

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Supplementary materials S1:

Interview guideline grounded theory

Water concerns

- 3) What are the water related problems you are most concerned about?

In the following section the main goal is to have a conversation with the respondent. There are questions (indicated in bold) which have to be asked in this very exact way. And then there are a lot of sub-questions prepared to sum up, what the content of the response should include. The goal now is to let the respondent talk freely and provide us with the information that comes into his mind and at the same time to lead the talk so that we get what we want to learn.

Organization of water system

In this first part of the interview, we'd like to learn from you about the water supply in your village.

- 5) Can you tell me, how water supply is organized?
 - o How is the water system during dry season? How is it during rainy season?
 - o Who is responsible for collecting water?
 - o How many times do you collect water a day at this source?
 - o When do you collect the water?
 - o What triggers you to go and collect water? What do you do most of the times directly before collecting water?

- 4) What is your first thought when you think of water collection?
 - o Where is the closest community filter for you?
 - o Why do/don't you collect water there?

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- o Who decided that you collect/don't collect water there?

- 7) What is the procedure when you are going to collect water?
 - o How long does it take you to collect water?
 - o Who else uses this water source?
 - o Who takes care of this water source?
 - o Do you meet other people when collecting water?
 - o What are the benefits of using this water source?
 - o What are the disadvantages of using this water source?

- 8) How is this system organized? Who is responsible for which task?
 - o How much does it cost to collect water?
 - o Do you think this is a fair fare?
 - o How much do you pay for maintenance of this water source?
 - o Who else pays for maintenance of this water source?
 - o How much did you pay for the installation of this water source?
 - o Who installed this water source?
 - o How was the system installed? Can you tell me, how this came about?
 - o Who looks after the system?
 - o Who may use the water system? Who may not use it?

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- o How many people are using the filter in your community?
- o What happened to the water before collecting?

- 9) How do you rate the organization of this system?
 - o How easy is it to access and to use?
 - o What could be better?
 - o What is the most preferred water collection option for you? Why?
 - o If you saw someone damaging or vandalizing the water system, what would you do?
 - o How IMPORTANT would you say the water filter is to the LIVELIHOODS of you and your family?
 - o How IMPORTANT would you say the water system is to the LIVELIHOODS of people in this village?
 - o What else is important for the LIVELIHOODS of people in this village?

- 10) What was there before?
 - o Were you ever visited by people from NGOs or the government who talked to you about water-related issues?
 - o What kind of community or group activity regarding water-related issues have been going on in your village?
 - o What were your fears and hopes before they started the project? What are your feelings now?
 - o How did you get the filter?
 - o Who was involved in the construction?
 - o How useful is it to collect water at this source?
 - o How easy is it to use?

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- o What are barriers for using this water source?
- o What would make the use more convenient for you?
- o What water source did you use before?
- o What is better now? What was better before?
- 11a) What do you think of the water you collect?
- o Do you believe this water source is safe?
- o Has this source ever been tested for arsenic?
- o By whom?
- o Is this source contaminated with other things (e.g. bacteria)?
- o Has this source ever been tested for other indicators of water quality?
- o For which ones?
- o Is this source contaminated with arsenic?
- o Do you think you are at low or high risk to develop an illness when drinking water from this source?
- o How high/low do you think is the risk?
- o What is the risk?
- o Do you think there is something harmful in the water collected from this source?
- o What is it?
- o What does it do that you perceive as harmful?
- o How does it get into the water?
- o How can you clean the water?

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- o Which of these substances does the water from this source contain?
 - o Is it necessary to purify the water form this substance?
 - o How can you purify it?
 - o Do you think there is something harmful in the food you cooked with this water?
 - o What is it?
 - o What does it do that you perceive as harmful?
 - o How does it get into the water?
 - o How can you clean the water?
 - o Which of these substances does the food cooked with water from this source contain?
 - o Is it necessary to purify the water form this substance?
 - o How can you purify it?
- 11b) How would a water-collection option best be organized for you?

Ownership towards this water system

- 122) Can you give me some examples of what you would say, that you own?
- 121) In your own words, can you tell me what you feel, when you think about these things?
- o Can you imagine not actually owning something, but feeling like it's yours?
 - o What is important to you to feel a certain level of security over a thing: investing the self, knowledge or being in control?

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- o What is the meaning or the importance of owning?
- o What advantages has it, that it is your own?
- o What disadvantages has it, that it is your own?
- o What items belong to the members of your family together? What items belong to the members of your village together?
- o Can you tell me why/how something just belongs to you and other things to your family or village? What is the difference?

- 13) You said you feel you are / are not one of the owners of the community water filter. Can you explain what makes you feel that the community filter belongs / doesn't belong to you?

- o Who decided or decides about the community filter? Can you influence this?
- o Can you explain to me, how the drinking water system works? Can you explain me, how the filter works?
- o How much did you or how much do you invest into the system?

14) And what are the consequences, when you say the community filter is your own?

o Let's think of the drinking water system in your village: Can you explain, who owns it? Who is responsible for ensuring the system works properly? Do you feel responsible?

- o What are your responsibilities for the functioning of the community filter?
E.g. paying money for maintenance and use, making repairs, perhaps also social responsibilities etc.
- o What rights do you have when it comes to the community filter?

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E.g. using it anytime you like, or fixed amount of water you can get etc.

- o Who else is responsible for the community filter?

What are their tasks? How well are they doing them?

- o Individual and collective ownership – what are your different associations with possession of yourself and shared possession? How do you distinguish these two levels?

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Supplementary materials S2:

Interview guideline think aloud reasoning

I am now reading you a couple of statements and sentences on your water system, which you can please complete or tell us what goes through your head. Please think aloud – tell us everything that goes through your mind. It is very important to emphasize that you cannot say anything wrong. What you are thinking is what we are interested in.

- 151: This is my water system.

- 152: This is our community's water system.

- 153: It is hard for me to think about this water system as mine.

- 154: My family is one of the owners of the water system.

- 155. The water system is owned by all the people who live in this village

- 156. This is my filter

- 157. This is OUR FAMILY's water filter

- 158. It is hard for me to think about this water filter as MINE.

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- 159. MY favourite water collection option is...

- 1510. MY FAMILY's favourite water collection option is...

- 1511. OUR favourite water collection option is...

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Supplementary materials S3:

Questionnaire

The questionnaire with all the items included in the survey is attached here.

	choices	
English label text	code	choices English
		

Hello, my name is

.....

and I am a
volunteer for
Paridhi. In
collaboration
with Eawag, the
Swiss Federal
Institute of
Aquatic Science
and Technology,
we are
conducting a
community based
action on water
consumption. If
you don't mind, I
would like to
interview you
about your water

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consumption
preferences. We
are also
interviewing
other households
in your
community as
well as other
communities in
Bhagalpur
District. It will
take about 1 hour
to complete the
interview. Do you
have the time for
the interview?
We are not
interested in any
particular
answers, just in
the answers that
really represent
your opinion.
Your answers will
be treated
anonymously. We
would like to
know why people
are doing what
they are doing so
that we can
improve the

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drinking water
situation
depending on this
information in
villages in
Bhagalpur
District. It helps
us most if you
answer as honest
and properly as
possible. Please
help us in finding
out how things
really are!

Would you like to
proceed with the
interview?

1 yes
0 no

Thank you for
your interest,
anyway! I wish
you a good day.



Enter household-
ID:
What is your
name?

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What is your
name, other
villagers call you?
What is the name
of the
household's
head?
What is the main
landmark of this
house?
How can we find
you most easily?

- 1 call
- 2 ask in the village for you
- 3 see you at the house

After the rainy
season, we will
come and
interview again, if
you agree. To find
you as easy as
possible - please
provide us with
your phone
number!
To whom belongs
this number?

- 1 the household of the respondent
- 2 relatives, neighbours, friends
- 3 no phone number

How old are you?
Observe: Sex?

- 1 female
- 2 male

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	0 other
What is the religion of the household?	1 Hinduism
	2 Buddhism
	3 Islam
	4 Other
If other, please specify: To which caste do you belong to?	1 Upper Caste
	2 General Caste
	3 OBC
	4 Scheduled Tribe
	5 Scheduled Caste
What is your highest educational degree?	7 Profession or honours
	6 Graduate or postgraduate
	5 Intermediate or post high school diploma
	4 High school certificate
	3 Middle school certificate
	2 Primary school certificate
	1 Literate
	0 Illiterate
What is the head of household's highest	7 Profession or honours

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educational
degree?

- 6 Graduate or postgraduate
- 5 Intermediate or post high school diploma
- 4 High school certificate
- 3 Middle school certificate
- 2 Primary school certificate
- 1 Literate
- 0 Illiterate

Are you able to
read?

- 1 yes
- 0 no

Are you able to
write?

- 1 yes
- 0 no

What is your
occupation?

- 10 Profession or honours
- 6 Semi-Profession
- 5 Clerical, Shop-owner
- 4 Skilled worker
- 3 Semi-skilled worker
- 2 Unskilled worker / Farmer
- 1 Unemployed / Housekeeper

What is the head
of household's
occupation?

- 10 Profession or honours
- 6 Semi-Profession
- 5 Clerical, Shop-owner
- 4 Skilled worker
- 3 Semi-skilled worker

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	2	Unskilled worker / Farmer
	1	Unemployed / Housekeeper
Is this your own house?	1	yes
	0	no
If no: Who owns this house?		
What is your relation to the head of the household?	1	wife
	2	husband
	3	daughter
	4	mother
	5	sister
	6	son
	7	father
	8	brother
	9	grandson
	10	granddaughter
	11	I am the head of the household
What is the monthly income of the family?	12	more than 41430 INR
	10	20715-41429 INR
	6	15536-20714 INR
	4	10357-15535 INR
	3	6214-10356 INR
	2	2092-6213 INR
	1	less than 2091 INR

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How much land
does your
household own
(incl. homestead
land)?



Think about the home or the cow or the bike or the mobile that you own and the experiences and feelings associated with the statement 'this is my home!', 'this is my cow!', 'this is my bike!', 'this is my mobile!'. The following questions deal with the 'sense of ownership' that you feel for the water scheme that you have in this community. Indicate the

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degree to which
you personally
agree or disagree
with the following
statements:

This is my water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I sense that this
water scheme is
our water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I feel a very high
degree of

- 10 I agree.

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personal
ownership for this
water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I sense that this is
my water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

This is our water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

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How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

It is hard for me to think about this water scheme as mine.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Most of the people that live in this village feel as though they own the water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

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I feel like I own the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I have rights on the water scheme, that no one else has.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
If something happens to this water scheme, others think that I am responsible for the water scheme.	20 I disagree.

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How much do you agree?	3 I neither agree nor disagree.
	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel I have autonomy over the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
The feelings I have towards the water scheme are unique and cannot be matched by the feelings somebody else has towards the water scheme.	20 I disagree.
	3 I neither agree nor disagree.

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How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
If others use the water scheme they have to follow my ideas of how to use.	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel the water scheme belongs to all community members in my village.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.

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It bothers me, when other people collect their water from the water system.	1 I strongly disagree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Other community members think that this is my water system.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I like the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.

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How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
The water scheme is very important to me.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel that I need to own this water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I am passionate about the water scheme.	10 I agree.

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	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I feel that the water scheme belongs to me.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
If the water scheme is broken, I feel personally sad.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.

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Thinking of the water scheme gives me a positive feeling.	1 I strongly disagree.
	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
The water scheme has no special meaning for me.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel the need to defend the water scheme when it is criticized by others.	20 I disagree.

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How much do you agree?	3 I neither agree nor disagree.
	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I am proud to tell others of the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
It is important to me that others think highly of the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.

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It is important to me to support the water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
My wellbeing is linked to the functionality of the water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I consider problems at the water scheme as my own problems.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.

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How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
This water scheme or a piece of this water scheme is really mine.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
If I were to describe myself, this water scheme would	

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likely be
something I
would mention

- 20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

I feel that I love
the water system

- 10 I agree.
20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

I feel great
affection for the
water system

- 10 I agree.
20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

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How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I feel like it is in my hand who can use the water system and who can not

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I feel like it is in my hand how often I may use the water system

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I would challenge anyone in my community if I

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thought
something with
the water system
was done wrong.

- 20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

I know best,
when something
has to be decided
over the water
scheme.

- 10 I agree.
20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

I am the head of
the water
scheme.

- 10 I agree.
20 I disagree.
3 I neither agree nor disagree.

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How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I am one of the leaders over the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I know how this water scheme is organised.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I know how this water scheme works.	10 I agree.

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	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I know who is responsible for the water scheme if there are any troubles.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I am familiar with the purpose of this water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.

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How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I take every opportunity to oversee how things are operated in this water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I have control over the water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I organise the water scheme to better align it

- 10 I agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

with my water-
collection
practice.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I was not at all
involved in the
planning of the
water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I cannot influence
what happens
with the water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I strongly influenced the decision, where the water scheme was going to be built.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
My family invested money or donated land in the water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

My family invested labour in the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Without my contribution, the water scheme would not exist.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I accept the water scheme as my water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?	5 I agree a little.
	2 I disagree a little.
	1 I strongly disagree.
They told me the water scheme was mine.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
They told me I was responsible for the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
The water collected at the water scheme, is of good quality	

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

and drinkable and
usable for
cooking purpose.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

The community
water scheme is
very important
for me.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

When the water
scheme is not in
use, I don't care.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?	5 I agree a little.
	2 I disagree a little.
	1 I strongly disagree.
Every other water source is second to the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I benefit from the water scheme financially.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
The water scheme is good for me and my family.	10 I agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
News about the water scheme are big news for me.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I perceive myself as very effective, if I would like to change something at the water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I can do whatever I want for the water scheme, I will not achieve anything.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

When I want to collect water at the water scheme, I use it anytime at my convenience.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

The water scheme makes me feeling strong and influential.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
If I wanted, I could ignore other peoples claims and have it as I like.	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel I need to protect the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel that other villagers should not use the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Other people mustn't handle the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

I feel that we in the village all have the same rights on the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Everybody can use the water scheme equally.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
We are all obliged to contribute equally to repairing and maintenance of the water scheme.	

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
I really care about the fate of the water scheme.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
When the water scheme is damaged, I try my best to have it repaired.	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I often motivate other people to take care of the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I am sure, the water scheme will be broken in the future.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I think the water scheme provides me with safe	10 I agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

water in the next
4 weeks.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

I feel responsible
for the water
scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Do you feel
responsible for
the repairing of
the water system
in case of
interruption?

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel the duty to personally take care of the water system.	
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I feel the same, it doesn't matter if I do maintain the water scheme or not.	
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

There are valuable things in the water scheme to look after.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I am having rights on the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
I have to follow the instructions of the people that have rights on the water scheme.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?

4 I strongly agree.

5 I agree a little.

How much do you disagree?

2 I disagree a little.

1 I strongly disagree.



Think about the temple, public schools, a public hospital, or some other item that you own or co-own with the community, and the experiences and feelings associated with the statement 'THIS IS OURS!' The following questions deal with the 'feelings of ownership' that you and your community members feel for

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

the water scheme
in the village.

We, my
community
members and I,
collectively agree
that this is OUR
water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

We, my
community
members and I,
collectively feel
that this water
scheme belongs
to US together.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- | | |
|--|---|
| How much do you disagree? | <ul style="list-style-type: none"> 5 I agree a little. 2 I disagree a little. 1 I strongly disagree. |
| We, my community members and I, feel a very high degree of collective (community} ownership for this water scheme. | <ul style="list-style-type: none"> 20 I disagree. 3 I neither agree nor disagree. |
| How much do you agree? | <ul style="list-style-type: none"> 4 I strongly agree. 5 I agree a little. |
| How much do you disagree? | <ul style="list-style-type: none"> 2 I disagree a little. 1 I strongly disagree. |
| All of the members of the community feel as though we own this water scheme collectively. | <ul style="list-style-type: none"> 20 I disagree. 3 I neither agree nor disagree. |

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

We as a community exercise influence over what is going on with the water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

We as a community exercise control over what is going on with the water scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

We as a community were involved in the planning of the water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

We as a community decided where the water scheme was going to be built.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Without the contribution of my community members and myself, the water scheme would not exist.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

All community members and I, we invested money or land in the water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

All community members and I,

- 10 I agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

we invested
labour in the
water scheme.

- 20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

All community
members and I,
we feel that we
know the water
system a lot.

- 20 I disagree.
3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
1 I strongly disagree.

All community
members and I,
we are informed
about what is
going on with the
water scheme.

- 20 I disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	3 I neither agree nor disagree.
	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
All community members and I, we know how this water scheme works.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
In this community it happens a lot, that people defer responsibilities to other community members.	
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

In this community it happens a lot, that someone does not do his or her share of the work.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

In this community it happens a lot, that someone puts forth less effort than other community members.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

No difficulty related the repairing of the water scheme is too tough for our community.	1 I strongly disagree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Our community has confidence in itself.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
Our community expects to be known in other communities as highly caretaking	

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

of the water
scheme.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

The community's
contribution to
the water scheme
is very valuable.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Our community
delivers it
important
changes on the
water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Our community works on important problems related to the water scheme.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.



We have now halfway completed the interview. How do you feel? In the next parts of the questionnaire, we

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

are interested to learn from you about your water collection behaviour. This is, because we want to learn about the use and its reasons of water infrastructure like handpumps and community based water infrastructure. You help us most, with your answers to find out how people in Bhagalpur really collect water! Are you caretaker, user or non-user of the community water scheme?

- 1 Caretaker
- 2 User
- 3 Non-User

Why are you the caretaker?
What is your main source for daily drinking and

- 1 private handpump

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

cooking water
collection?

- 2 shared handpump
- 3 filtration unit
- 4 private borewell or private arrow filter
- 5 public taps of community based piped water
- 6 bottled water
- 7 open well
- 8 household tap of community based piped water scheme

How many times
did you collect
water from this
main source per
day for drinking
and cooking
purpose during
the last 4 weeks?

What is the
volume of the
bucket you collect
the water with
(INTERVIEWER:
please verify the
answer or
measure the
volume)?

What is the main
alternative source
for daily drinking
and cooking
water collection

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

that you used
during the last 4
weeks?

- 2 shared handpump
- 3 filtration unit
- 4 private borewell or private arrow filter
- 5 public taps of piped water
- 6 bottled water
- 7 open well
- 8 household tap of community based piped water scheme

How many times
did you collect
water at this
alternative source
per day for
drinking and
cooking purpose
during the last 4
weeks?

What is the
volume of the
bucket you collect
the water with
(please check
plausibility of the
answer or
measure the
volume)?

Multiple! Where
do you collect
drinking and

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

cooking water
during the
monsoon (rainy
season)?

- 2 shared handpump
- 3 filtration unit
- 4 private borewell or private arrow filter
- 5 public taps of piped water
- 6 bottled water
- 7 open well
- 8 household tap of community based piped water scheme

Do people of
different castes
collect drinking
and cooking
water at different
sources?

- 0 no, we all collect water at the same source
yes, some castes exclusively uses the water scheme, the other caste has to use
- 1 other sources (e.g. open wells, handpumps, ...}
- 2 yes, different castes have it's own water scheme
- 3 yes, there are separate collecting points depending on which caste one belongs to

Has your
handpump been
tested on water-
quality?

- 1 yes
- 0 no
- 999 I don't know

If yes, on what
components?

- 1 fluoride
- 2 iron

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	3	bacterial contamination
	4	arsenic
Is it contaminated with arsenic?	1	yes
	0	no
	999	I don't know
How sure are you, that it is contaminated with arsenic?	5	extremely sure
	4	very sure
	3	I don't know
	2	a little sure
	1	not at all sure
How sure are you, that it is not contaminated with arsenic?	5	extremely sure
	4	very sure
	3	I don't know
	2	a little sure
	1	not at all sure
Are you willing or unwilling to help the caretaker to look after the community water scheme?	10	unwilling
	3	neither willing nor unwilling

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How willing are
you?

- 5 very much willing
- 4 a little willing

How unwilling are
you?

- 2 a little unwilling
- 1 very much unwilling

Multiple! Which
of the following
tasks would you
be ready to
support the
caretaker?

- 2 maintenance
- 3 running
- 4 repairing when broken
- 5 changing the filtermedia
- 6 testing the waterquality



Generally, do you
think the chance
that you get skin
related diseases
(such as changes
in colour and
hard patches on
the palms & soles
of the feet} if you
drink water from

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

the handpump is
high or low?

- 10 High
- 3 Neither low nor high.

how high do you
think it is?

- 4 Somewhat high.
- 5 Very high.

How low do you
think it is?

- 2 Somewhat low.
- 1 Very low.

Do you think the
risk is high or low
to get cancer
when you drink
water from the
community water
scheme only?

- 10 High
- 3 Neither low nor high.

how high do you
think it is?

- 4 Somewhat high.
- 5 Very high.

How low do you
think it is?

- 2 Somewhat low.
- 1 Very low.

How good or bad
is it for you and
your health to
drink water from

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

the community
water scheme?

- 10 Good
- 3 Neither good nor bad
- 4 Somewhat good
- 5 Very good
- 2 Somewhat bad
- 1 Very bad

How good is it?

How bad is it?

How often do you
think you need to
drink water from
the community
water scheme in
order to not
experience any
illness?

- 2 Most of the times
- 3 Sometimes
- 4 Few
- 5 Never

Imagine you have
skin related
diseases (such as
changes in colour
and hard patches
on the palms &
soles of the feet),
how severe
would be the

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

impact on your
life?

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

READ! Arsenic is a naturally existing toxic metal. It is especially present at high levels in the groundwater of gangetic plane (several States in India as well as Bangladesh).
Introduction: The questions and responses will be read to the study participant. The interviewer should circle the number corresponding to the subject's answer. Tell other individuals present during the quiz to not

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

assist the re-
spondent.

Remind

respondents that
it is okay if they
don't know an
answer. However
do not suggest
that a respondent
answer "I don't
know" to any
particular study
question.

Can you please
tell me for each
of the following
whether it is a
major effect of
peoples exposure
towards arsenic?
Black dots on the
skin is an effect of
arsenic exposure.

1 yes

0 no

999 I don't know

Stomach
problems and
problems with
digestion are
effects of arsenic
exposure.

1 yes

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	0	no
	999	I don't know
Changes in thickness and surface of the skin on hands, feet and the back are effects of arsenic exposure.		
	0	no
	999	I don't know
Diarrhea is an effect of arsenic exposure.	1	yes
	0	no
	999	I don't know
Headache is an effect of arsenic exposure.	1	yes
	0	no
	999	I don't know
Fever is an effect of arsenic exposure.	1	yes
	0	no
	999	I don't know
Cough is an effect of arsenic exposure.	1	yes
	0	no

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	999	I don't know
Cancer is an effect of arsenic exposure.	1	yes
	0	no
	999	I don't know
High blood pressure is an effect of arsenic exposure.	1	yes
	0	no
	999	I don't know
The major health related effects of arsenic exposure can be completely different from day to day.	0	no
	999	I don't know
The major effects of arsenic exposure are developed immediately.	1	yes
	0	no
	999	I don't know

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

The worst major effect of long-term and constant arsenic exposure is cancer on the lungs, the skin and the bladder. There are signs, that arsenic can foster diabetes, can have neurological effects and can cause problems with the heart and blood pressure. These symptoms are together known as "Arsenicosis". Can you please tell me for each of the following whether it is a preventive action to lower arsenic exposure?
To drink only clean-looking water.

- 1 yes
- 0 no

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	999	I don't know
To let the water have contact with fresh air.	1	yes
	0	no
	999	I don't know
To test the water on arsenic and drink it only if it is classified as safe.		
	0	no
	999	I don't know
To boil the water before drinking it.	1	yes
	0	no
	999	I don't know
To drink the water right after collecting and avoid storage of the water.	1	yes
	0	no
	999	I don't know
To collect water in a special bucket.	1	yes
	0	no
	999	I don't know
To avoid microbial	1	yes

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

contamination of
the water.

0 no
999 I don't know

To collect water
only from the
special filtration
unit.

1 yes
0 no
999 I don't know

There is no
prevention
possible for
arsenicosis.

1 yes
0 no
999 I don't know

To purify the
water by adding
chlorine

1 yes
0 no
999 I don't know

The only thing
one can do to
prevent from
consequences of
arsenic exposure
is neither to drink
water with
arsenic pollution
nor to cook with
it. As well,

Supplementary materials to:
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contaminated
food crops pose a
great threat to
one's health. For
washing purpose,
it doesn't matter
whether the
water contains
arsenic or not.

How many people
of your household
do you know that
suffer from
effects of arsenic
exposure?

How many people
outside of your
family do you
know that suffer
from effects of
arsenic exposure?

Compared to
persons your sex
and age, how
much higher or
lower are your
chances of
developing
arsenicosis?

- 20 Lower
- 3 neither higher nor lower

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- How much higher?
- 5 Very much higher
 - 4 a little higher
- How much lower?
- 2 a little lower
 - 1 Very much lower
- Do you think you are more or less respected by your community because you collect water of the community water scheme?
- 20 less respected
 - 3 neither more nor less respected
- How much more respected do you think you are?
- 5 very much more
 - 4 a little more
- How much less respected do you think you are?
- 1 a little less
- If you collect water at the community water scheme, to what extent do you think people will envy you?
- 2 A little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 3 Somewhat.
- 4 Very.
- 5 Extremely.

Do you feel comfortable or uncomfortable to your community when collecting water at the community water scheme?

- 20 uncomfortable
- 3 neither comfortable nor uncomfortable

How comfortable?

- 4 somewhat comfortable
- 5 very much comfortable

How uncomfortable?

- 2 somewhat uncomfortable
- 1 very much uncomfortable

How safe or dangerous is it for you to use the community water scheme for water collection?

- 20 dangerous
- 3 neither safe nor dangerous

How safe?

- 4 somewhat safe
- 5 very safe

How dangerous?

- 2 somewhat dangerous

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Introduction: all of the following can be effortful sometimes when fetching water at the community water scheme. What do you think is effortful?	1 very dangerous
long distance	1 not effortful at all 2 a little effortful 3 rather effortful 4 effortful 5 very effortful
spending time	1 not effortful at all 2 a little effortful 3 rather effortful 4 effortful 5 very effortful
waiting time	1 not effortful at all 2 a little effortful 3 rather effortful 4 effortful 5 very effortful
walking to the source	1 not effortful at all 2 a little effortful 3 rather effortful 4 effortful

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

pumping / collecting the water	5	very effortful
	1	not effortful at all
	2	a little effortful
	3	rather effortful
	4	effortful
self willingness	5	very effortful
	1	not effortful at all
	2	a little effortful
	3	rather effortful
	4	effortful
keep in mind where to collect the water	5	very effortful
	1	not effortful at all
	2	a little effortful
	3	rather effortful
	4	effortful
be patient	5	very effortful
	1	not effortful at all
	2	a little effortful
	3	rather effortful
	4	effortful
be punctual	5	very effortful
	1	not effortful at all
	2	a little effortful
	3	rather effortful
	4	effortful

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

planning to collect the water due to the running times of the water scheme	5 very effortful
	1 not effortful at all
	2 a little effortful
	3 rather effortful
	4 effortful
	5 very effortful
pay for using	1 not effortful at all
	2 a little effortful
	3 rather effortful
	4 effortful
	5 very effortful
share maintenance costs for repairs	1 not effortful at all
	2 a little effortful
	3 rather effortful
	4 effortful
	5 very effortful
maintain water source and piped scheme	1 not effortful at all
	2 a little effortful
	3 rather effortful
	4 effortful
	5 very effortful

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

maintain good
relationship with
caretaker

- 1 not effortful at all
- 2 a little effortful
- 3 rather effortful
- 4 effortful
- 5 very effortful

Is there anything
else you find
effortful at
collecting water
at the community
water scheme?

More specifically,
how difficult is it
to collect enough
water as you
need from the
community water
scheme?

- 2 a little difficult
- 3 rather difficult
- 4 somewhat difficult
- 5 very difficult

How sure are you
that you can
collect as much
water as you
need at the
community water
scheme?

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 2 a little sure
- 3 rather sure
- 4 somewhat sure
- 5 very sure

How time-consuming is it to collect water at the community water scheme?

- 1 not at all
- 2 a little
- 3 rather
- 4 somewhat
- 5 very

How difficult is it to find the time and effort to collect your water at the community water scheme?

- 2 a little difficult
- 3 rather difficult
- 4 somewhat difficult
- 5 very difficult

How convenient is it for you to use the community water scheme for water collection?

- 2 a little convenient
- 3 rather convenient

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Considering
benefits and
efforts of
collecting water
at the community
water scheme,
how worthwhile
do you think it is?

- 4 somewhat convenient
- 5 very convenient

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

Multiple! What
are positive
things of
collecting water
at the community
water scheme?

- 1 reliable functionality
- 2 removes iron
- 3 removes salinity
- 4 removes arsenic
- 5 removes dirt
- 6 doesn't give diarrhea
- 7 short distance
- 8 time to collect water
- 9 physical effort
- 10 costs
- 11 restriction to collect

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 12 meet other people
- 13 others see me
- 14 other

If other, please
specify:

Multiple! What
are negative
things of
collecting water
at the community
water scheme?

- 1 unreliable functionality
- 2 iron
- 3 salinity
- 4 arsenic
- 5 dirt
- 6 gives diarrhea
- 7 distance
- 8 time to collect water
- 9 physical effort
- 10 costs
- 11 restriction to collect
- 12 meet other people
- 13 others see me
- 14 other

If other, please
specify:

If you do not
collect the water
at the community

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

water scheme,
how do you feel?

How much do you
like the taste of
the water
collected at the
community water
scheme?

- 1 Not at all.
- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How much do you
like the colour of
the water
collected at the
community water
scheme?

- 1 Not at all.
- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How much do you
like the smell of
the water
collected at the
community water
scheme?

- 1 Not at all.
- 2 A little.
- 3 Somewhat.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- | | |
|---|--|
| <p>How many members of your community collect water at the community water scheme?</p> | <p>4 Very.
5 Extremely.</p> |
| <p>How much of their drinking and cooking water do the members of your community collect from the community water scheme?</p> | <p>1 almost nobody
2 some of them
3 half of them
4 most of them
5 everyone</p> |
| <p>How much of their drinking and cooking water do your relatives within your community collect from the</p> | <p>2 a little bit
3 half of it
4 most of it
5 all of it</p> |

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

community water
scheme?

- 2 a little bit
- 3 half of it
- 4 most of it
- 5 all of it

How many of
your relatives
within your
community
collect water at
the community
water scheme?

- 2 some of them
- 3 half of them
- 4 most of them
- 5 everyone

You collect water
from the
community water
scheme. Do
people who are
important to you
rather approve or
disapprove of
this?

- 20 Disapprove
- 3 Neither approve nor disapprove

How much do
they approve?

- 4 Somewhat approve

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	5 strongly approve
How much do they disapprove?	2 somewhat disapprove
	1 strongly disapprove
You do not collect water from the community water scheme. Do people who are important to you rather approve or disapprove of this?	
	20 Disapprove
	3 Neither approve nor disapprove
How much do they approve?	4 Somewhat approve
	5 strongly approve
How much do they disapprove?	2 somewhat disapprove
	1 strongly disapprove
Imagine you didn't collect drinking water at the communtiy water scheme - how much would people who are important to you approve that you do not collect	

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

water at the
community water
scheme?

- 20 Disapprove
- 3 Neither approve nor disapprove

How much do
they approve?

- 4 Somewhat approve
- 5 strongly approve

How much do
they disapprove?

- 2 somewhat disapprove
- 1 strongly disapprove

Imagine you
collected drinking
water at the
community water
scheme - how
much would
people who are
important to you
approve that you
do collect water
at the community
water scheme?

- 20 Disapprove
- 3 Neither approve nor disapprove

How much do
they approve?

- 4 Somewhat approve
- 5 strongly approve

How much do
they disapprove?

- 2 somewhat disapprove

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Who is important to you?
People who are leaders in the community (e.g gram panchayat), how much do they promote that you collect water at the community water scheme?

1 strongly disapprove

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How much do religious leaders promote that you collect water at the community water scheme?

- 1 Not at all.
- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

Multiple! In your opinion, what do the people that are important to

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

you dislike about
you collecting
water at the
community water
scheme?

- 2 They think the water tastes badly
- 3 They think it takes too much time
- 4 They think it is too effortful
- 5 They think it is shameful
- 6 They don't want me to talk to the caretaker
- 7 They think it is too expensive
- 8 They think the water quality is bad
- 9 Other

Multiple! In your
opinion, what do
these people like
about you
collecting water
at the community
water scheme?

- 2 they like the taste of the water
- 3 iron free water is important to them
- 4 arsenic free water is important to them
- 5 they think it is healthy
- 6 they like the colour of the water
- 7 they like the clear water
- 8 other

How strongly do
you feel a
personal

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

obligation to
collect all the
water at the
community
water-filter?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How strongly
does the head of
household
support that you
collect water at
the water
scheme?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How strongly
does the head of
household
support that you
don't collect
water at the
water scheme?

- 2 A little.
- 3 Somewhat.
- 4 Very.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How confident
are you that you
can collect water
at the community
water scheme
even if your
relatives continue
to consume water
from other
sources?

5 Extremely.

2 A little.

3 Somewhat.

4 Very.

5 Extremely.

How confident
are you that you
can collect
sufficient water
from the
community
water-filter for
your family?

2 A little.

3 Somewhat.

4 Very.

5 Extremely.

How confident
are you that you
can collect
drinking water at

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

the community
water scheme
even if the
caretaker is rude
to you?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How confident
are you that you
can continue to
collect drinking
water all the
time, even if
problems arise
(e.g. some people
question your
water collection},
at the community
water scheme?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How confident
are you that you
can always collect
your drinking
water from the
community water

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

scheme, even though this may be difficult sometimes (e.g. because it is broken, you have little time to go there)?

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

Imagine that the water collection is not possible at some point at the community water scheme. How confident are you that you will be able to re-start collecting drinking water at the community water scheme again after a couple of days?

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

Imagine that the water collection is not possible during monsoon (rainy season) at the community water scheme. How confident are you that you will be able to re-start collecting drinking water at the community water scheme again after?

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

Imagine you occasionally do not go to collect water from the community water scheme. How confident are you about collecting water from the community water-filter regularly again?

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.

How often does it happen that you want to collect water at the community water scheme but you cannot use it because it is not working?

- 2 Seldom.
- 3 From time to time
- 4 Frequently
- 5 Very often

What is the main reason it is not working?
How often does it happen that these reasons prevent you from collecting water at the community water scheme?
Bad relationship with caretaker

- 1 Never
- 2 Seldom.
- 3 From time to time

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	4 Frequently
	5 Very often
water collection frequency is restricted	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
collecting water there is shameful	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
going outside the house is bad	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
fee for water collection	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
water scheme is broken	1 Never
	2 Seldom.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	3	From time to time
	4	Frequently
	5	Very often
long distance	1	Never
	2	Seldom.
	3	From time to time
	4	Frequently
	5	Very often
much time to walk	1	Never
	2	Seldom.
	3	From time to time
	4	Frequently
	5	Very often
long waiting time	1	Never
	2	Seldom.
	3	From time to time
	4	Frequently
	5	Very often
much physical effort	1	Never
	2	Seldom.
	3	From time to time
	4	Frequently
	5	Very often
salinity problem	1	Never
	2	Seldom.
	3	From time to time
	4	Frequently

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

microbial contamination	5 Very often
	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
forgetting to collect water there	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
other	1 Never
	2 Seldom.
	3 From time to time
	4 Frequently
	5 Very often
How easy or difficult do you find it to overcome these difficulties?	
Bad relationship with caretaker	10 difficult
	20 easy
	3 neither difficult nor easy
How difficult?	4 somewhat difficult?
	5 very

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How easy?	2	somewhat easy?
	1	very
water collection frequency is restricted	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
collecting water there is shameful	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
going outside the house is bad	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
fee for water collection	10	difficult

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
water scheme is broken	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
long distance	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
much time to walk	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

long waiting time	10	difficult
	20	easy
	3	neither difficult nor easy
	4	somewhat difficult?
	5	very
How difficult?	2	somewhat easy?
How easy?	1	very
much physical effort	10	difficult
	20	easy
	3	neither difficult nor easy
	4	somewhat difficult?
	5	very
How difficult?	2	somewhat easy?
How easy?	1	very
salinity problem	10	difficult
	20	easy
	3	neither difficult nor easy
	4	somewhat difficult?
	5	very
How difficult?	2	somewhat easy?
How easy?	1	very
microbial contamination	10	difficult
	20	easy
	3	neither difficult nor easy
	4	somewhat difficult?
	5	very
How difficult?	2	somewhat easy?
How easy?		

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

	1	very
forgetting to collect water there	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
other	10	difficult
	20	easy
	3	neither difficult nor easy
How difficult?	4	somewhat difficult?
	5	very
How easy?	2	somewhat easy?
	1	very
How often during the last 4 weeks did it happen that you wanted to collect water at the community water scheme but you didn't feel like doing it?	2	Seldom.
	3	From time to time
	4	Frequently
	5	Very often

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How often during
the last 4 weeks
did it happen that
you wanted to
collect water at
the community
water scheme but
you didn't
because you were
in a hurry?

- 2 Seldom.
- 3 From time to time
- 4 Frequently
- 5 Very often

How often during
the last 4 weeks
did it happen that
you wanted to
collect water at
the community
water scheme but
you didn't
because you
thought it is too
effortful?

- 2 Seldom.
- 3 From time to time
- 4 Frequently
- 5 Very often

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

What are other
habits that hinder
you?

How much do
they hinder you
to collect water
from the
community water
scheme?

- 1 Not at all
- 2 Not so much
- 3 Somewhat
- 4 Strongly.
- 5 Very.

Who in your
household takes
the final decision
to collect water at
the community
water scheme?

Do you have a
plan who helps
you to collect
water from the
community based
water scheme?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you have a
plan when to

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

collect sufficient
water for your
family for an
entire day at the
water scheme?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you have a
plan where you
can store the
water collected at
the water scheme
safely in your
home?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you have a
plan how you can
collect water at
the community
water scheme if
the water scheme
is not running at
that point in
time?

- 2 I disagree a little bit
- 3 I neither disagree nor agree

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 4 I agree a little bit
- 5 I agree very much

Do you have a detailed plan what to do when the community water scheme gets broken?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you have a detailed plan how to avoid forgetting to collect water from the community water scheme?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you have a detailed plan what to do when other urgent tasks arise and impair my going to collect water

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4-Step Protocol for Contextual Adaptation of Measurement Instruments

from the
community water
schemes?

- 2 I disagree a little bit
- 3 I neither disagree nor agree
- 4 I agree a little bit
- 5 I agree very much

Do you try to
comply with your
intention to
always collect
your drinking
water at the
community water
scheme?

- 2 a little true
- 3 somewhat true
- 4 very true
- 5 extremely true

During the last
week...
... How much did
you pay attention
so you don't
forget to collect
water from the
community water
scheme?

- 2 a little true
- 3 somewhat true

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

... How much did you watch yourself to collect sufficient water from the community water scheme for drinking and cooking for your family?

- 4 very true
- 5 extremely true

... How often did you remember your good intentions to collect water from the community water scheme?

- 2 a little true
- 3 somewhat true
- 4 very true
- 5 extremely true

... How aware were you of your goal to collect

- 2 seldom
- 3 half of the times
- 4 most of the times
- 5 everytime

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

water from the
community water
scheme?

- 2 a little
- 3 rather
- 4 very
- 5 Extremely.

... How strongly
did you try to to
collect all of our
drinking water
from the
community water
scheme?

- 2 a little
- 3 rather
- 4 very
- 5 Extremely.

... How strongly
did you try to
make time to
collect water
from the
community water
scheme every
day?

- 2 a little
- 3 rather
- 4 very
- 5 Extremely.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How often did
you forget to
collect water
from the
community water
scheme in the last
four weeks?

- 2 seldom
- 3 half of the times
- 4 most of the times
- 5 everytime

Multiple! Is there
something that
helps you to
remember to
collect water at
the community
water scheme?

- 2 head of household
- 3 other household member
- 4 relatives
- 5 neighbour
- 6 religious leader
- 7 empty bucket
- 8 before eating
- 9 before cooking
- 10 seeing the position of the sun
- 11 daily routines
- 12 others

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

If other, please
specify:

How much does it
bother you when
you cannot
collect your water
at the community
water scheme
even if you want
to for example
because the
water scheme is
not running?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How important is
it for you to
collect water
from the
community water
scheme?

- 1 Not at all.
- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

Do you feel guilty
if you don't
collect the water

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

at the community
water scheme?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How annoyed do
you feel if you
forget to collect
water at the
community water
scheme?

- 2 A little.
- 3 Somewhat.
- 4 Very.
- 5 Extremely.

How strongly do
you intend to
collect all your
water at the
community based
water scheme?

- 2 somewhat high intention
- 3 rather high intention
- 4 quite high intention
- 5 very high intention

How strongly do
you intend to
collect always
your water from

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

the community
water scheme?

- 2 Not.
- 3 A little.
- 4 Strongly.
- 5 Very.



The following
questions are
related to your
water-collection
at the taps of the
community water
scheme in your
village. Water
collection at the
water scheme is
something...

... I do frequently.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

... I do automatically.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
... I do without having to remember actively.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.
	5	I agree a little.
How much do you disagree?	2	I disagree a little.
	1	I strongly disagree.
... that makes me feel weird, if I don't collect water there.	10	I agree.
	20	I disagree.
	3	I neither agree nor disagree.
How much do you agree?	4	I strongly agree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?	5 I agree a little.
	2 I disagree a little.
	1 I strongly disagree.
... I do without thinking.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that would require an effort NOT to do.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that belongs to my daily routine.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I start doing before I realize I am doing it.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I would find hard not to collect water there.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

... I have no need to think about doing.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that is typically "me".	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I have been doing for a long time.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

How much do you agree or disagree with the following statement:

"Drinking water collection at the community water scheme is a matter of habit for me."

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

How often do you go to collect water at the water scheme as needed?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How often do you
go to collect
water at the
water scheme
before cooking?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme
after cooking?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme
before breakfast?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the

- 1 almost never

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

water scheme
after waking up?

- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme
before lunch?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme in
the afternoon?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme in
the evening?

- 1 almost never
- 2 seldom

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme in
the night?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme
around midday?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
water scheme in
the morning?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How often do you
go to collect
water at the
water scheme
when you see the
storage is empty?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always



The following
questions are
related to your
water-collection
at your
handpump.
Water collection
at the handpump
is something...

... I do frequently.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

... I do automatically.	1 I strongly disagree.
	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I do without having to remember actively.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that makes me feel weird, if I don't collect water there.	20 I disagree.
	3 I neither agree nor disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I do without thinking.	10 I agree.
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that would require an effort NOT to do.	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... that belongs to my daily routine.	10 I agree.
	20 I disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you agree?	3 I neither agree nor disagree.
	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I start doing before I realize I am doing it.	
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.
... I would find hard not to collect water there.	
	20 I disagree.
	3 I neither agree nor disagree.
How much do you agree?	4 I strongly agree.
	5 I agree a little.
How much do you disagree?	2 I disagree a little.
	1 I strongly disagree.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

... I have no need
to think about
doing.

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

... that is typically
"me".

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you
disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

... I have been
doing for a long
time.

- 10 I agree.
- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you
agree?

- 4 I strongly agree.
- 5 I agree a little.

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

Do you agree or disagree with the following statement:

"Water collection at the handpump is a matter of habit for me."

- 20 I disagree.
- 3 I neither agree nor disagree.

How much do you agree?

- 4 I strongly agree.
- 5 I agree a little.

How much do you disagree?

- 2 I disagree a little.
- 1 I strongly disagree.

How often do you go to collect water at the handpump as needed?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you go to collect water at the

- 1 almost never

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

handpump before
cooking?

- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
handpump after
cooking?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
handpump before
breakfast?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
handpump after
waking up?

- 1 almost never
- 2 seldom

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

- | | | |
|--|---|---------------|
| | 3 | sometimes |
| | 4 | often |
| | 5 | almost always |
| How often do you
go to collect
water at the
handpump before
lunch? | 1 | almost never |
| | 2 | seldom |
| | 3 | sometimes |
| | 4 | often |
| | 5 | almost always |
| How often do you
go to collect
water at the
handpump in the
afternoon? | 1 | almost never |
| | 2 | seldom |
| | 3 | sometimes |
| | 4 | often |
| | 5 | almost always |
| How often do you
go to collect
water at the
handpump in the
evening? | 1 | almost never |
| | 2 | seldom |
| | 3 | sometimes |
| | 4 | often |
| | 5 | almost always |

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

How often do you
go to collect
water at the
handpump in the
night?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
handpump
around midday?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the
handpump in the
morning?

- 1 almost never
- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always

How often do you
go to collect
water at the

- 1 almost never

Supplementary materials to:
4-Step Protocol for Contextual Adaptation of Measurement Instruments

handpump when
you see the
storage is empty?

- 2 seldom
- 3 sometimes
- 4 often
- 5 almost always



Supplementary materials S4:

Fit indices of three dimensional psychological ownership scale

The three-dimensional measurement scale showed acceptable fit indices: a significant chi-square ($\chi^2 = 187.699$, 77 d.f., $p < .001$), low RMSEA = 0.077 [.063; .091], and moderate CFI = 0.865. Completely standardized factor loadings ranged from 0.305 to 0.725.

After one step of modifications, the shortened three-dimensional measurement scale showed good fit indices: a significant chi-square ($\chi^2 = 67.419$, 27 d.f., $p < .001$), low RMSEA = 0.082 [.058; .106], and moderate to high CFI = 0.93. Completely standardized factor loadings ranged from 0.454 to 0.769.