.8. Television? ____ [NUMBER]

79.9. Electric Radio/Music System? ____ [NUMBER]

79.10. Cooler? ____ [NUMBER]

79.11. Washing machine? ____ [NUMBER]

79.12. Electric stove? ____ [NUMBER]

79.13. Inverter? ____ [NUMBER]

79.14. Electric Water Pump ____ [NUMBER]

79.15. Radio ____ [NUMBER]

79.16. Others? _____ ____ [NUMBER]

79.17. Others? _____ ____ [NUMBER]

80. Generally, how satisfied are you with the electricity situation in your household?

1 Unsatisfied 2 Neutral 3 Satisfied

IF "1 UNSATISFIED" (otherwise: skip to 84)

80.1. Why are you unsatisfied? [CHECK ALL THAT APPLY]

80.1.1. Too expensive to consume 1 Yes 0 No

80.1.2. Not available when you need it 1 Yes 0 No

80.1.3. Poor quality (voltage fluctuations) 1 Yes 0 No

80.1.4. Poor maintenance and repair services 1 Yes 0 No

80.1.5. Other, SPECIFY: _____

[*ALL *NON-GRID HOUSEHOLDS; otherwise, skip to 84* ***]**

81. Is grid electricity available in your habitation? 1 Yes 0 No (skip to 82)

IF YES: If it is available, then why don't you have grid electricity?

81.1. Is the connection too expensive? 1 Yes 0 No

81.2. Is the monthly bill too expensive? 1 Yes 0 No

81.3. Is it too unreliable? 1 Yes 0 No

81.4. Don't know how to get or whom to ask? 1 Yes 0 No

81.5. Other: _____ [SPECIFY]

82. Did you ever have grid electricity in your household? 1 Yes 0 No (skip to 83)

IF YES:

82.1 When did you lose connection? _____ [Month & Year]

82.2 Why did you lose connection?

0 Non-payment of bill
1 Supply stopped/broke down
2 Other _____ [specify]

83. Are you interested in having grid electricity? 1 Yes 0 No

83.1. **If YES**: What amount are you willing to pay to get electricity connection? ____ [RUPEES]

2. Cooking

[* ALL HOUSEHOLDS ***]**

84. What is your primary cooking fuel?

1 Firewood and chips 2 Dung cakes 3 LPG 4 Bio-gas 5 Coal 6 Other _____ [Specify]

85. How many meals are cooked in your house every day? _____ [NUMBER]

86. How much time is spent in cooking per day? _____ [HOURS/DAY]

87. Do you use domestic gas (LPG) for cooking? 1 Yes 0 No **(if NO, skip to 88)**

IF YES (LPG Households):

87.1. How many years ago did your house begin to use LPG? _____ [YEARS AGO]

87.2. Did you receive the LPG connection under Pradhan Mantri Ujjwala Yojana (PMUY)

0 No 1 Yes -99 Don't know/Never heard about the scheme

87.3. How much did it cost to get the LPG connection? _____ [RUPEES]

87.4. What all do you cook using LPG? [SELECT ALL THAT APPLY]

1 Chapattis/roti 2 Vegetables and lentils 3 Rice 4 Tea/snacks
5 Milk boiling 6 Water boiling 7 Chicken/mutton/other meat
8. Other [SPECIFY]_____

87.5. Do you use LPG for all cooking needs? 1 Yes 0 No

87.5.1. **If NO:** why not?

1 Too expensive to use 2 Free biomass is easily available
3 Few items are preferred to cook on chulha 4 Don't like LPG cooked food
5 LPG availability is a constraint 6. Other [SPECIFY] _____

87.6. How many large LPG cylinders do you use in a year? _____ [NUMBER/YEAR]

87.7. How many large cylinders do you get from authorized distributors? _____ [NUMBER/YEAR]

87.8. How many large cylinders do you get from market? _____ [NUMBER/YEAR]

87.9. How many small LPG cylinders do you use in a year? _____ [NUMBER/YEAR]

87.10. How many small cylinders do you get from authorized distributors? ____[NUMBER/YEAR]

87.11. How many small cylinders you get from market? _____ [NUMBER/YEAR]

87.12. How much does a large cylinder of LPG from authorized distributors cost? _____ [RUPEES/CYLINDER] [If the respondent does not know the answer write “DK”]

87.13. How much does a small cylinder of LPG from authorized distributors cost? _____ [RUPEES/CYLINDER] [If the respondent does not know the answer write “DK”]

87.14. How much does a large cylinder of LPG from market cost? [DK IF RESPONDENT DOESN'T KNOW OR IF TAKES TOO LONG TO FIND OUT] _____ [RUPEES/CYLINDER]

87.15. How much does a small cylinder of LPG from market cost? [DK IF RESPONDENT DOESN'T KNOW OR IF TAKES TOO LONG TO FIND OUT] _____ [RUPEES/CYLINDER]

87.16. Is the domestic gas cylinder delivered at your door step? 1 Yes 0 No

IF NO:

87.16.1. What is the one-way distance in kilometers your household typically travels to get LPG? _____ [KM]

87.17. Generally, how satisfied are you with the LPG situation in your household?

1 Unsatisfied 2 Neutral 3 Satisfied

IF UNSATISFIED: Why are you unsatisfied?

87.17.1. Too expensive to consume 1 Yes 0 No

87.17.2. Poor availability 1 Yes 0 No

87.17.3. Too far to procure 1 Yes 0 No

87.17.4. Poor maintenance services 1 Yes 0 No

87.17.5. Other, SPECIFY: _____

87.18. How many days does it usually takes after placing an order for LPG to get a refill? ___ [DAYS]

87.19. LPG subsidy from authorized procurement is received in whose bank account?

1 Man’s account 2 Woman’s account 3 Joint account 4 Others

87.20. Who orders the refills?

1 Head of the household
2 Spouse of the head of the household
3 Both
4 Son of the household head
5 Daughter/Daughter-in-law of the household head
6 Other

87.21. Who gets the LPG cylinder when it has to be procured away from home?

1 Head of the household
2 Spouse of the head of the household
3 Both

4 Son of the household head
5 Daughter/Daughter-in-law of the household head
6 Other

***** NON-LPG HOUSEHOLDS ONLY (skip to 90 otherwise) *****

88. Why don't you have LPG?

88.1. Is it not available or too far from your village to obtain? 1 Yes 0 No

88.2. Is it too expensive to install an LPG connection? 1 Yes 0 No

88.3. Is the monthly expense of LPG too expensive? 1 Yes 0 No

88.4. Don't know how to get or whom to ask? 1 Yes 0 No

88.5. Other, SPECITY: _____

89. Are you interested in getting LPG? 1 Yes 0 No **(skip to 90)**

89.1. How much would you be willing to pay for an LPG connection? _____ [RUPEES]

89.2. How much would you be willing to pay on monthly basis for enough LPG for your entire cooking needs? _____ [RUPEES/MONTH]

***** ALL HOUSEHOLDS *****

90. Do you use firewood and chips for cooking? 1 Yes 0 No **(skip to 91)**

IF YES (firewood/Chips Households):

90.1. Where do you collect firewood and chips?

90.1.1. A forest? 1 Yes 0 No

90.1.2. The roadside? 1 Yes 0 No

90.1.3. A farm? 1 Yes 0 No

90.2. Typically, how much firewood do you use per week for cooking? _____ [KG/WEEK]

Of this:

90.3. How much of this is collected by household members? _____ [KG]

90.4. How much of this is brought from the market? _____ [KG]

90.5. How much does a KG of firewood and chips cost? _____ [RUPEES/KG]
[If the respondent does not know the answer write "DK"]

90.6. What is your collection frequency for firewood?

1 Daily 2 A few times a week 3 A few times a month
4 A few times a year 5 Don't collect firewood

IF ANSWER IS 1-4 *(otherwise: skip to 91)*:

90.6.1. How much time do you spend each time you go for collection?
_____HOURS/COLLECTION

90.6.2. What is the one-way distance in kilometers your household typically travels to:

90.6.2.1. Collect firewood and chips? _____ [KM]

90.6.2.2. Buy firewood and chips? _____ [KM]

***** ALL HOUSEHOLDS *****

91. Do you use dung cakes for cooking? 1 Yes 0 No (**Skip to 92**)

IF YES (dung cakes households):

91.1. Typically, how many dung cakes do you use per week? _____ [PIECES/ WEEK]

91.2. If you bought all of this in market, how much would it cost you?

_____ [RUPEES/WEEK] *[If the respondent does not know the answer write "DK"]*

Of this weekly usage:

91.2.1. How many are prepared by household members? ____ [PIECES/ WEEK]

91.2.2. How many are bought from the market? ____ [PIECES/ WEEK]

***** ALL HOUSEHOLDS *****

92. Do you use agro residue for cooking? 1 Yes 0 No (**Skip to 93**)

IF YES (agro residue households):

92.1. Typically, how much agro residue do you use per year? _____ [KG/YEAR]

92.2. How much does a KG of agro residue cost? _____ [RUPEES/KG] *[if the respondent does not know the answer write DK]*

***** ALL HOUSEHOLDS *****

93. Do you use coal for cooking? 1 Yes 0 No **(skip to 94)**

IF YES (Coal Households):

93.1. Where do you collect coal?

93.1.1. A coal mine? 1 Yes 0 No

93.1.2. The roadside? 1 Yes 0 No

93.1.3. A market? 1 Yes 0 No

93.1.4. A private seller? 1 Yes 0 No

93.2. Typically, how much coal do you use per week for cooking? _____ [KG/WEEK]

Of this:

93.3. How much of this is collected by household members? _____ [KG]

93.4. How much of this is bought? _____ [KG]

93.5. How much does a KG of coal cost? _____ [RUPEES/KG]
[If the respondent does not know the answer write "DK"]

93.6. What is your collection frequency for coal?

1 Daily 2 A few times a week 3 A few times a month
4 A few times a year 5 Don't collect coal

***** ALL HOUSEHOLDS *****

94. Do you use any other fuel for cooking?

1 Yes, SPECIFY _____ 0 No (**Skip to 95**)

IF YES:

94.1. How much do you use of this fuel in a week? _____ [UNITS/WEEK]

94.2. How much do you spend on this fuel in a week? _____ [RUPEES/WEEK]

***** ALL HOUSEHOLDS *****

95. Does your household have the following items and how many?

95.1. 3-stone cookstove? Indoor: ____ Outdoor: ____

95.2. Mud cookstove? Indoor: ____ Outdoor: ____

95.3. Improved biomass cookstove? Indoor: ____ Outdoor: ____ Portable: ___

95.4. Kerosene stove? Portable: ____

95.5. LPG gas stove? Portable: ____

95.6. Electric stove? Portable: ____

95.7. Other, specify _____

96. Where do you usually cook? 0 indoor 1 outdoor 2 mixed

97. How satisfied are you from your primary cooking arrangement?

1 Unsatisfied 2 Neutral 3 Satisfied

98. Are you cooking less than you want because of poor availability of cooking fuel?

1 Yes 0 No

99. Compared to 5 years ago, has the availability of this fuel:

1 Decreased 2 Remained the same 3 Increased

100. Regarding your primary arrangement for cooking:

100.1. Is it cheap or expensive? 0 Cheap 1 Expensive

100.2. Is it safe or dangerous? 0 Safe 1 Dangerous

100.3. Is the cooking of high or low quality? 0 High quality 1 Low quality?

100.4. Does it cook fast or slowly? 0 Fast 1 Slowly

100.5. Is it easy or difficult to use? 0 Easy 1 Difficult

100.6. Does it provide no smoke, a little smoke, a lot of smoke?

0 No smoke 1 A little smoke 2 A lot of smoke

101. Have you heard about improved biomass cookstoves? 1 Yes 0 No (**if NO, skip to 102**)

IF YES

101.1. Compared to traditional cookstove, the improved biomass cookstove is:

1 Better 2 Similar 3 Worse 99 Don't know

101.2. Have you ever used an improved biomass cookstove in this household?

1 Yes 0 No **(IF NO, skip to 102)**

IF YES:

101.2.1. Do you still use it? 1 Yes 0 No

101.2.2. When did you first use it? _____ [YEARS AGO]

101.2.3. What was the cost of your improved biomass cookstove? _____ [RUPEES]

101.2.4. What is the type of clean cookstove?
0 Basic stove with chimney 1 Rocket type 2 Gasification-based

101.2.5. Who is the provider of the improved biomass cookstove?

0 Government 1 NGO 2 Private vendor

101.2.6. How satisfied are you with the performance of your improved biomass cookstove?

1 Unsatisfied 2 Neutral 3 Satisfied

IF 1 ("UNSATISFIED"); OTHERWISE: skip to 102:

101.2.6.1. Too dangerous to use? 1 Yes 0 No

101.2.6.2. Too costly? 1 Yes 0 No

101.2.6.3. Breakdown frequently? 1 Yes 0 No

101.2.6.4. Poor maintenance service? 1 Yes 0 No

101.2.6.5. SPECIFY: _____

***** ALL HOUSEHOLDS *****

102. Have you heard about biogas with piped supply for cooking? 1 Yes 0 No (**Skip to 103)**

IF YES

102.1. Compared to traditional cookstove, the biogas-based cooking is:

1 Better 2 Similar 3 Worse DK Don't know

102.2. Have you ever used biogas for cooking? 1 Yes 0 No **(Skip to 103)**

IF YES:

102.2.1. Do you still use it? 1 Yes 0 No

102.2.2. When did you first use it? _____ [YEARS AGO]

102.2.3. What kind of plant was it? 0 Individual 1 Community

102.2.4. How satisfied are you with your biogas plant?

1 Unsatisfied 2 Neutral 3 Satisfied

IF 1 ("UNSATISFIED")

102.2.4.1.	Too difficult to use?	1 Yes 0 No
102.2.4.2.	Too dangerous to use?	1 Yes 0 No
102.2.4.3.	Too costly?	1 Yes 0 No
102.2.4.4.	Breakdown frequently?	1 Yes 0 No
102.2.4.5.	Poor maintenance service?	1 Yes 0 No
102.2.4.6.	Other. SPECIFY: _____	

102.2.5. Who is the provider of the biogas plant?

0 Government 1 NGO 2 Private vendor

102.2.6. What was the upfront cost of the biogas plant? _____ [RUPEES]

3. (Just) Energy Transition

I will now ask you a series of questions about the coal industry in Jharkhand.

103. Do you think that the coal industry of Jharkhand helps or hurts the economy of the state?

1 Helps a lot 2 Helps 3 Neutral 4 Hurts 5 Hurts a lot DK Don't know

104. How important is the coal industry for jobs in your village?

1 Not important at all 2 Not important 3 Neutral
4 Important 5 Very important DK Don't know

105. How important is the coal industry for your household as a source of income?

1 Not important at all 2 Not important 3 Neutral
4 Important 5 Very important DK Don't know

106. Do you think that working in a coal mine is safe or dangerous?

0 Safe 1 Dangerous DK Don't know

107. Do you work in the coal sector, whether for CIL, or as a contractor, or informally (e.g. as a coal seller)? 1 Yes 0 No

[* FOR RESPONDENTS WHO DO NOT WORK IN THE COAL SECTOR (skip to 117 otherwise) ***]**

108. How attractive would a job working for CIL in a coal mine be for you?

1 Not attractive at all
2 Somewhat unattractive
3 Neutral
4 Somewhat attractive
5 Very attractive
DK Don't know

109. How attractive would a job working as a contractor in a coal mine be for you?

1 Not attractive at all
2 Somewhat attractive
3 Neutral
4 Somewhat attractive
5 Very attractive
DK Don't know

110. How would you feel about a job working for CIL in the closest existing coal mine?

110.1. Would such a job be safe or dangerous? 0 Safe 1 Dangerous DK Don't know
110.2. Would the wages be high or low? 0 High 1 Low DK Don't know
110.3. Would it be close or far to your home? 0 Close 1 Far DK Don't know
110.4. Would it be physically easy or demanding? 0 Easy 1 Demanding DK Don't know

111. How much do you earn in your current job? _____ [RUPEES] [WRITE "NO JOB" IF NO JOB] [WRITE "NA" IF RESPONDENT DOESN'T WANT TO ANSWER]

☐per day
☐per week
☐per month

112. How satisfied are you with your wages?

1 Very unsatisfied 2 Unsatisfied 3 Satisfied 4 Very satisfied

113. How much money do you think coal miners make compared to you?

1 Much less 2 Somewhat less 3 About the same
4 Somewhat more 5 Much more DK Don't know

114. How attractive would a job of selling coal to shops in the region you live in be to you?

1 Not attractive at all
2 Somewhat unattractive
3 Neutral
4 Somewhat attractive
5 Very attractive
DK Don't know

115. Imagine a job selling coal to shops in the nearest town…

115.1. Would such a job be safe or dangerous? 0 Safe 1 Dangerous DK Don't know
115.2. Would the wages be high or low? 0 High 1 Low DK Don't know
115.3. Would such a job be close or far to your home? 0 Close 1 Far DK Don't know
115.4. Would such a job be physically easy or demanding? 0 Easy 1 Demanding DK Don't know

116. How much money do you think people involved in selling coal to shops make compared to you?

1 Much less
2 Somewhat less
3 About the same
4 Somewhat more
5 Much more
DK Don't know

[* FOR RESPONDENTS WHO DO WORK IN THE COAL SECTOR (DIRECTLY OR INDIRECTLY; E.G. COAL MINES, COAL TRANSPORTATION, COAL SALE, etc. (skip to 125 otherwise) ***]**

117. What is your job? [ENUMERATOR: DON'T SPELL OUT THE ANSWERS]

1 Coal miner 2 Transport coal 3 Selling coal
4 Other. SPECIFY: _____

118. Who do you work for?

1 Work for Coal India Limited (CIL)
2 Contractor for CIL
3 Informal work/self-employed (e.g. coal seller, coal cyclewallah, coal seller).
4 Private coal company (e.g. Tata)

119. How many years have you worked in this position? _____ [YEARS]

120. How much do you earn? _____ [RUPEES]

☐per day
☐per week
☐per month

121. How satisfied are you with your wages?

1 Very unsatisfied 2 Unsatisfied 3 Satisfied 4 Very satisfied

122. What is the best thing about working in the coal sector?

[*** ENUMERATOR: DON'T READ ANSWERS ***]

1 Wages
2 Reliability of income
3 Close to home geographically
4 Other. SPECIFY: _____

123. How do you see your own coal job?

123.1.	Is it safe or dangerous?	0 Safe	1 Dangerous
123.2.	Are its wages high or low?	0 High	1 Low
123.3.	Is it close or far from your home?	0 Close	1 Far
123.4.	Is it physically easy or demanding?	0 Easy	1 Demanding

124. How far is your coal job from your home? _____ [KM]

[* FOR ALL RESPONDENTS ***]**

125. Over the last five years, has any coal company made gifts to your household, such as fans, radios, televisions, and so forth?

0 No 1 Yes. [SPECIFY] What kind of gift? _____

126. Over the last five years, has any coal company made gifts to people in this village, such as fans, radios, televisions, and so forth?

0 No 1 Yes. [SPECIFY] What kind of gift? _____

127. Over the last five years, has any coal company paid for or built buildings such as hospitals, schools, recreation center, etc. in the village?

0 No 1 Yes. [SPECIFY] What kind of building(s)? _____

128. How many family members (not including yourself) do you know who work in the coal industry? _____ [NUMBER] [WRITE 0 IF RESPONDENT DOESN'T KNOW ANYBODY]

129. How many close friends of yours do you know who work in the coal industry? _____ [NUMBER] [WRITE 0 IF RESPONDENT DOESN'T KNOW ANYBODY]

130. How many people do you know outside family and close friends who work in the coal industry? [CLARIFICATION: people whose name you know] _____ [NUMBER] [WRITE 0 IF RESPONDENT DOESN'T KNOW ANYBODY]

IF MORE THAN 3:

130.1. Can you give us give us the names of three of the people you know? [ENUMERATOR: DON'T WRITE UP NAMES; JUST NOTE IF RESPONDENT COULD PROVIDE NAMES]

1 Respondent was able to name 3 people
0 Respondent was not able to name 3 people

[* CONJOINT ***]**.
[*** ENUMERATOR: DO NOT REPEAT INTRO – JUST QUICKLY WRITE ON BLACKBOARD, STATE CONDITION REMAINS SAME ***]
[*** ENUMERATOR: RUN 4 SCENARIOS PER RESPONDENT]
[*** ENUMERATOR: ONE OF THE 2 JOBS SHOULD ALWAYS BE "COAL MINER"; IF JOB A IS NOT COAL MINER, JOB B IS AUTOMATICALLY COAL JOB ***]

I will now present you two possible jobs, and I want to hear which you would prefer:

Job A	**Job B**
It is a job as a [coal miner, farmer, solar energy worker, street vendor]	It is a job as a [coal miner, farmer, solar energy worker, street vendor]
Pays [3000, 4000, 5000, 6000, 7000, 8000, 9000, 10000] rupees per week	Pays [3000, 4000, 5000, 6000, 7000, 8000, 9000, 10000] rupees per week
Is located [1, 5, 10, 15, 20, 50] kilometers away from your home	Is located [1, 5, 10, 15, 20, 50] kilometers away from your home
Is [bad, safe] for your health	Is [bad, safe] for your health
Will employ you [6 months per year, 7 months per year, 8 months per year, 9 months per year, 10 months per year, 11 months per year, the entire year]	Will employ you [6 months per year, 7 months per year, 8 months per year, 9 months per year, 10 months per year, 11 months per year, the entire year]

131. Which of the two jobs would you prefer?

Job A Job B

132. How strongly do you feel about your choice?

1 Not strongly 2 Somewhat strongly 3 Very strongly

4. Environment and Health

133. Over the last 5 years, has the size of forests around your village…

1 Decreased 2 Stayed the same 3 Increased

134. Over the last 5 years, firewood collection has become:

1 Easier 2 Same as before 3 More difficult

135. How satisfied are you with the quality of drinking water in your village?

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

136. How satisfied are you with the quality of the air in your home (indoors)?

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

137. How satisfied are you with the quality of the air outside in your village (outdoors)?

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

138. Over the last 3 months:

138.1. How many days was the air filled with smoke, dust, and fumes? _____ [DAYS; 0-90]

138.2. How many days was the water of bad quality? ____ [DAYS; 0-90]

138.3. How many days did you struggle to breathe and/or have heavy cough? ____ [DAYS; 0-90]

138.4. How many days has any other adult in your household member struggled to breath and/or have heavy cough? ____ [DAYS; 0-90] [WRITE N/A IF NO OTHER ADULT]

138.5. How many days has any children in your household struggled to breath and/or have heavy cough? ____ [DAYS; 0-90] [WRITE N/A IF NO CHILDREN]

138.6. How many days were you too sick to work? ____ [DAYS; 0-90] [WRITE "NA" IF RESPONDENT DOESN'T WORK]

138.7. How many days was any other adult in your household too sick to work? [WRITE N/A IF NO OTHER ADULT] ____ [DAYS; 0-90]

138.8. How many days were the children in your household too sick to go to school or work? [WRITE N/A IF NO CHILDREN] ____ [DAYS; 0-90]