

Appendix 5. Focused codes from the case study analysis

Here we provide descriptions and synthesized results for each of the focused codes in the inductive case study analysis, where we explored benefits and challenges of cross-fertilizing the Transition Movement and the Resilience Assessment approaches.

Inductive coding is an iterative process of describing, refining, and merging codes that significantly overlap (Wagenaar 2011). The codes were framed by our research question to identify benefits and challenges of cross-fertilization (Table 2). Several codes are related, and some overlap partially. In some of the codes benefits and challenges are mixed, e.g. in *Resilience characteristics*, but the order refers to when they appear in the results section. We refer to our collaborators from the partner organization as partner1 (P1) and partner2 (P2).

Table A5.1. Description and synthesized results for each of the focused codes

Code	Description	Synthesized results
Reflections on commonalities and differences		
<i>1. Finding common ground</i>	The common ground we experienced between the Resilience Assessment approach and the Transition Movement approach.	Both P1 and P2 said that they did not experience any contradictions between the two; rather the Transition Movement applies resilience thinking. Common ground was e.g. interest in the resilience concept and the aim to build resilience, as well as the complex systems perspective, which is also part of the core material of the Transition Movement. However, P1 emphasized that it is a pedagogical task to spread the understanding of resilience and complex systems within the movement.
<i>2. Acknowledging the different roles of research and movement</i>	The differences we experienced between the roles and roots of the Resilience Assessment approach and the Transition Movement, i.e. academic vs. social movement.	<p>Researchers and a social movement can do and say different things: e.g. a social movement can be clearer with saying what the problems and the solutions are, while an academic approach has to be more careful with e.g. clarifying underlying assumptions.</p> <p>P1: You can't build a movement on only a resilience lens – the Transition Movement also includes values, e.g. fair share principle, and is more holistic, taking in more different influences.</p> <p>The Resilience Assessment approach is more open to be used within different value contexts.</p>

Benefits of cross-fertilization: Contributions of the Resilience Assessment approach

3. <i>Operationalizing resilience</i>	Ways that the Resilience Assessment approach contributed to the workshop design and helped the partners to operationalize resilience.	<ul style="list-style-type: none"> - Using the structure of the Resilience Assessment approach: going through the steps of defining “resilience of what” and “to what” gave P1 and P2 the overall structure for the workshop (Appendix 1). - “Characteristics of resilient systems” (Appendix 2): During the project we clarified, translated and wrote descriptions of them that would be comprehensible for the workshop participants. This was an important part of learning how to communicate resilience and operationalize the concept. The characteristics are open enough to be applied to different dimensions, e.g. also social and economic, and to include both strengths and weaknesses. They also were helpful in arguing for why diversity is important (P1). It was difficult to find existing quantitative data relating to the workshop output for the different characteristics, e.g. ecological and cultural diversity and economic modularity. - Including a historical perspective on the focal system: The partners integrated the historical perspective into an adapted version of the “Web of resilience”-exercise. The quality of the historical input at the workshops depended on the participants and their local historical knowledge.
4. <i>Reaching new groups</i>	A benefit that P1 and P2 experienced with the Resilience Assessment approach, in this case that they could reach new target groups.	The Resilience Assessment approach offered a possibility to reach new target groups that were previously closed for P1 and P2, since resilience is a new concept and you can reframe sustainability. In this case, the new target groups were “ordinary” people living in small, rural communities, and people who are prejudiced against sustainability, who have been difficult to reach in the past with projects related to transition to sustainability.
5. <i>Bridging divide/bypassing clinch</i>	A benefit that P1 and P2 experienced with the Resilience Assessment approach, in this case that they could bridge a divide in	P2’s original aspiration with the resilience workshops was to bridge the divide and get past the clinch in the organization between people promoting transition to sustainability and caring for environmental issues vs. those promoting rural development, usually in the form of economic development and assuming unlimited

their organization.

economic growth. During the collaboration project he saw enough examples of this to continue to believe in this possibility. The Resilience Assessment approach helps e.g. because of reframing and inclusion of both local and global issues of concern (see below).

6. Reframing sustainability

Underlying possibilities and challenges with using the concept of resilience instead of sustainability, especially identified by P2.

Possibilities: talking about sustainability (or about things that will lead to sustainability) using resilience and relating to vulnerability, both in general and of communities in particular, is a way to make sustainability and more egoistic concerns go hand in hand. This helps with *Reaching new groups* and *Bridging the divide* in the organization, and is something new compared to how they have worked with the Transition Movement approach: “My experience of the Transition Movement is not so much that it is about sensitivity and vulnerability, but more about transitioning for the sake of the climate, that is a lot for someone else’s sake, for your children and grandchildren’s sake” (P2).

Challenge: need to have a long time perspective and big geographical scale for resilience to overlap with sustainability. This framing emphasizes sustainability for the sake of yourself, your family, or your community, which P2 identifies as a potential risk. It is challenging to communicate the need for coordination across scales and between different places, and e.g. mitigation of climate change, while still appealing to people’s more egoistic values. However, P1 sees resilience as positive, since it is less static compared to many metaphors for sustainability.

7. Including local and global issues

A benefit that P1 and P2 experienced with the Resilience Assessment approach, in this case that they could address both local and global issues.

The Resilience Assessment approach had an analytical frame and a workshop design that was more open to a broad range of issues and included both local and global issues. At each of the workshops both global and local issues were raised, even if the proportions varied depending on the participants.

With the Transition Movement approach, they had focused more on global issues, e.g. mitigating climate change, and peak oil, but the Resilience Assessment approach gave a new focus on the vulnerability of local communities and a possibility to include

both local (e.g. relating to own community and landscape) and global concerns. P1 saw this as a way to facilitate the pedagogical task of making global issues comprehensible to a local context.

Many participants mentioned that the workshop highlighted the local-global connections, even though some also experienced that either the global connection got lost, or that some of the resilience characteristics were too abstract and global to connect to the local.

8. Highlighting strengths

A benefit that P1 and P2 experienced with the Resilience Assessment approach, in this case that it highlighted strengths of rural communities.

It was useful for P1 and P2 that the Resilience Assessment approach also highlighted strengths, and not only weaknesses, of small, rural communities. This added something new compared to their existing work with transition to sustainability. E.g. participants in the workshops used the folder with characteristics of resilient systems to discuss both strengths and weaknesses of their communities and landscapes.

9. Using new concept

Challenges and opportunities of using a new concept – resilience.

People are less prejudiced about resilience compared to sustainability, which makes it easier to reach new target groups. The challenge relates to the pedagogical task of teaching a new concept, which often is perceived as complicated and requires time for learning.

10. Problematizing global economy

A benefit that P1 and P2 experienced from the collaboration project, in this case that it helped them to problematize the global economy.

Both P1 and P2 were strengthened by the project in problematizing the globalized economy. For example by using the “characteristics of a resilient system” to point how the global economic system lacked resilience. P1 also saw the global economy as a common root cause to both environmental problems and rural development problems, which could help bridging the two (see 5. *Bridging divide/bypassing clinch*).

Benefits of cross-fertilization: contributions of the Transition Movement approach

11. Using pedagogical

Participant observations of pedagogical exercises and that

We used different playful and pedagogical exercises in the workshops to facilitate understanding of resilience and complex systems. Most of the exercises came from

<i>exercises</i>	were part of the workshop design and were new to the Resilience Assessment approach.	the Transition Movement, even if they had been adapted a bit, e.g. the “Web of Resilience”-exercise (Hopkins 2008:60). Some were completely new and developed by P1 and/or P2. The exercises were new to the Resilience Assessment approach. Usually the exercises encouraged a discussion afterwards about the concepts or the situation in the community. They were appreciated by many of the participants, but also required time.
<i>12. Acknowledging emotions</i>	Participant observations of how P1 and P2 acknowledged participants’ emotions in the workshops.	After introducing global sustainability challenges P1 gave space for participants to express their emotions. Awareness in P1 and P2 of how change and global crises awakens psychological defenses in people, and that it is important to acknowledge these emotions when they arise. When a participant in one of the workshops expressed feeling threatened, P1 and P2 recognized this and facilitated the discussion.
<i>13. Promoting transition</i>	Participant observations of how P1 and P2 promoted transition to sustainability during the collaboration project.	P1 and P2 promoted transition to sustainability, both of individual's worldviews and of society/communities, and a global sustainability perspective within their organization. They also used the Resilience Assessment approach as a way to promote transition. For example: 1) Focusing “resilience of what” on basic needs opened up for changing the current way of providing for those needs. 2) Introducing global sustainability challenges before the “resilience to what” motivated the need for transition. Transition to sustainability is also part of the context, since the project is part of “Leader learns for transition to sustainability” and there is ongoing work within their organization related to transition to sustainability.
<i>14. Defining “of what”</i>	How we asked the question of what it is that should be resilient, how it was framed, in the workshops.	Focus was on resilience of local communities, and using basic human needs as a starting point, as well as things contributing to life quality.

Challenges of cross-fertilization and of operationalizing resilience

<i>15. The pedagogical task</i>	Recognition of the pedagogical task of facilitating resilience workshops.	Both P1 and P2 recognized that we took on a pedagogical task in communicating abstract and theoretical concepts, and global issues to local people in a way that makes it relevant for them in their context, and in a short amount of time. How to give a sense of resilience thinking, both the concept and the worldview around it. In the workshops, there were both examples of when we succeeded and not in this task. It appeared to be very individual, how easy it was for the participants to grasp and appreciate the way of thinking.
<i>16. The learning process</i>	When P1 and P2 talk implicitly about an underlying learning process in each individual, both in themselves and in the participants.	It is a learning process to grasp the global sustainability perspective, and the abstract concepts, like resilience, when you're operating in a very local context. The learning process requires motivation and interest, and time. It is not easy, and only information is not enough, especially when the new ideas conflict with existing worldviews. Understanding resilience thinking requires e.g. examples, time for reflection and emotions, pedagogical exercises, and connections to your own context and own mental models. It is a challenge to get enough time and to get the same participants involved for a longer period of time.
<i>17. Openness in participatory process</i>	Participant observations of challenges relating to the openness of the participatory process.	There are multiple challenges here, but only most relevant for the combination of the two approaches is the challenge of promoting transition to sustainability, while at the same time creating a participatory process that was open to the participants' issues of concern and value systems. This relates to combining the different roles of research and a social movement in fruitful ways.
<i>18. Loosing the ecological dimension?</i>	Tracking through the project if the ecological dimension, as well as the idea of social-ecological interactions, was present.	It was a part of the "Web of Resilience"-exercise, the context cards, and the folder (see Appendix 1 and 2). It was also part of the results from each workshop, even though it depended on the people in the room – both the facilitator and the participants, and what issues they brought up.