



D2.3 Household Survey on Environmental Sanitation

The questionnaire below was prepared for a household survey conducted in September 2009 within the Household-Centred Environmental Sanitation (HCES) project in Darkhan, Mongolia. This project is being implemented as a component of the Water Research Project “MoMo – Integrated Water Resources Management for Central Asia: Model Region Mongolia”, which is funded by the German Federal Ministry of Education and Research (BMBF). The goal of the household survey was to assess the current status, practices and perceptions of the environmental sanitation situation in a peri-urban sub-district in Darkhan.

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Household survey environmental sanitation: current status, practices, perceptions

Questionnaire

Date:

Questionnaire No.:

Number of group (I-IX):

Name of enumerator:

Time start:

Time finish:

Part I: Household and housing characteristics

“First I would like to ask some general questions about the household and housing characteristics.”

Household

Nr ¹	Question	Possible Answers
1	How old are you?	No. of years: ____
2	Gender of respondent	- Male - Female
3	Are you the head of the household? If no: What is your role in this household?	- Yes - No, I am...
6	How many adults (≥ 18 years) live in this household?	- No. of adults: ____ (summertime) - No. of adults: ____ (wintertime)
7	How many children (< 18 years) live in this household?	- No. of children: ____ (summertime) - No. of children: ____ (wintertime)
8	What is the highest level of school which you have completed?	- No formal education - Class 1-4 - Class: 5-8 - Class: 9-12 - Vocational - Polytechnic college - University

¹ The questions are not numbered consecutively because after the pre-test of the survey some questions were deleted and others added.

9	What is the highest level of school the other members of your household (7 years and older) have completed?	<ul style="list-style-type: none"> - No formal education:___ (number) - Class 1-4:___ (number) - Class: 5-8:___ (number) - Class: 9-12:___ (number) - Vocational:___ (number) - Polytechnic college:___ (number) - University:___ (number)
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Housing characteristics

Nr	Question	Possible Answers
12	Is the head of household the actual owner?	<ul style="list-style-type: none"> - No, because___ - Yes, paid land price at that time:___ Tugrik - Assumed value of the piece of land today:_____ Tugrik
13	If no, what is your monthly rent?	<ul style="list-style-type: none"> - Don't pay rent - _____ Tugrik per month
14	Is this piece of land (khashaa) officially registered?	<ul style="list-style-type: none"> - Yes, since___ - No, because___
15	How many buildings are on this khashaa?	<ul style="list-style-type: none"> - Ger:___ - House (wood):___ - House (stone/brick):___ - Buildings other (specify):___
16	In how many buildings does your household live?	<p>Summertime</p> <ul style="list-style-type: none"> - Ger:___ - House (wood):___ - House (stone/brick):___ - Buildings other (specify):___ <p>Wintertime</p> <ul style="list-style-type: none"> - Ger:___ - House (wood):___ - House (stone\brick):___ - Buildings other (specify):___
17	What is the total area of this khashaa?	<ul style="list-style-type: none"> - _____ m2 - Length:_____m - Width:_____m
18	Do you have electricity?	<ul style="list-style-type: none"> - Yes - No, because___

19	What was your electricity bill last month? (i.e., your share if you do not have your own meter)	- _____ Tugrik - Don't know
20	Do you have a telephone connection?	- Yes - No, because _____
21	Do you have a mobile phone?	- Yes - No, because _____
22	What was your telephone bill last month (including mobile phone)?	- _____ Tugrik - Don't know

Part II: Water supply

"Now I would like to ask you some questions about your water supply situation."

Existing household water supply situation

Nr	Question	Possible Answers
24	What is the main source of drinking-water for members of your household?	<ul style="list-style-type: none"> - Water kiosk (A) - Water from other households who have private taps or wells (B) - Private well (C) - Rainwater collection - Surface water (river, dam, lake, pond, stream, canal, irrigation channels) - Bottled water - Cart with small tank (provider) - Protected spring - Unprotected spring - Piped water into dwelling (private water connection) - Piped water to yard/plot (private water connection)
25	What is the second most important source of drinking-water for members of your household?	<ul style="list-style-type: none"> - Water kiosk (A) - Water from other households who have private taps or wells (B) - Private well (C) - Rainwater collection - Surface water (river, dam, lake, pond, stream, canal, irrigation channels) - Bottled water - Cart with small tank (provider) - Protected spring - Unprotected spring - Piped water into dwelling (private

		<p>water connection)</p> <ul style="list-style-type: none"> - Piped water to yard/plot (private water connection)
26	How would you evaluate the quality of drinking-water?	<ul style="list-style-type: none"> - Good - Fair, because ____ - Bad, because ____
A	Water kiosk:	
27	Do you use water from the water kiosk?	<ul style="list-style-type: none"> - Yes, water kiosk number ____ - No [<i>go to question 38</i>]
29	How long does it take to go there, take water, and come back?	<ul style="list-style-type: none"> - No of minutes: ____ - Don't know
30	How many times a day do you fetch water?	<ul style="list-style-type: none"> - Once - Twice - Three times... - ____ days a week - Don't know
31	Who usually goes to this source to fetch the water for your household?	<ul style="list-style-type: none"> - Adult woman - Adult man - Female child (under 18 years) - Male child (under 18 years) - Varies - Don't know
32	What do you use for carrying water?	<ul style="list-style-type: none"> - Car - Two wheel cart - Hand - Other (specify): ____ - Don't know
33	Does your water kiosk have water every time you go?	<ul style="list-style-type: none"> - Always - Almost always - Sometimes - Very often it has no water - Don't know
36	If yes, how much do they charge per litre water from the water kiosk?	<ul style="list-style-type: none"> - Charge: _____ Tugrik/litre - Other (e.g., flat rate): ____ - Don't know
37	How much water do members of your household usually collect from the water kiosk per day/week?	<p>Summertime:</p> <ul style="list-style-type: none"> - Litres per day: ____ - Litres per week: ____ <p>Wintertime:</p> <ul style="list-style-type: none"> - Litres per day: ____ - Litres per week: ____

B	Water from other households:	
38	Do you use water from other households who have private taps or wells?	<ul style="list-style-type: none"> - Yes - No <i>[go to question 43]</i>
39	How much water do members of your household usually collect from other households per day or per week?	<p>Summertime</p> <ul style="list-style-type: none"> - Litres per day: ____ - Litres per week: ____ <p>Wintertime:</p> <ul style="list-style-type: none"> - Litres per day: ____ - Litres per week: ____
40	If you use water from other households: How do they charge for water?	<ul style="list-style-type: none"> - Per bucket - Fixed monthly fee - Water provided free - Tugrik per litre: _____ - Don't know
41	If per bucket: How much do they charge per bucket?	<ul style="list-style-type: none"> - 60l bucket: _____ Tugrik - 40l bucket: _____ Tugrik - 25l bucket: _____ Tugrik - Don't know
C	Private well:	
43	Within the perimeter of your khashaa, do you have a private well?	<ul style="list-style-type: none"> - Yes - No <i>[go to question 49]</i>
44	How is this well constructed?	<ul style="list-style-type: none"> - Tubewell/borehole - Protected dug well - Unprotected dug well - Don't know
45	What is the distance of your well to pit latrines (including pit latrines of your neighbours)?	<ul style="list-style-type: none"> - Distance: ____ m - Don't know
46	For what purposes do you use the water from your well?	<ul style="list-style-type: none"> - Drinking - Washing of food - Washing of clothes - Washing of dishes - Washing oneself - Other (specify): ____
47	Is the private well you use shared with other households?	<ul style="list-style-type: none"> - Yes - No
48	If yes: How many households share the well?	No of households: ____

	General questions:	
49	How many litres of water does your household consume every day (including all sources and uses)?	<p>_____ litres per day</p> <ul style="list-style-type: none"> - Up to 20 litres per day - 21-40 litres per day - 41-80 litres per day - >80 litres per day - Don't know
50	How much water does your household consume for drinking and other household needs?	<ul style="list-style-type: none"> - Drinking: _____% - Other household needs: _____% - Don't know
51	Do you know about how much money your household usually spends for water (including all sources and uses)?	<ul style="list-style-type: none"> - Tugrik per month: _____ (summertime) - Tugrik per month: _____ (wintertime) - Don't know
52	What type of water container do you use for fetching water?	<ul style="list-style-type: none"> - Metal - Plastic - Other (specify): _____
53	In what type of vessel do you keep water?	<ul style="list-style-type: none"> - Metal - Plastic - Wood - Other (specify): _____
54	Do you treat your water in any way to make it safer to drink? (If necessary differentiate between the different water sources you use)	<ul style="list-style-type: none"> - Yes - No - Don't know
55	If yes, what do you usually do to the water to make it safer to drink?	<ul style="list-style-type: none"> - Boil - Add bleach/chlorine - Strain it through a cloth - Use a water filter (ceramic, sand, composite, etc.) - Solar disinfection - Let it stand and settle - Other (specify): _____ - Don't know
56	Have any of your household members become ill recently due to water quality?	<ul style="list-style-type: none"> - Yes - No - Don't know

57	If so, which of the following diseases did your household member have?	<ul style="list-style-type: none"> - Diarrhoea - Hepatitis - Dysentery - Salmonella - Other (specify)
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Household attitudes and perceptions about the existing water supply situation

Nr	Question	Possible Answers
58	How satisfied are you with your water supply situation?	<ul style="list-style-type: none"> - Very satisfied - Fairly satisfied - Not satisfied at all
59	What are the biggest disadvantages of the existing water supply situation?	
60	What measures to improve the existing water supply situation would you suggest?	
61	What do you think about the amount of money you have to pay for water?	<ul style="list-style-type: none"> - Cheap - Fair and affordable - Expensive and not affordable

Part III: Sanitation

“Now I would like to ask you some questions about your sanitation situation.”

Existing household sanitation situation

Nr	Question	Possible Answers
62	What kind of toilet facilities do members of your household usually use?	<ul style="list-style-type: none"> - Own toilet facility - Toilet facility of other household(s) - Public toilet facility - Other (specify): _____
	Own toilet facility	
63	What kind of toilet facility do you have on your khashaa?	<ul style="list-style-type: none"> - Pit latrine without slab/open pit - Pit latrine with slab - Ventilated improved pit latrine (VIP) - Composting toilet - Toilet with (pour) flush - No facilities or bush or field - Other (specify): _____
64	Do you share this facility with other households?	<ul style="list-style-type: none"> - Yes - No

65	If yes, how many other households share this toilet?	No. of households:____
66	The last time the youngest child of your household (< 8 years) passed stool, what was done to dispose of the stool?	<ul style="list-style-type: none"> - Child used toilet/latrine - Put/rinsed into toilet or latrine - Thrown into garbage - Buried - Left in the open - Other (specify): ____ - Don't know
67	When was your pit latrine constructed?	Year:_____
68	By whom was your pit latrine constructed?	<ul style="list-style-type: none"> - Self-built - Professional company - Contract worker - Other (specify): ____ - Don't know
69	How much did you pay for the construction of your pit latrine?	<ul style="list-style-type: none"> - _____Tugrik - Own construction work: ____ days - Don't know
70	How deep is your pit latrine?	<ul style="list-style-type: none"> - Depth:____m - Don't know
71	Is your pit latrine laterally lined? (i.e., does your pit latrine have solid side walls?)	<ul style="list-style-type: none"> - Yes - No - Don't know
72	Do you dispose other things than excreta in your pit latrine?	<ul style="list-style-type: none"> - Paper (including toilet paper) - Leftovers - Ashes - Greywater - Other (specify): ____ - Nothing
73	What do you do when the pit latrine is full?	<ul style="list-style-type: none"> - Dig a new pit - Have pit emptied - Other (specify): ____ - Don't know
73-2	If you dig a new pit: How often do you have to dig a new pit?	<ul style="list-style-type: none"> - Every____ years - Never dug a new pit so far - Don't know <i>[go to question 81]</i>
74	If you have pit emptied: How often is the pit latrine emptied?	<ul style="list-style-type: none"> - Every ____ years - Never emptied so far - Don't know
76	Who empties the pit latrine?	<ul style="list-style-type: none"> - Self - USAG Darkhan - Private contractor - Other (specify): ____

		- Don't know
79	Does your household have to pay anything to have the latrine pit emptied?	- Yes, _____ Tugrik per emptying - No
	General questions:	
81	How would you describe the condition of your pit latrine in terms of:	- Cleanliness: Good/fair/poor - Privacy: Good/fair/poor - Convenience: Good/fair/poor
88	Where is the greywater of your household discharged?	- In the pit latrine - In the toilet (WC) - To the yard (e.g. special hole for greywater) - To the street - To open drain/gutters - Into the sewer - To natural water way - Other (specify): _____
89	How much greywater do you produce?	- ___ litres per day - Don't know
91	Do you use the bathhouse of bag 7? If yes: Which services of the bathhouse do you use?	- Don't use any services because____ - Shower - Public latrine - Hairdryer, hairdresser - Other (specify): _____
92	Where can you have a shower/wash yourself?	- At home - At another household (e.g. neighbours, relatives) who have private taps or wells - Public shower (e.g. at the bathhouse) - Other (specify): _____
93	How often do you have a shower?	Every ___ days
94	If you use public shower: How much Tugrik do you have to pay for one shower?	- Adults: _____ Tugrik - Children: _____ Tugrik
95	Do you grow crops in your garden/on your khashaa?	- Yes - No
96	If no: Are you thinking of growing crops in your garden in the future?	- Yes - No, because _____
97	Would you use sanitised (treated) human sludge as fertilizer for vegetables or other horticultural products?	- Yes - No, because____ - Don't know

Household attitudes and perceptions about the existing sanitation situation

Nr	Question	Possible Answers
98	How satisfied are you with your sanitation situation?	<ul style="list-style-type: none"> - Very satisfied - Fairly satisfied - Not satisfied at all
99	What are the biggest disadvantages of the existing sanitation situation?	
100	What measures to improve the existing sanitation situation would you suggest?	
101	What do you think about the amount of money you have to pay for sanitation facilities (e.g. public shower, public toilet facilities, emptying own pit latrine)?	<ul style="list-style-type: none"> - No costs - Cheap - Fair and affordable - Expensive and not affordable

Part IV: Stormwater management (drainage)

“Now I would like to ask you some questions about stormwater drainage.”

Nr	Question	Possible Answers
103	Have you ever experienced storm water flooding?	<ul style="list-style-type: none"> - Yes - No <i>[go to question 111]</i>
104	How many times per year is your home/khashaa heavily flooded by stormwater?	Times per year:___
105	In which months does stormwater flooding occur?	- Months:___
106	Did the most serious stormwater flooding in the past year enter your yard/home?	<ul style="list-style-type: none"> - No flooding - Flooding in yard only - Flooding inside home
107	How high did the flood waters reach?	<ul style="list-style-type: none"> - Less than ankle deep - At least ankle deep - At least knee deep
109	What are the biggest disadvantages of the existing stormwater drainage system?	
110	What measures to improve the stormwater drainage would you suggest?	

Part V: Solid waste management

“Now I would like to ask you some questions about solid waste disposal.”

Nr	Question	Possible Answers
111	Do you have your solid waste collected at your home, and if so by which service type?	<ul style="list-style-type: none"> - No service - Communal service - Other (specify): ____ - Don't know
113	How much do you typically pay to dispose of your solid waste (e.g. the collection fee or fuel for transport etc.)	<ul style="list-style-type: none"> - Nothing - Tugrik per month: ____ - Tugrik per bag: ____ - Don't know
114	If solid household waste is not collected by service: How is the waste disposed of?	<ul style="list-style-type: none"> - Dump away (e.g. on the street, open gutters and channels, empty land, river) - Burn - Bury or compost - Into a pit that is emptied - Into a pit that is abandoned - Other (specify): _____ - Don't know
115	How satisfied are you with the existing solid waste disposal situation?	<ul style="list-style-type: none"> - Very satisfied - Fairly satisfied - Not satisfied at all

117	How do you consider the costs you have to pay for solid waste disposal?	<ul style="list-style-type: none"> - No costs - Cheap - Fair and affordable - Expensive and not affordable
118-2	Would you agree to sort your solid waste? (e.g. glass, paper, ashes)	<ul style="list-style-type: none"> - Yes - No

Part VI: Household socio-economic characteristics

“Now I would like to ask you some questions concerning employment and income.”

Nr	Question	Possible Answers
119	How many adults in this household (18 years and older) have employment or are self-employed? (i.e., how many are working)	<ul style="list-style-type: none"> - Number of people employed: ____ - Number of people unemployed: ____ - Number of people retired: ____

120	Indicate the occupation of each working person:	1.____ 2.____ 3.____ 4.____ ...
121	Which is the main source of income of this household?	- Wages and salaries or other cash income - Support from family or friends - Retirement pension and state social benefits - Child benefits - Other (specify):____
122	What is the total monthly income of this household? (or: How much money does your household have at its disposal every month)?	- _____ Tugrik - < 30,000 Tugrik - 30,000-59,999 Tugrik - 60,000-99,999 Tugrik - 100,000-149,999 Tugrik - 150,000-299,999 Tugrik - 300,000-499,999 Tugrik - ≥ 500,000 Tugrik
123	How much money would you estimate all the members of your household spend per week, not including rent?	- Tugrik per week:____ - Don't know
124	Do you have animals?	- No - Yes: - Cattle (Yaks):____ - Horses:____ - Goats:____ - Camels:____ - Sheep:____ - Pig:____ - Chickens:____ - Other (specify):____
125	Where do you keep the animals?	- On and around the khashaa - Aimag (name):____ - Distance from Darkhan:___ km
126	Do you have land?	- No - Yes (e.g. for growing crops)
126-2	Do you have financial assets?	- No - Yes (e.g. bank account, stocks)

Part VII: Concluding questions

“Now we come to the concluding questions.”

Nr	Question	Possible Answers
128	How well do you know your neighbours?	<ul style="list-style-type: none">- Very well- Fairly well- Don` t know
129	Could you imagine participating in joint activities of households or neighbourhoods to improve your water and sanitation situation?	<ul style="list-style-type: none">- Yes- No- Don` t know
129-2	Have you already participated in community-based activities? (e.g. money-saving groups)	<ul style="list-style-type: none">- Yes- No
130	Which of the following improvements do you think one should try the hardest to achieve? Please rank the following items:	<ul style="list-style-type: none">- Improving water supply services- Improving sanitation services- Improving stormwater drainage- Improving solid waste disposal

“Thank you very much for this interview!”