

Appendix 1: Questionnaire

Water supply, sanitation and hygiene Household Survey

Interviewer's name: Date: Start Time: Town: Enumeration map: Household ID:

Introduction

Good morning/afternoon/evening. My name is and I am carrying out research on behalf of COWI, an independent company.

I would like to speak to an adult female member of the household, who is living in this household on a permanent basis.

The aim of the research is to gain knowledge about household's water supply and sanitation facilities and related issues. As part of the questions I would like to see your household's water and sanitation facilities, and in addition to the questions I ask, I will take notes about the facilities you show me.

Your household has been chosen for the interview by random and only a certain number of households in this town will be interviewed. The purpose is to obtain a general view of the situation and all the information your give remains strictly confidential.

The interview will take about 30 minutes.

Q1. Would you agree to participate in the interview?

- 1 Yes (ask for details below) 2 No (write location of household on the list of respondents who are refusing to participate) 1 2

Respondent:

Name

Address

Phone

The name, address and phone number is needed for our quality procedure - **GO TO Q2**

Water Supply

Q2. What is the main source of drinking water for members of your household?

Interviewer: Circle one only.

- | | | | | | |
|---|---------------------------|----|---|---|----|
| 1 | Piped water into dwelling | 9 | Rainwater collection in closed containers | 1 | 9 |
| 2 | Piped water to yard/plot | 10 | Rainwater collection in open containers | 2 | 10 |
| 3 | Public tap/standpipe | 11 | Bottled water | 3 | 11 |
| 4 | Tubewell/borehole | 12 | Small-scale vendor | 4 | 12 |
| 5 | Protected dug well | 13 | Tanker-truck | 5 | 13 |
| 6 | Unprotected dug well | 14 | Surface water (river dam, lake, pond, stream, canal, irrigation channels) | 6 | 14 |
| 7 | Protected spring | 15 | Other (please write in) | 7 | 15 |
| 8 | Unprotected spring | | | 8 | |

Q3. Does your household use other sources of water, drinking and other purposes?

- 1 Yes 1
2 No **If only piped water (into dwelling/yard) is used GO TO Q10, otherwise GO TO Q5** 2
3 Don't know **If only piped water (into dwelling/yard) is used GO TO Q10, otherwise GO TO Q5** 3

Q4. Please state the main source and other sources for each use of water.

Interviewer: Write in the category number as above, write "0" for none. Prompt for other sources, for example rainwater.

	Main source	Other source
a) Drinking	-
b) Cooking
c) Washing clothes
d) House cleaning
e) Bathing/washing your bodies
f) Domestic agriculture
g) Other (write down.....)

- | | | | |
|---|---------------------------|----|---|
| 1 | Piped water into dwelling | 9 | Rainwater collection in closed containers |
| 2 | Piped water to yard/plot | 10 | Rainwater collection in open containers |
| 3 | Public tap/standpipe | 11 | Bottled water |
| 4 | Tubewell/borehole | 12 | Small-scale vendor |
| 5 | Protected dug well | 13 | Tanker-truck |
| 6 | Unprotected dug well | 14 | Surface water (river dam, lake, pond, stream, canal, irrigation channels) |
| 7 | Protected spring | 15 | Other (please write in) |
| 8 | Unprotected spring | | |

Interviewer: If the household is using piped water (into dwelling/yard) only in both Q2 and Q4, **GO TO Q10**

Q5. Who usually goes to the source to fetch the water for the household?

Interviewer: Circle '1' for all mentioned, TWO maximum

- 1) Mother, wife, aunt, sister, sister-in-law 1
2) Father, husband, uncle, brother 1
3) Daughter, niece 1
4) Son, nephew 1
5) Other (please write down) 1

Q6. How long does it take to go there, get water and come back?

Interviewer: Instruct respondent to exclude time used to other household errands. Make sure that the answer is for one roundtrip only.

	minutes	
888 Water on premises		999 Don't know	
888	999		

Q7. Does your household use any means of transport for fetching the water?

1 Yes	2 No	1	2
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If yes, write in means of transport.....

Q8. What is the size of the container(s) you are using to fetch the water?

Interviewer: Ask to see the containers and note the size.

Size of container, type 1.....	litres
Size of container, type 2.....	litres
Size of container, type 3.....	litres

Q9. How many containers does your household usually use per day (for all purposes and sources)?

Number of containers per day, type 1.....	
Number of containers per day, type 2.....	
Number of containers per day, type 3.....	

Q10. How much does your household usually pay per day for the water (for all purposes and sources)?

Interviewer: If the household is consuming bottled water, these expenditures should be included.

Expenses per day	Birr per day	GO TO Q13
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Q11. How many cubic meters does your household usually use per month (for all purposes)?

Interviewer: If the water is metered, ask to see the latest tree water bill and write down the average amount of water.

Amount of water consumed, cubic meters pr month	
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Q12. How much does your household usually pay per month for the water (for all purposes and sources)?

Interviewer: If the household is consuming bottled water, these expenditures should be included. Use water bills as above.

Expenses per month.....	Birr per month
-------------------------	----------------

Q13. What contributions, in kind and cash, did your household make to get the water supply facility?

Interviewer: READ OUT, circle "1" for all mentioned.

1) Connection fee/Initial contribution.....	1
2) Building materials, sand, cement, stone etc.....	1
3) Pipes, taps, etc.	1
4) Water meter	1
5) Contribution with own labour.....	1
6) Hire labour.....	1
7) Other (write down.....)	1
8) None GO TO Q16	1

Q14. What were the total initial water related expenses for your household, this includes connection fee, initial contribution and own expenditures for materials etc?

.....Birr	
888 Nothing GO TO Q16	999 Don't know
888	999

Q15. When did your household have these expenses?

Year.....

999 Don't know GO TO Q16	999
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Q16. What water related contributions, in kind and cash, does your household have regularly?

Interviewer: Circle "1" for all mentioned

- | | |
|--|---|
| 1) Fixed monthly water expenditures..... | 1 |
| 2) Metered water expenditures..... | 1 |
| 3) Fee per bucket/jerry can etc. | 1 |
| 4) Purchase of bottled water..... | 1 |
| 5) Contribution with own labour..... | 1 |
| 6) Expenses on materials for repair..... | 1 |
| 7) Other (write down.....) | 1 |
| 8) None | 1 |

Continuity of the water supply

Q17. How frequently was the drinking water from the main source available to your household during the last two weeks?

- | | | | |
|---|---|---|---|
| 1 Daily, 24 hours a day GO TO Q19 | 4 One - two days a week GO TO Q19 | 1 | 4 |
| 2 Daily, at certain hours | 5 Less frequent than once a week GO TO Q19 | 2 | 5 |
| 3 Three - five days a week GO TO Q19 | | 3 | |

Q18. Between what hours is drinking water from the main source available to your household?

Interviewer: Use the second line only when applicable, i.e. if water is available in two intervals each day

From..... To.....

From..... To.....

Q19. Did your household experience interruptions/breakdowns in the drinking water supply from the main source during the last six months?

Interviewer: If the source was not used the entire period due to e.g. seasonality, ask for irregular interruptions since they last started using the main source.

- | | | | |
|-----------------------|-------------------------------|---|---|
| 1 Yes | 3 Don't know GO TO Q21 | 1 | 3 |
| 2 No GO TO Q21 | | 2 | |

Q20. During these interruptions/breakdown, how many days was drinking water not available from the main source?

Interviewer: Instruct the respondent to add up from all irregular interruptions in the period.

Total number of days:

Drinking water treatment

Q21. Has your household ever treated the water to make it safer to drink?

- | | | | |
|-------|-----------------------|---|---|
| 1 Yes | 2 No GO TO Q25 | 1 | 2 |
|-------|-----------------------|---|---|

Q22. What did your household do to make the water safer to drink?

Interviewer: Circle "1" for all mentioned - PROBE

- | | |
|--|---|
| 1) Boil the water..... | 1 |
| 2) Add bleach/chlorine..... | 1 |
| 3) Sieve it through cloth..... | 1 |
| 4) Water filter (ceramic, sand, composite, etc.) | 1 |
| 5) Let it stand and settle | 1 |
| 6) Other (please write down.....) | 1 |
| 7) Don't know | 1 |

Q23.	When was the last time your household treated the water using this method?			
1	Today	4	Less than one month ago	1 4
2	Yesterday	5	More than one month ago	2 5
3	Less than one week ago	6	Don't know	3 6

Q24.	How much does your household approximately spend on the water treatment per month?			
	ExpendituresBirr per month			
888	Nothing	999	Don't know	888 999

Storage

Q25. Does your household have a water storage container for drinking water?				
<i>Interviewer: This includes the container used for transporting if it is also used for storage</i>				
1	Yes	2	No GO TO Q31	1 2

Q26.	I would very much like to see your household's drinking water storage container - would you kindly show it to me?			
1	Yes	2	No (refused)	1 2

Q27.	How does your household remove water from your drinking water storage container?			
1	Tap	5	Pitcher	1 5
2	Cup/dipper/ladle/scoop	6	Pour from the container	2 6
3	With hands	7	Other (write down:.....)	3 7
4	With bottle			4

Q28.	Observation about storage:				
<i>Interviewer: Circle "1" for the facilities that you observe without reading out loud. If respondent refused to show the container, go to next question.</i>					

	Yes	No	Don't know	Not applicable
1) Is the cup/dipper/ladle kept clean, off the floor and out of reach of children?	1	2	3	9
2) Is the drinking water storage container covered?.....	1	2	3	9
3) Does the drinking water storage container have a narrow-neck?.....	1	2	3	9
4) Does the drinking water storage container look clean?	1	2	3	9

Q29.	What were the household's expenses for the drinking water storage container?			
Expenses	Birr			

Q30.	How often does your household usually clean the drinking water storage container?			
1	Daily	5	Once every half year	1 5
2	Several times per week	6	Less often than half yearly	2 6
3	Once a week	7	Don't know	3 7
4	Once a month			4

Attitude towards the water quality

Q31.	How would you rate the quality of your drinking water service now (coming from the primary source) on a scale from 1 = good to 3 = poor.			
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	Good	Acceptable	Poor	Don't know/not applicable
1) Clarity (no sediments in the water).....	1	2	3	9
2) Colour.....	1	2	3	9
3) Smell.....	1	2	3	9
4) Taste	1	2	3	9
5) Healthiness.....	1	2	3	9
6) Stability of service	1	2	3	9
7) Convenience (time, distance, waiting).....	1	2	3	9

Seasonal variation

Q32.	Are there some months where your household cannot use the main source of drinking water?			
1	Yes	2	No GO TO Q38	1 2

Q33. Which months?

Interviewer: Circle "1" for all mentioned

1) January	1
2) February	1
3) March	1
4) April	1
5) May	1
6) June	1
7) July	1
8) August	1
9) September	1
10) October	1
11) November	1
12) December	1

Q34.	What is the main source of drinking water for members of your household during months mentioned above?			
1	Piped water into dwelling	9	Rainwater collection in closed containers	1 9
2	Piped water to yard/plot	10	Rainwater collection in open containers	2 10
3	Public tap/standpipe	11	Bottled water	3 11
4	Tubewell/borehole	12	Small-scale vendor	4 12
5	Protected dug well	13	Tanker-truck	5 13
6	Unprotected dug well	14	Surface water (river dam, lake, pond, stream, canal, irrigation channels)	6 14
7	Protected spring	15	Other (please write in	7 15
8	Unprotected spring			8

*Interviewer: If the household is using piped water (into dwelling/yard) only, **GO TO Q36***

Q35.	During those months, how long does it take to go there, get water and come back?
<i>Interviewer: Instruct respondent to exclude time used to other household errands. Make sure that the answer is for one roundtrip only.</i>	

.....minutes

888	Water on premises	999	Don't know	888 999
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Q36.	During this period, how frequently is the water you fetch from that source available to your household?			
1	Daily, 24 hours a day GO TO Q38	4	One - two days a week GO TO Q38	1 4
2	Daily, at certain hours	5	Less frequent than once a week GO TO Q38	2 5
3	Three - five days a week GO TO Q38			3

Q37.	Between what hours is water from that source available to your household?
<i>Interviewer: Use the second line only when applicable, i.e. if water is available in two intervals each day</i>	

From..... To.....

From..... To.....

Disposal of used water

Now I have a number of questions regarding your households used water, i.e. used water from washing, bathing and in the kitchen.

Q38.	Would you kindly show me how your household disposes of used water?			
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1	Yes	2	No (refused)	1	2
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Q39. Observation: What are the points of discharge of household's used water?
Interviewer: Circle for the facilities that you observe without reading out loud. ASK the question if respondent refused to show the used water disposal system.

- | | |
|--|---|
| 1) Piped sewer..... | 1 |
| 2) Soak-away/cesspit/septic system | 1 |
| 3) Sanitation facility..... | 1 |
| 4) Open channel | 1 |
| 5) Street surface | 1 |
| 6) Space outside premises..... | 1 |
| 7) Water body (lake, river, etc.)..... | 1 |
| 8) Premises' yard or garden..... | 1 |
| 9) Other (please write down.....) | 1 |

*Interviewer: If only piped sewer (1), soak-away/cesspit/septic system (2) or sanitation facility (3), **GO TO Q41***

Q40. Observations about points of discharge of used water:
Interviewer: Circle "1" for the descriptions you observe without reading out loud. If respondent refused to show the used water disposal system, go to next question.

- | | |
|---|---|
| 1) Stagnant water pool | 1 |
| 2) Swampy area..... | 1 |
| 3) Lots of insects /mosquito breeding | 1 |
| 4) Bad smell | 1 |
| 5) Signs of residues (soap, green slime)..... | 1 |
| 6) Other (write down.....) | 1 |
| 7) None | 1 |

Hygiene

Q41. I would very much like to see how the members of your household wash their hands - would you kindly show it to me?

1	Yes	2	No (refused) GO TO Q43	1	2
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Q42. Observations of hand washing:
Interviewer: Circle "1" for the facilities that you observe without reading out loud.

1) Soap	1
2) Water for hand washing (from tap, storage etc.)	1
3) Facility for hand washing (basin, bucket, sink, etc.).....	1

Q43. Do you have soap or something else that you use for hand washing in your household?

- | | | | | | |
|---|-----------|---|------------------------------|---|---|
| 1 | Yes, soap | 4 | Yes, other (write down.....) | 1 | 4 |
| 2 | Yes, ash | 5 | No GO TO Q47 | 2 | 5 |
| 3 | Yes, sand | | | 3 | |

Q44. Can you please show the soap to me?
Interviewer: If you see the soap, note the answer without asking the question

1	Yes (brought by respondent within one minute)	2	No	1	2
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Q45. Have you used soap today or yesterday?

1	Yes	2	No GO TO Q47	1	2
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Q46. When you used soap today or yesterday, what did you use it for?
Interviewer: Circle '1' for all mentioned - DO NOT READ OUT the answer. If "washing my hands" is mentioned, probe what was the occasion without reading out the answers. Encourage by asking anything else after a reply.

- | | |
|---|---|
| 1) Washing clothes | 1 |
| 2) Washing my body | 1 |
| 3) Washing child's bottom..... | 1 |
| 4) Washing child's hands | 1 |
| 5) Washing hands after defecating | 1 |
| 6) Washing hands after cleaning child | 1 |
| 7) Washing hands before feeding child | 1 |
| 8) Washing hands before preparing food | 1 |
| 9) Washing hands before eating | 1 |
| 10) Washing hands before going out..... | 1 |
| 11) Washing hands before receiving visitors | 1 |
| 12) Other (write down.....) | 1 |

Q47. When do you think is it important for a young child (4 years or older) to wash her/his hands or have her/his hands washed for her/him?

Interviewer: Circle '1' for all mentioned - do NOT read out the answers. Encourage by asking anything else after a reply.

- | | |
|------------------------------------|---|
| 1) Before eating | 1 |
| 2) After eating | 1 |
| 3) After defecating | 1 |
| 4) Before going out | 1 |
| 5) Before receiving visitors | 1 |
| 6) Other (.....) | 1 |
| 7) Don't know | 1 |

Q48. Are there small children living in the household (4 years old or younger)?

1	Yes	2	No GO TO Q51	1	2
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Name of youngest child:.....

Q49. The last time [name of youngest child] passed stools, where did she/he defecate?

Interviewer: DO NOT READ OUT.

- | | | | | | |
|---|---|---|--------------------------------|---|---|
| 1 | Used the sanitation facility GO TO Q51 | 5 | Went outside the premises | 1 | 5 |
| 2 | Used potty | 6 | Went in her/his clothes | 2 | 6 |
| 3 | Used diapers | 7 | Other (please write down.....) | 3 | 7 |
| 4 | Went in yard | 8 | Don't know | 4 | 8 |

Q50. The last time [name of youngest child] passed stools, where were the faeces disposed of?

Interviewer: DO NOT READ OUT.

- | | | | | | |
|---|---|----|--------------------------------|---|----|
| 1 | Dropped into toilet facility | 7 | Disposed in the yard | 1 | 7 |
| 2 | Washed away into toilet facility | 8 | Disposed outside premises | 2 | 8 |
| 3 | Washed away into sink or tub | 9 | Buried | 3 | 9 |
| 4 | Washed away, water discharged as grey water | 10 | Did nothing/left it there | 4 | 10 |
| 5 | Washed away, water discharged outside | 11 | Other (please write down.....) | 5 | 11 |
| 6 | Disposed into solid waste/garbage | 12 | Don't know | 6 | 12 |

Sanitation

Now I will ask you a number of questions regarding your household's toilet facilities

Q51. What kind of toilet does your household use?

- | | | | | | |
|---|-------------------------------|----|--------------------------------------|---|----|
| 1 | Flush to piped sewer system | 7 | Pit latrine without slab/open pit | 1 | 7 |
| 2 | Flush to septic tank | 8 | Bucket | 2 | 8 |
| 3 | Flush/pour flush to pit | 9 | Hanging toilet | 3 | 9 |
| 4 | Flush/pour flush to elsewhere | 10 | Open air/bush/field GO TO Q61 | 4 | 10 |
| 5 | Composting toilet | 11 | Other (please write down.....) | 5 | 11 |
| 6 | VIP/pit latrine with slab | | | 6 | |

Q52. I would very much like to see your toilet - would you kindly show it to me?

1	Yes	2	No (refused)	1	2
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Q53. Is the toilet private (one household), shared (more than one household) or public?

1	Private (one household)	3	Public	1	3
2	Shared (more than one household)			2	

Q54. Observation: How long time does it take to go to the toilet?

Interviewer: If the respondent refused to show you the facility, ASK the question!

.....minutes			
888 Toilet facilities on premises	999 Don't know	888	999

Q55. Observation about access to toilet:

Circle "1" for all observations. If the respondent refused to show you the facility, go to next question!

- 1) Path is clear..... 1
- 2) Dense vegetation in front of toilet..... 1
- 3) Waste or debris on path..... 1
- 4) Major crevice or potholes on path..... 1
- 5) Mud on path..... 1
- 6) Entrance to toilet is obstructed..... 1
- 7) Other observation (write in.....)..... 1
- 8) None 1

Q56. Observations about toilet:

Interviewer: Circle "1" for all observations. If the respondent refused to show you the facility, go to next question!

- 1) Visible faecal residues in and around the drop whole or the basin..... 1
- 2) Visible faecal residues on the floor, wall or door..... 1
- 3) Visible used anal cleansing material (e.g. toilet paper) 1
- 4) Surface flow of sewage 1
- 5) The toilet smells bad (stinks)..... 1

Q57. What kind of maintenance is needed for the household's toilet?

Interviewer: Circle "1" for all mentioned, do NOT read out.

- 1) Empty pit..... 1
- 2) Empty septic tank (deslugde)..... 1
- 3) Dig new hole (when pit is full) 1
- 4) Cleaning 1
- 5) Other (write down.....)..... 1

Q58. How much does your household approximately spend per year for repair and cleaning of the toilet?

Interviewer: Ask for an average figure (if maintenance is every second year, write down half the cost)

.....Birr per year			
888 Work performed by household members only	999 Don't know	888	999

Q59. What were the household's total expenses for building the toilet, including hired labour, materials etc.?

.....Birr			
888 Not applicable	999 Don't know	888	999

Q60. How would you rate the quality of the toilet you use on a scale from 1 = good to 3 = poor.

	Good	Acceptable	Poor	Don't know/not applicable
1) Effective operation (no leakage, no overflow, no blockage)	1	2	3	9
2) Convenience	1	2	3	9
3) Cleanliness.....	1	2	3	9
4) Smell.....	1	2	3	9
5) Distance to toilet.....	1	2	3	9
6) Ease of repair	1	2	3	9

Household Characteristics

Finally, I will now ask you some more personal questions about you and your household. The answers to these questions are confidential.

Q61. How many adults (aged 15 years and above) live in this household permanently including you?

Q62. How many children (aged 5-14 years) live in this household?

Q63. How many infants (aged 0-4 years) live in this household?

Q64. Who in the household contributes most to the household's income?

Name.....

Q65. What has been [name]'s main employment during the last 7 days?

1	Unemployed	8	Self-employed, small business/home production	1	8
2	Employer	9	Unpaid family worker	2	9
3	Regular skilled employee/professional	10	Student/apprentice	3	10
4	Regular unskilled employee	12	Pensioner	4	11
5	Casual skilled employee	13	Sick/handicapped	5	12
6	Casual unskilled employee	14	Other (write in.....)	6	13
7	Farmer			7	

Q66. What is the highest educational level completed by [name]?

1	None	6	College	1	6
2	Self-contained (grade 1-4)	7	University	2	7
3	First cycle (grade 5-8)	8	Technical/vocational	3	8
4	Second cycle (grade 9-10)	9	Don't know	4	9
5	Preparatory (grade 11-12)			5	

Q67. What is the average total monthly income of the household? This includes income earned by all members of the household and all sources (income from employment, own production, received from other family members etc.)

Interviewer: Ask respondent to indicate the income bracket

1	Below 50 Birr per month	6	1001-2000 Birr per month	1	6
2	51-100 Birr per month	7	Over 2,000 Birr per month	2	7
3	101-200 Birr per month	8	Don't know	3	8
4	201-500 Birr per month	9	Refused to answer	4	9
5	501-1000 Birr per month			5	

Q68. How old are you?

1	18-25	5	56-60	1	4
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2	26-35	6	61 or older	2	5
3	36-45	7	Don't know/refused	3	6
4	46-55				7

Q69.	Are you head of household?				
1	Yes GO TO Q71	2	No	1	3
3	Don't know			2	

Q70.	What is your relationship to the head of household?				
1	Wife	6	Husband	1	6
2	Mother	7	Father	2	7
3	Grandmother	8	Grandfather	3	8
4	Daughter (in law)	9	Son (in law)	4	9
5	Other (write down.....)			5	

Q71.	Gender				
1	Male	2	Female	1	2

Q72.	Observations about household surroundings:				
	<i>Interviewer: DO NOT READ OUT</i>				

		Yes	No	Don't know	Not applicable
	Is faecal matter deposited in the household surroundings (children's/animals faeces)?	1	2	3	9

THANK YOU FOR YOUR HELP IN THIS RESEARCH

I confirm that this interview is completely confidential

End Time: