

Supplementary material D

Questionnaire about the relationship and importance of evaluation indicators for residents' engagement level in the SOCR

Dear experts,

Thank you for participation in the questionnaire survey. We are honored to invite you to participate in our research work. Our research team is conducting research on residents' engagement of the SOCR to enhance the enthusiasm of residents. We assure you that the research materials used in this survey are only for academic research and will not disclose your personal information. Thank you again for your participation!

Section A. Personal information

1. What is your gender?
A. Male B. Female
2. How many years have you been engaged in research in the field of "sponge city", "sponge-style old community renewal" or "city governance"?
A. More than 5 years B. 3-5 years C. 1-3 years D. Less than 1 year
3. What is your occupation?
A. College teachers B. Government employee C. Enterprise administrator D. Other ()
4. What is your professional title?
A. Professor B. Associate professor C. Intermediate D. Initial E. Other ()
5. What is your educational background?
A. Doctor B. Master C. Other ()

Section B. The mutual influence relationship of evaluation indicators for residents' engagement level

Table S3. Evaluation indicator system of residents' engagement level of the SOCR

Primary indicators	Code	Secondary indicators
Empowerment	EP1	The government departments at the community level provide residents with certain power to participate in decision-making
	EP2	Relevant government departments at the community level build follow-up tracking mechanisms to solve the problem of residents' engagement
	EP3	The government departments at the community level provide sufficient economic resources for residents to participate, such as providing funds for holding pre-consultation meetings
	EP4	The government departments at the community level allocate sufficient human resources to help residents engage, such as setting up specialized governance institutions
Engagement	EG1	Residents have the opportunity to participate in the decision-making stage of the SOCR and put forward suggestions
	EG2	Residents have the opportunity to participate in the implementation stage of the SOCR and give feedback
	EG3	Residents have the opportunity to participate in the maintenance phase of the SOCR and supervise the follow-up process
Cooperation	CP1	There are specialized government departments responsible for coordinating problems of residents' engagement at the community level

	CP2	Third-party organizations have specialized agencies at the community level responsible for coordinating problems of residents' engagement
	CP3	The construction party has special personnel responsible for coordinating problems of residents' engagement
	CP4	The resident representatives communicate with the coordinating unit about the problems in the engagement process
Network	NW1	Government departments actively guide residents to engage
	NW2	Third-party organizations actively guide residents to engage
	NW3	Construction party actively guides residents to engage
Validity	EF1	The residents' engagement helps to deepen the understanding of the importance of the SOCR
	EF2	The residents' engagement helps to deepen the understanding of the technologies and targets of the SOCR
	EF3	The residents' engagement helps to improve residents' satisfaction with the SOCR
	EF4	The residents' engagement helps to enhance residents' trust in the government
	EF5	The residents' engagement has effectively accelerated the progress of project implementation and improved efficiency
	EF6	The residents' engagement has effectively reduced the complaints of residents and conflicts with government departments
	EF7	The residents' engagement has effectively improved the community environment

If you believe that the indicator in this row affects the indicator in this column, fill in 1. If you believe that the indicator in this row does not affect the indicator in this column, fill in 0.

Table S4. Scoring table for the mutual influence relationship between indicators of residents' engagement level of the SOCR

[illegible]

Section C. Scoring the relative importance of evaluation indicators for residents' engagement level

This section compares the primary and secondary indicators in the evaluation indicator system of residents' engagement level of the SOCR pairwise. The specific assignment method is shown in Table S5.

Table S5. Pairwise comparison assignment

Comparison of indicator importance	Assignment
Both indicators are equally important	1
One indicator is slightly more important than another indicator	3
One indicator is obviously more important than another indicator	5
One indicator is strongly more important than another indicator	7
One indicator is extremely more important than another indicator	9
Middle value of adjacent scales above	2, 4, 6, 8

Table S6. Comparison of primary indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Table S7. Comparison of empowerment dimension indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Table S8. Comparison of engagement dimension indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Table S9. Comparison of coordination dimension indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Table S10. Comparison of network dimension indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Table S11. Comparison of validity dimension indicators

Indicator	Empowerment	Engagement	Coordination	Network	Validity
Empowerment	--				
Engagement		--			
Coordination			--		
Network				--	
Validity					--

Section D. Evaluation of the level of residents' engagement cluster

Please score the engagement level of the following residents' engagement clusters on a scale of 1-5, where 1 represents complete disagreement, 2 represents disagreement, 3 represents neutrality, 4 represents agreement, and 5 represents complete agreement.

Table S12. Evaluation of the level of residents' engagement cluster of the SOCR

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