SUPPLEMENTARY MATERIAL OF

A multi-criteria approach for assessing the sustainability of small-scale cooking and sanitation technologies

A. Krause, J. Köppel Correspondence to: Ariane Krause (krause@ztg.tu-berlin.de)

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PRELIMINARY REMARK

The present document supplements a manuscript about a method developed called the 'multi-criteria technology assessment' (MCTA). This supplements contains graphical visualizations, additional to those presented in the main article and plot data to graphical visualizing results presented in the main article as well as in the present supplements. In addition, results of the final evaluation with participants of the MCTA are presented.

FIGURES



Results of the self-assessment of participants

Fig. S.1: Rating of the participants concerning their individual power and interest in the three case studies of this work

Among all participants of the MCTA, there was no person who had high power to decide about the future course of the project but showed disruptive interest in the project. In practice, there would be the risk that this person could be a "potential project breaker" according to Lohri (2009). This means, that the respective stakeholder has the power for example to prevent the implementation of the technologies just because of his or her own opinion rather then the will of the community. In the described situation, a high potential for conflicts exists (indicated by the red flag). Hence, the assessment should be interfered to address and clear the specific conflict. Before continuing the assessment, the situation shall be improved in collaboration with the stakeholders. For example, an open discussion my clear the conflict or an exchange of the respective stakeholder would be required. However, here we had no such situation and thus continued with the MCTA.



Results of the weighting process

Fig. S.2: The relative importance of the six main-criteria represented by the relative weight of each main-criterion (in %) as an average of the weights from all participants and ranked from the most important (left) to the least important (right). Error bars indicate the standard error of the mean (SEM).



Results of sustainability index for cooking and sanitation alternatives

Fig. S.3: Color-coded scatter plot of the overall sustainability index (SI) of cooking alternatives analysed of Tanzanian (red) and German participants (blue) alongside the average of all participants (grey). [The index ranges from -10 to +10 with an alternative being strongly unfavourable (-10), unfavourable (-5), acceptable (0), favourable (+5), or very favourable (+10).]



Fig. S.4: Color-coded scatter plot of the overall sustainability index (SI) of sanitation alternatives analysed of Tanzanian (red) and German participants (blue) alongside the average of all participants (grey). [The index ranges from -10 to +10 with an alternative being strongly unfavourable (-10), unfavourable (-5), acceptable (0), favourable (+5), or very favourable (+10).]



Results of the assessment of the energy technologies

Fig. S.5: Distribution of the individual SIs (+) as balance of positive and negative weighted scores of the different main-criteria (colours explained in legend) for all participants (1 to 10; legend indicates affiliation of participants) and alongside the mean SI of all participants. (black dotted line).



Fig. S.6: Results of the scoring (y-axis) and weighting (x-axis) of cooking alternatives. The graphs present results for all main-criteria (color-coded symbols) and for all participants (number of signs). The 'red area' indicates that a criterion was given above-average importance but the performance was not perceived as favourable.

Results of the assessment of the sanitation technologies





Fig. S.7: Distribution of the individual SIs (+) as balance of positive and negative weighted scores of the different main-criteria (colours explained in legend) for all participants (1 to 10; legend indicates affiliation of participants) and alongside the mean SI of all participants. (black dotted line).



Fig. S.8: Results of the scoring (y-axis) and weighting (x-axis) of sanitation alternatives. The graphs present results for all main-criteria (color-coded symbols) and for all participants (number of signs). The 'red area' indicates that a criterion was given above-average importance but the performance was not perceived as favourable.

Short discussion of Figs S.5-S.8

Figure S.6 reveals that for charcoal burner, rocket stove, microgasifier, and biogas system, respectively, 18, 13, 11, and 19 judgements out of a total of 60 are found in the 'red area'. Hence, for microgasifier and rocket stoves, most main-criteria considered important are assessed positively; only one sixth of judgements are in the 'red area'. However, for charcoal and biogas alternatives about one third of the important main-criteria are in the 'red area'. Improvements to rocket stoves and microgasifiers primarily pertain to socioeconomic/financial criteria whilst charcoal and biogas alternatives need major general improvements because all main-criteria are represented within 'red area'. Looking at sanitation alternatives (Fig. S.8), we find that for EcoSan, CaSa, and septic system, respectively, 11, 11, and 29 judgements out of a total of 60 are found in the 'red area'. Hence, for the EcoSan- and CaSa-alternatives, most main-criteria considered important are assessed positively. Only one sixth of judgements are in the 'red area' indicating that both ecological alternatives need improvement with respect to health/hygiene and political/legal criteria. For the septic system however, about half of the important criteria receive negative scorings. This signifies that it seems difficult to meet SCD aims while implementing septic systems, even with strong improvements.

Results of the evaluation of the final feedback



Fig. S.9: Results from evaluating the feedback questionnaires given to participants at the end of the MCTA. Evaluation includes answers received from 6 out of 10 participants.

$T \mathrel{A} B \mathrel{L} E \mathrel{S}$

	Table 5.1. Results of weighting the main-criteria. Individual felative weights for ten participants; plot data for Fig. 3.							
	1) Technological /	Environmental	3) Health / hygiene	Socio-cultural	5) Political / legal	6) Socio-economic /		
	operational criteria	criteria	criteria	criteria	criteria	financial criteria		
1	0.18	0.21	0.15	0.17	0.14	0.15		
2	0.18	0.21	0.17	0.19	0.11	0.15		
3	0.20	0.22	0.15	0.21	0.10	0.13		
4	0.24	0.22	0.14	0.27	0.05	0.08		
5	0.17	0.18	0.18	0.19	0.12	0.15		
6	0.19	0.24	0.21	0.12	0.10	0.14		
7	0.20	0.19	0.10	0.14	0.16	0.21		
8	0.19	0.21	0.18	0.18	0.13	0.11		
9	0.13	0.33	0.20	0.07	0.10	0.17		
10	0.17	0.21	0.16	0.19	0.12	0.14		
Mean	0.19	0.22	0.16	0.17	0.11	0.14		

Table S.1: Results of weighting the main-criteria: 'individual relative weights' for ten participants; plot data for Fig. 3.

Table S.2: Results of weighting the main-criteria: 'relative weight' as average of all participants; plot data for Fig. S.2.

	1) Technological /	2) Environmental	3) Health / hygiene	4) Socio-cultural	5) Political / legal	6) Socio-economic
	operational criteria	criteria	criteria	criteria	criteria	/ financial criteria
Mean	0.19	0.22	0.16	0.17	0.11	0.14
SEM	0.01	0.01	0.01	0.02	0.01	0.01
Max	0.24	0.33	0.21	0.27	0.16	0.21
Min	0.13	0.18	0.10	0.07	0.05	0.08
$\Delta_{min.}^{max.} \approx$	0.11	0.15	0.12	0.20	0.11	0.13
		Non commo	n abbrariational CEM: Sta	ndard armar of the mean		

Non-common abbreviations: SEM: Standard error of the mean

Table S.3: Results of assessment: 'overall SI' of cooking alternatives analysed as mean value of all participants; plot data for Fig. 4.

	Charcoal burner	Rocket stove	Microgasifier	Biogas system					
Mean	0.2	1.1	0.9	0.1					
SEM	0.5	0.6	0.6	0.4					
	Non-common abbreviations: SEM: Standard error of the mean; SI: Sustainability index								

Table S.4: Results of	of assessment:	'overall SI'	of sanitatio	n alternatives a	analysed	l as mean v	alue of all p	articipants;	plot data for I	Fig. 6.
-	Ecos	San (UDDT	only) Ca	Sa (UDDT + o	oven)	Septic syste	em(WC + s)	eptic tank)		

Mean	1.6	0.9	-1.6	
SEM	0.7	0.7	0.4	
Non-common abbreviations: CaSa:	Carbonization and S	Sanitation; EcoSan: Ecological sanitation; S	SEM: Standard error of the mean	; SI: Sustainability index;

UDDT: Urine-diverting dry toilet; WC: water closet

Table S.5: Results of assessment: 'individual SI' of cooking alternatives analysed for ten participants; plot data for Fig. S.3.

	Charcoal burner	Rocket stove	Microgasifier	Biogas system
1	-1.1	-1.2	-0.9	-0.6
2	-0.2	1.8	1.8	1.8
3	1.4	2.6	2.6	-0.6
4	2.8	3.0	2.9	-0.3
5	0.8	2.4	1.6	-1.4
6	-0.4	-0.5	-0.4	-0.8
7	-0.4	1.7	1.8	-0.3
8	-1.9	-1.2	-1.9	-0.4
9	-1.9	-1.4	-1.5	0.8
10	2.8	3.6	3.3	3.2
Mean	0.2	1.1	0.9	0.1

Non-common abbreviations: SI: Sustainability index

Table S.6: Results of assessment: 'individual SI' of sanitation alternatives analysed for ten participants; plot data for Fig. S.4.

	EcoSan (UDDT only)	CaSa (UDDT + oven)	Septic system (WC + septic tank)
1	-1.5	-1.5	-1.7
2	-0.2	-0.3	-2.7
3	4.9	4.5	-0.9
4	3.5	2.5	-2.1
5	3.6	2.5	-2.8
6	-0.4	-1.9	-1.3
7	3.0	2.7	-3.0
8	1.8	-0.5	-1.1
9	-0.4	-0.5	-0.6
10	1.6	1.6	0.7
Mean	1.6	0.9	-1.6

Non-common abbreviations: CaSa: Carbonization and Sanitation; EcoSan: Ecological sanitation; SEM: Standard error of the mean; SI: Sustainability index; UDDT: Urine-diverting dry toilet; WC: water closet

Table S.7: Results of scoring: 'Individual weighted scores' of cooking alternatives for ten participants, scores assigned for sub-criteria are weighted with relative weights of sub-criteria and aggregated to the level of main criteria (Eq. A.7) for main-criteria; plot data for Fig. 5.

weigr	1)	2)		(1)	5)	main-criteria; piot da	ta for Fig. 5.
	Technological /	<i>Environmental</i>	Health / hygiene	Socio-cultural	Political / legal	Socio-economic	51
	operational	criteria	criteria	criteria	criteria	/ financial	
	criteria	ontonia	ontonia	ontona	ontonia	criteria	
	ontonia		Char	coal burner		ententa	
1	-1.9	-1.9	0.8	0.1	0.0	-3.5	-1.1
2	0.5	-1.6	1.3	-0.8	0.0	-0.5	-0.2
3	1.4	-1.0	4.0	1.7	-0.8	3.4	1.4
4	4.5	2.9	1.4	3.0	2.9	-0.7	2.8
5	3.4	0.1	0.8	3.3	-2.8	-1.6	0.8
6	0.2	-1.8	1.2	0.1	0.2	-2.0	-0.4
7	3.9	0.2	0.4	1.3	-4.0	-3.7	-0.4
8	-1.3	-1.3	-3.1	-1.9	-2.6	-1.6	-1.9
9	1.8	-2.9	-5.0	0.4	0.0	-1.0	-1.9
10	4.5	0.5	3.1	4.5	4.1	0.3	2.8
Mean	1.7	-0.7	0.5	1.2	-0.3	-1.1	0.2
			Ro	cket stove			
1	-3.4	-1.1	0.8	-0.4	0.0	-3.0	-1.2
2	5.1	0.4	2.2	-0.2	0.9	2.8	1.8
3	2.4	1.2	5.0	3.1	0.0	3.7	2.6
4	4.4	4.3	3.0	2.2	0.0	-0.3	3.0
5	3.8	2.4	2.9	4.2	1.0	-0.9	2.4
6	-0.3	-0.9	1.2	-0.2	0.2	-3.5	-0.5
7	4.5	2.4	2.6	2.7	2.3	-3.0	1.7
8	-0.3	-0.2	-2.0	-1.8	-2.2	-1.4	-1.2
9	0.9	-1.1	-5.0	0.4	0.0	-1.0	-1.4
10	6.8	1.4	4.0	4.1	4.1	1.7	3.1
Mean	2.4	0.9	1.5	1.4	0.6	-0.5	1.1
·			Mie	crogasifier			
1	-2.6	-1.1	0.8	0.6	0.0	-3.0	-0.9
2	4.3	0.6	1.3	0.8	0.9	2.8	1.8
3	2.1	2.8	5.0	0.9	0.0	5.2	2.6
4	3.0	5.7	2.4	1.7	0.0	1.5	2.9
5	1.6	3.8	0.8	1.1	1.0	1.1	1.6
6	-0.6	-0.9	1.2	1.1	0.2	-3.5	-0.4
7	3.8	3.5	2.6	2.5	2.3	-3.0	1.8
8	-0.5	-1.1	0.0	-4.6	-4.4	-1.8	-1.9
9	0.9	-2.3	-3.2	0.0	0.0	-1.0	-1.5
10	4.1	1.5	4.0	4.4	4.1	1.9	2.8
Mean	1.6	1.3	1.5	0.8	0.4	0.0	0.9
	1.0	0.2	B10	gas system	0.0	1.0	0.6
1	-1.9	-0.3	-0.5	1.0	0.0	-1.9	-0.0
2	3.7	5.1 1.4	0.1	0.2	0.9	2.0	1.8
3	-2.7	-1.4	5.0	-1.4	0.0	0.5	-0.0
4 5	-2.0	-1.8	1.4	2.0	0.0	-2.5	-0.5
5	-2.8	-3.8	0.1	-1.3	0.9	-0.4	-1.4
0	-2.0	-0.5	-0.2	0.5	0.2	-2.4	-0.8
/ 0	0.2	-0.5	2.9	1.1	5.1 2.0	-3.0	-0.5
0 0	-0.7	0.0	0.7	-0.1	-2.0	-0.8	-0.4
9 10	0.7	1.0	0.0	2.2 2.2	0.0	0.0	0.8
10 Mean	5./ _0.4	2.3 _0 1	4.9 1 0	5.5 0.7	4.1	-0.0	5.2 0.1
Ivitall	-0.4	-0.1	1.2	0./	0.7	-0.9	0.1

Non-common abbreviations: SI: Sustainability index

0	1)	2)	2)	4)	5)	6)	SI
	Technological /	<i>2)</i> Environmental	<i>3)</i> Health / hygiene	4) Socio-cultural	<i>J</i> Political / legal	0) Socio-economic	51
	operational	criteria	criteria	criteria	riteria	/ financial	
	criteria	cincina	cincina	criteria	cintenia	criteria	
	eriteria		EcoSar	(UDDT only)		entena	
1	0.0	2.2	-7.5	-1 9	_3.0	-13	-1.5
2	2.1	2.2	-7.5	-1.7	-3.8	-0.4	-0.2
3	2.1 6.4	5.0	-2.7	-1.4	-5.8	-0. 4 5.2	-0.2
5 4	5.0	2.8	23	5.9 4 1	-2.3	5.2 4 5	35
+ 5	3.6	5.8	2.5	4.1	-2.5	4.5 2.4	3.5
5	5.0	5.8 1.1	-2.4	-1.5	1.1 _2 2	2.4 _0.2	-0.4
7	1.5	5.2	-2.4	-1.5	-2.2	-0.2	-0.4
8	4.0	5.2	2.2	5.9	0.0	2.1	3.0 1.8
0	0.2	4.1	0.0	0.0	0.0	0.0	1.8
9 10	-0.2	-0.9	0.0	-0.2	0.0	-0.5	-0.4
10 Mean	3.0	3.7	-1.2	1.9	-1.7	2.0	1.0
Ivicali	5.1	5.2	CaSa (1	1.5	-1.5	1.4	1.0
1	0.0	2.2	Ca5a (1		_3.0	-13	-1.5
1	1.0	2.2	-7.5	-1.7	-3.8	-0.4	-0.3
2	5.5	2.0 6.1	-2.7	-1.4	-5.8	-0.4	-0.5
3	3.1	3.2	1.0	2.0	-2.3	3.6	4.5 2.5
	0.7	5.2	3.7	2.7	-2.5	1.0	2.5
6	1.5	2.1	-83	_2 7	_1.1	-1.7	_1.0
7	2.6	5.0	-0.5	-2.7	-4.2	-1.4	-1.)
8	-3.8	2.0	2.2	0.0	0.0	-1.6	-0.5
0	-0.8	_0.9	0.0	-0.2	0.0	-0.5	-0.5
10	-0.8	-0.9	-1.2	-0.2	-1 7	-0.5	-0.5
Mean	1.5	3.4	-1.2	0.3	-1.7	2.0	0.9
Ivicali	1.5	J. T	-0.7	otic system	-1.5	1.0	0.9
1	-0.8	-3.7	0.0	-0.5	0.0	_4 7	-17
1	-0.3	-5.2	-1.3	-0.5	0.0	-4.8	-1.7
2	-0.5	-5.2	-4.5	-1.1	0.0	-7.0	-2.7
3	1.8	-5.2	-1.4	2.2	0.0	-2.9	-0.9
т 5	-0.4	-5.0	-3.0	-1.5	-0.9	-5.4	-2.1
6	0.1	-3.6	-5.5	-0.6	-0.9	-3.8	-2.0
7	0.2	-5.0	0.5	-0.0	0.0	-3.0	-1.5
0	0.0	-0.0	0.0	-1.0	0.0	-0.0	-5.0
0	0.1	-1.4	-1.0	-0.0	-3.3	-1.5	-1.1
9 10	-1.0	-0.9	0.0	-0.2	0.0	-0.3	-0.0
10 Maan	∠.0 0.3	-1.5	1.3	∠.4 0.1	1.1	-2.3 3 7	0.7

Table S.8: Results of scoring: 'Individual weighted scores' of sanitation alternatives for ten participants, scores assigned for sub-criteria are weighted with relative weights of sub-criteria and aggregated to the level of main criteria (Eq. A.7) for main-criteria; plot data for Fig. 7.

Non-common abbreviations: CaSa: Carbonization and Sanitation; EcoSan: Ecological sanitation; SI: Sustainability index; UDDT: Urine-diverting dry toilet; WC: water closet

			(Eq. A.8); p	lot data for Fig. S.5.			
	1)	2)	3) Health /	4) Socio-	5) Political /	6) Socio-	SI
	Technological /	Environmental	hygiene criteria	cultural criteria	legal criteria	economic /	
	operational	criteria				financial criteria	
	criteria						
			Cha	rcoal burner			
1	-0.3	-0.4	0.1	0.0	0.0	-0.5	-1.1
2	0.1	-0.3	0.2	-0.1	0.0	-0.1	-0.2
3	0.3	-0.2	0.6	0.4	-0.1	0.4	1.4
4	1.1	0.6	0.2	0.8	0.2	-0.1	2.8
5	0.6	0.0	0.1	0.6	-0.3	-0.2	0.8
6	0.0	-0.4	0.3	0.0	0.0	-0.3	-0.4
7	0.8	0.0	0.0	0.2	-0.6	-0.8	-0.4
8	-0.2	-0.3	-0.6	-0.3	-0.3	-0.2	-1.9
9	0.2	-1.0	-1.0	0.0	0.0	-0.2	-1.9
10	0.8	0.1	0.5	0.8	0.5	0.0	2.8
Mean	0.3	-0.2	0.1	0.2	-0.1	-0.2	0.2
			Ro	ocket stove			
1	-0.6	-0.2	0.1	-0.1	0.0	-0.4	-1.2
2	0.9	0.1	0.4	0.0	0.1	0.4	1.8
3	0.5	0.3	0.8	0.6	0.0	0.5	2.6
4	1.1	0.9	0.4	0.6	0.0	0.0	3.0
5	0.7	0.4	0.5	0.8	0.1	-0.1	2.4
6	-0.1	-0.2	0.3	0.0	0.0	-0.5	-0.5
7	0.9	0.5	0.3	0.4	0.4	-0.6	1.7
8	-0.1	0.0	-0.4	-0.3	-0.3	-0.2	-1.2
9	0.1	-0.4	-1.0	0.0	0.0	-0.2	-1.4
10	1.2	0.3	0.7	0.8	0.5	0.2	3.6
Mean	0.5	0.2	0.2	0.3	0.1	-0.1	1.1
			M	icrogasifier			
1	-0.5	-0.2	0.1	0.1	0.0	-0.4	-0.9
2	0.8	0.1	0.2	0.1	0.1	0.4	1.8
3	0.4	0.6	0.8	0.2	0.0	0.7	2.6
4	0.7	1.2	0.3	0.5	0.0	0.1	2.9
5	0.3	0.7	0.1	0.2	0.1	0.2	1.6
6	-0.1	-0.2	0.3	0.1	0.0	-0.5	-0.4
7	0.8	0.7	0.3	0.3	0.4	-0.6	1.8
8	-0.1	-0.2	0.0	-0.8	-0.6	-0.2	-1.9
9	0.1	-0.8	-0.6	0.0	0.0	-0.2	-1.5
10	0.7	0.3	0.7	0.8	0.5	0.3	3.3
Mean	0.3	0.2	0.2	0.2	0.1	0.0	0.9
			Bio	ogas system			
1	-0.3	-0.1	-0.1	0.2	0.0	-0.3	-0.6
2	0.7	0.6	0.0	0.0	0.1	0.4	1.8
3	-0.5	-0.3	0.5	-0.3	0.0	0.1	-0.6
4	-0.5	-0.4	0.2	0.5	0.0	-0.2	-0.3
5	-0.5	-0.7	0.0	-0.3	0.1	-0.1	-1.4
6	-0.4	-0.1	0.0	0.1	0.0	-0.3	-0.8
7	0.0	-0.1	0.3	0.1	0.5	-1.2	-0.3
8	-0.1	0.0	0.1	0.0	-0.2	-0.1	-0.4
9	0.1	0.5	0.0	0.1	0.0	0.0	0.8
10	0.6	0.5	0.8	0.6	0.5	0.1	3.2
Mean	-0.1	0.0	0.2	0.1	0.1	-0.2	0.1

Table S.9: Results of assessment: 'Individual overall assessment results' of cooking alternatives for ten participants, 'individual weighted scores' aggregated for main-criteria (Eq. A.7) are weighted with relative weights for main-criteria and aggregated to receive the 'individual SI'

Non-common abbreviations: SI: Sustainability index

	1)	2)	3) Health /	4) Socio-	5) Political /	6) Socio-	SI
	Technological /	Environmental	hygiene criteria	cultural criteria	legal criteria	economic /	
	operational	criteria				financial criteria	
	criteria		5.0				
		<u> </u>	EcoSa	n (UDDT only)			
1	0.2	0.5	-1.1	-0.3	-0.5	-0.2	-1.5
2	0.4	0.6	-0.5	-0.3	-0.4	-0.1	-0.2
3	1.3	1.1	0.7	1.2	0.0	0.7	4.9
4	1.2	0.6	0.3	1.1	-0.1	0.4	3.5
5	0.6	1.0	0.7	0.8	0.1	0.4	3.6
6	0.3	0.3	-0.5	-0.2	-0.2	0.0	-0.4
7	0.8	1.0	0.2	0.5	0.0	0.4	3.0
8	0.9	0.9	0.0	0.0	0.0	0.0	1.8
9	0.0	-0.3	0.0	0.0	0.0	-0.1	-0.4
10	0.5	0.8	-0.2	0.4	-0.2	0.4	1.6
Mean	0.6	0.6	0.0	0.3	-0.1	0.2	1.6
			CaSa (UDDT + oven)			
1	0.2	0.5	-1.1	-0.3	-0.5	-0.2	-1.5
2	0.3	0.6	-0.5	-0.3	-0.4	-0.1	-0.3
3	1.1	1.3	0.9	0.5	0.0	0.7	4.5
4	0.8	0.7	0.1	0.7	-0.1	0.3	2.5
5	0.1	1.0	0.7	0.3	0.1	0.3	2.5
6	0.3	0.5	-1.8	-0.3	-0.4	-0.2	-1.9
7	0.7	1.1	0.2	0.2	0.0	0.4	2.7
8	-0.7	0.4	0.0	0.0	0.0	-0.2	-0.5
9	-0.1	-0.3	0.0	0.0	0.0	-0.1	-0.5
10	0.5	1.0	-0.2	0.2	-0.2	0.4	1.6
Mean	0.3	0.7	-0.2	0.1	-0.2	0.1	0.9
			Se	ptic system			
1	-0.2	-0.8	0.0	-0.1	0.0	-0.7	-1.7
2	-0.1	-1.1	-0.7	-0.2	0.0	-0.7	-2.7
3	0.4	-1.1	-0.2	0.5	0.0	-0.4	-0.9
4	-0.1	-1.4	-0.5	0.2	0.0	-0.3	-2.1
5	0.0	-0.9	-0.7	-0.3	-0.1	-0.8	-2.8
6	0.0	-0.8	0.1	-0.1	0.0	-0.5	-1.3
7	0.1	-1.3	0.1	-0.2	0.0	-1.7	-3.0
8	0.0	-0.3	-0.2	-0.1	-0.4	-0.1	-1.1
9	-0.1	-0.3	0.0	0.0	0.0	-0.1	-0.6
10	0.5	-0.3	0.2	0.5	0.1	-0.3	0.7
Mean	0.1	-0.8	-0.2	0.0	0.0	-0.6	-1.6

Table S.10: Results of assessment: 'Individual overall assessment results' of sanitation alternatives for ten participants, 'individual weighted scores' aggregated for main-criteria (Eq. A.7) are weighted with relative weights for main-criteria and aggregated to receive the 'individual SI' (Eq. A.8): plot data for Fig. S.7.

Non-common abbreviations: CaSa: Carbonization and Sanitation; EcoSan: Ecological sanitation; SI: Sustainability index; UDDT: Urine-diverting dry toilet