## Appendix 1: Questionnaire

Water supply, sanitation and hygiene Household Survey

| Interviewer's name: | $\square$ |
| :--- | :--- |
| Town: | $\square$ |
| Enumeration map: | $\square$ |
| 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)

## Respondent:

$\qquad$

## 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

Piped water into dwelling
$\begin{array}{ll}9 & \text { Rainwater collection in closed containers } \\ 10 & \text { Rainwater collection in open containers }\end{array}$
Piped water to yard/plot
Public tap/standpipe
Tubewell/borehole
6 Unprotected dug well
$\begin{array}{ll}13 & \text { Tanker-truck } \\ 14 & \text { Surface water (river dam, lake, pond, stream, }\end{array}$
Surface water (river dam, lake, pond, stream, 6
15 Other (please write in ..
7 Protected spring
Q3. Does your household use other sources of water, drinking and other purposes? 1 Yes

Yo If only piped water (into dwelling/yard) is used GO TO Q10, otherwise GO TO Q5 3 Don't know If only piped water (into dwelling/yard) is used GO TO Q10, otherwise GO TO Q5
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
$\ldots \ldots$
$\ldots \ldots$
$\ldots \ldots$.
$\ldots \ldots$.
$\ldots \ldots$
$\ldots \ldots$.
$\ldots \ldots$.
g) Other (write down................)

9 Rainwater collection in closed containe
1 Piped water into dwelling
2 Piped water to yard/plot
Public tap/standpipe
4 Tubewell/borehole
5 Protected dug well
10 Rainwater collection in oners
11 Bottled water
11 Bottled water
13 Tanker-truck
14 Surface water (river dam, lake, pond, stream,
canal, irrigation channels
15 Other (please write in ..............................
7 Protected spring

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
2) Father, husband uncle, brother $\qquad$ .1
3) Son, nephew....................................................

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.

888 Water on premises
999 Don't know .........minutes
Does your household use any means of transport for fetching the water?

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..........................................................................itres
Size of container, type 2
litres
Q9. How many containers does your household usually use per day (for all purposes and sources)?

Number of containers per day, type
Number of containers per day, type
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 $\qquad$
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
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. $\qquad$ 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.

| Connection fee/Init |
| :---: |
| 2) Building materials |
| 3) Pipes, taps, etc. |
| 4) Water meter |
| 5) Contribution with |
| 6) Hire labour.. |
| 7) Other (write down |
| 8) None GO TO Q16 |

Q14. What were the total initial water related expenses for your household, this includes connection fee, initial contribution and own expenditures for materials etc?
888 Nothing GO TO Q16 $\qquad$ 999 Don't know
..Birr
. When did your household have these expenses?
Year..................
999 Don't know GO TO Q16

Q16. What water related contributions, in kind and cash, does your household have regularly?
Interviewer: Circle " 1 " for all mentioned
Fixed monthly water expenditures...................................................
2) Metered water expenditures..
3) Fee per bucket/jerry can etc.
) Purchase of bottled water...

) Expenses on materials for repar fopair
6) Expenses on materials for repair..

Other (write down
8) None

## 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 O19

2 Daily, at certain hours
3 Three - five days a week GO TO Q19
Q19
. Between what hours is drinking water from the main source available to you household?
Interviewer: Use the second line only when applicable, i.e. if water is available in two intervals each day
From...
То..............................

From...
To. $\qquad$
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 |
| :--- | :--- |
| 2 | No |

No GO TO Q21
3 Don't know GO TO Q21
. 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
$\qquad$
Q22. What did your household do to make the water safer to drink?
Interviewer: Circle " 1 "for all mentioned - PROBE

| 1) Boil the water. <br> 2) Add bleach/chlorine <br> 3) Sieve it through cloth <br> 4) Water filter (ceramic, sand, composite, etc.). <br> 5) Let it stand and settle <br> 6) Other (please write down. |
| :---: |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

6) Other (please write dowi
T) Don’t know .................................................................................... 1

| Q23. | When was the last time your household treated the water using this method? |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 Today | 4 | Less that 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? <br>  |  |  |  |  |
|  |  |  |  |  |  |
|  | 888 Nothing |  | Don't know | 888 | 999 |

Storage
Q25. Does your household have a water storage container for drinking water?
Interviewer: This includes the container used for transporting if it is also used for storage
1 Yes
2 No GO TO Q31
$1 \quad 2$
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)
Q27. How does your household remove water from your drinking water storage container?
1 Tap
5 Pitcher
6 Pour from the container
3 With hands
7 Other (write down:............)
. Observation about storage:
Interviewer: Circle "1" for the facilities that you observe without reading out loud. If respondent refused to show the container, go to next question.

| 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? | 2 | 3 | 9 |

Q29. What were the household's expenses for the drinking water storage container?
$\qquad$
Birr
Q30. How often does your household usually clean the drinking water storage container? 1 Daily
$\begin{array}{ll}5 & \text { Once every half year } \\ 6 & \text { Less often than half yearly }\end{array}$
2 Several times per week
3 Once a week
7 Don't know
4 Once a month

## 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.

| 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

Q33. Which months?
Interviewer: Circle " 1 " for all mentioned

$\qquad$
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 container
Piped water to yard/plot
10 Rainwater collection in open containers
3 Public tap/standpipe
11 Bottled water
$\begin{array}{ll}4 & \text { Tubewell//borehole } \\ 5 & \text { Protected dug well }\end{array}$
6 Unprotected dug well
12 Small-scale v
7 Protected spring
$\begin{array}{ll}8 & \text { Protected spring } \\ \text { Unprotected spring }\end{array}$
14 Surface water (river dam, lake, pond, stream,
Oana, irrigation channels)

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

888 Water on premises $\qquad$ 999 Don't know
.......minutes
Q36. During this period, how frequently is the water you fetch from that source available to your household?
1 Daily, 24 hours a day
4 One - two days a week GO TO Q38
$038 \begin{array}{lll}1 & 4 \\ 2 & 5\end{array}$
3 Daily, at certain hours
5 Less frequent than once a week GO TO Q38 $\qquad$

Q37. Between what hours is water from that 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............................
То.............................
From. $\qquad$
$\qquad$

## 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?

1 Yes $\qquad$ 2 No (refused) $\qquad$ $1 \quad 2$
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 how the used water disposal system.


Interviewer: If only piped sewer (1), soak-away/cesspit/septic system (2) or sanitation facility (3), GO TO Q4
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.


## 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 $\qquad$
$\qquad$
Q42. Observations of hand washing:
Interviewer: Circle "1" for the facilities that you observe without reading out loud.

1) Soap.
) Water for hand washing (from tap, storage etc.............................. $\qquad$ $\begin{array}{r}\ldots .1 \\ \ldots . .1 \\ \hline\end{array}$
) Facility for hand washing (basin, bucket, sink, etc. $\qquad$ $\ldots . . .1$
Q43. Do you have soap or something else that you use for hand washing in your household?
$\begin{array}{ll}1 & \text { Yes, soap } \\ 2 & \text { Yes, ash }\end{array}$
4 Yes, other (write down..............)
Yes, sand
5 No GO TO Q47
4. Can you please show the soap to me?

Interviewer: If you see the soap, note the answer without asking the question


Q46. When you used soap today or yesterday, what did you use it for?
Interviewer: Circle 'I' 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...
dy ................
2) Washing child's hands
3) Washing hands after defecating
4) Washing hands after cleaning child
5) Washing hands before feeding child
6) Washing hands before preparing food
7) Washing hands before eating
8) Washing hands before going out.
9) Washing hands before receiving visitors
10) Other (write down
isitors.. $\qquad$
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 'l' for all mentioned - do NOT read out the answers. Encourage by asking anything else after a reply


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

$$
\begin{aligned}
& 1 \text { Yes } \\
& \text { Name of youngest child: }
\end{aligned}
$$

2 No GO TO Q51
2
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 $\mathbf{G O} \mathbf{~ T O}$ Q51
5 Went outside the premises
2 Used potty
4 Went in yard
6 Went in her/his clothes
7 Other (please write down...................) $\quad 3$

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

## 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)
$\qquad$
Q53. Is the toilet private (one household), shared (more than one household) or public? 1 Private (one household)

3 Public
13
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!

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

Observation about access to toilet:
Circle "I" for all observations. If the respondent refused to show you the facility, go to next question!

$$
\begin{aligned}
& \text { ) Path is clear........................................................... } 1 \\
& \text { ) Waste or debris on path } \\
& \text { 4) Major crevice or potholes on path } \\
& \text { 5) Mud on path. } \\
& \text { 6) Entrance to toilet is obstructed } \\
& \text { ) Other observation (write in }
\end{aligned}
$$

8) None

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..... 2) Visible faecal residues on the floor, wall or door.
> 4) Surface flow of sewag
> 5) The toilet smells bad (stinks)

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.........................

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)

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

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

888 Not applicable
999 Don't know
$888 \quad 999$

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

| Poor. |  |  | Don't <br> know/not |
| :--- | :--- | :--- | :---: | :---: |
| applicable |  |  |  |

## 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 |
| :--- | :--- |
| 2 | Employer |
| 3 | Regular skilled employee/professional |
| 4 | Regular unskilled employee |
| 5 | Casual skilled employee |
| 6 | Casual unskilled employee |
| 7 | Farmer |

8 Self-employed, small business/home production 1
9 Unpaid family worker
10 Student/apprentice
13 Sick/handicapped
14 Other (write in
...)
9
10
11

5 Casual skilled employee
ompleted by [name]?
1 None
$\begin{array}{lll}6 & \text { College } \\ 7 & \text { University }\end{array}$
Self-contained (grade 1-4)
8 Technical/vocational
9 Don't know
4 Second cycle (grade 9-10)

| 1 | 6 |
| :--- | :--- |
| 2 | 7 |
| 3 | 8 |
| 4 | 9 |
| 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



I confirm that this interview is completely confidential

End Time: $\square$

