

Supplementary online material 1:

Quantifiable metrics identified by experts for measuring requirements of community stakeholders and expert stakeholders

(These are denoted as M1, etc. for easy reference later on)

Sl. no.	Metric	Measurement method	Score on 0 to 1 scale				
			0.00	0.25	0.50	0.75	1.00
M1	Transect walks to field sites						
		Focus group discussions	Not supported	-	-	-	Supported
M2	Collecting text information as attribute-value pairs using a questionnaire						
		Focus group discussions	Not supported	-	-	-	Supported
M3	Photographs						
		Focus group discussions	Not supported	-	Supported	-	Supported with easy access
M4	Audio recordings						
		Focus group discussions	Not supported	-	Supported	-	Supported with easy access
M5	Using existing maps						
		Focus group discussions	Not supported	-	Supported as paper maps	-	Supported as computer maps
M6	Collecting location information						
		Focus group discussions	Not supported	Supported using ground based rough sketches	Supported using paper based rough sketches	Supported using paper based maps	Supported using GPS with error <= 3m
M7	Time taken to search and view detailed information about a particular system						
		Usability trials	> 30 minutes	> 10 - 30 minutes	> 5 - 10 minutes	> 1 - 5 minutes	<= 1 minute
M8	Time taken to search and view a list of systems that meet specified criteria ('sequential access'/'query')						
		Usability trials	> 30 minutes	> 10 - 30 minutes	> 5 - 10 minutes	> 1 - 5 minutes	<= 1 minute

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M9	Time taken to search and view summary information about a list of systems that meet specified criteria						
		Usability trials	> 30 minutes	> 10 - 30 minutes	> 5 - 10 minutes	> 1 - 5 minutes	<= 1 minute
M 10	Showing a list of systems that meet specified criteria on a map ('spatial query')						
		Focus group discussions	Not supported	-	-	-	Supported
M 11	Showing preview before saving						
		Focus group discussions	Not supported	-	-	-	Supported
M 12	Alerting about potential duplication						
		Focus group discussions	Not supported	-	-	-	Supported
M 13	Viewing all works in the neighbourhood						
		Focus group discussions	Not supported	-	-	-	Supported
M 14	Educational background needed						
		Focus group discussions	College or more	Junior college / High school	Middle school	Literacy / Primary school	None
M 15	Training period						
		Focus group discussions	More than 1 month	> 5 days to 1 month	> 2 to 5 days	> ½ day to 2 days	<= ½ day
M 16	Less error prone						
		Usability trials	> 33%	> 20% - 33%	> 10% - 20%	> 5 - 10%	<= 5%
M 17	Educational background needed						
		Focus group discussions	College or more	-	High school	-	Middle school

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M 18	Training period						
		Focus group discussions	More than 15 days	-	> 5 to 15 days	-	<= 5 days
M 19	Point of interest: Time taken to gather detailed information about 5 RWH systems within 250 meter distance:						
		Usability trials	> 2 hours	1-2 hours	½ - 1 hour	¼ - ½ hour	<= ¼ hour
M 20	Area of interest: Time taken to gather detailed information about an area of size 1 hectare:						
		Usability trials	> 2 hours	1-2 hours	½ - 1 hour	¼ - ½ hour	<= ¼ hour
M 21	Error while gathering detailed information about 5 RWH systems within 250 meter distance:						
		Usability trials	>33%	<=33%	<=20%	<=10%	0.00%
M 22	Error while gathering detailed information about an area of size 1 hectare:						
		Usability trials	>33%	<=33%	<=20%	<=10%	0.00%
M 23	Easy-to-use training manuals						
		Focus group discussions	Instructor is needed	-	Occasional help from a resource person is sufficient	-	Self study is sufficient
M 24	Telephone support provided						
		Focus group discussions	No	-	-	-	Yes
M 25	Robust solution: Minimal data loss						
		Focus group discussions	Frequent	-	Rare	-	Never
M 26	Easy to upgrade solution						
		Focus group discussions	No	-	Few simple steps	-	Upgrade not needed

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M 27	Easy-to-use training manuals						
		Focus group discussions	Instructor is needed	-	Occasional help from a resource person is sufficient	-	Self study is sufficient
M 28	Telephone support provided						
		Focus group discussions	Not supported	-	-	-	Supported
M 29	Robust solution: Minimal data loss						
		Focus group discussions	Frequent	-	Rare	-	Never
M 30	Easy to upgrade solution						
		Focus group discussions	No	-	Few simple steps	-	Upgrade not needed
M 31	Independent access						
		Focus group discussions	Not supported	-	-	-	Supported
M 32	Confidential access						
		Focus group discussions	Not supported	-	-	-	Supported
M 33	Affordability						
		Focus group discussions	High: >Rs10,000	Medium: > Rs. 1,000 to <= Rs. 10,000	Low: > Rs. 100 to Rs. 1,000	Nominal: Rs. 100	Free