

Appendix 3:

Interview questions

Each interview question was introduced by referring to Walker & Salt (2012).

1. How would you translate “Self organization” to WASH systems?

If a part of a system is changed most of the time the system can handle it by “self-organizing” i.e. absorbing the disturbance, reorganize, and perform in the way it did—retaining its identity. But sometimes the system can’t cope with the change and begins behaving in some other (often undesirable) way.

2. In this discussion, can you identify any “Thresholds” and their interactions?

Thresholds are the limits to how much a self-organizing system can be changed and still recover. Beyond those limits it functions differently because some critical feedback process has changed—it has a different identity.

3. What could be the corresponding way to translate “Adaptive cycles (across scales)” to WASH systems?

The behavior of self-organizing systems changes over time due to internal processes. Systems undergo a period of rapid growth as they exploit new opportunities and resources. However, over time availability of resources is decreasing; connections are increasing. The system enters a phase of “conservation”, which comes to an end in a collapse. Resources are lost, but it also opens the way for renewal and a new order rises up, and enters back in a phase of rapid growth.

4. How do you translate “Scales are linked” to WASH systems?

What happens at one scale can have a profound influence on what’s happening at scales above it and on the embedded scales below.

5. Are there any “Tradeoffs between the two complementary aspects of resilience: specified resilience and general resilience?”

Specified resilience is the resilience of a specified part of the system to a specific shock. General resilience is the capacity of a system that allows it to absorb disturbances of all kinds, including novel, unforeseen ones. Channeling all your efforts into one kind of resilience will reduce resilience in other ways.

6. How do you see Transformation in WASH ? How do you look at the Difference between “adapting and transformation”?

Adaptability is the capacity of a social-ecological system to manage resilience—to avoid crossing thresholds, or to engineer a crossing to get back into a desired regime,

or to move thresholds to create a larger safe operating space. Transformability is the capacity of a system to become a different system.

7. How do you see the “Tradeoffs between building resilience and not doing it?”

Building resilience isn't free; it comes with both the direct costs of the actions you take and the indirect costs of opportunities lost. Enhancing the resilience of a system usually involves reducing efficiency, staying away from maximum yield states, maintaining reserves, and so forth.