



Scaling and Systems: Issue Paper



Global Community of Practice on Scaling Development Outcomes

May 2021

Dr. Richard Kohl, Strategy and Scale LLC

Scaling Community of Practice

Webinar on Scaling and Systems Change

10 May 2021

Main questions for discussion

The following questions are designed to help inform and frame the discussion at the Webinar about scaling and systems change. They draw on the attached Issues Paper prepared by Dr. Richard Kohl. In the questions that follow, the phrase “systems taken into account” is used as a shorthand to cover several points: what systemic factors should be considered in scaling efforts? to what extent or depth? how much systems change should be targeted? Some of the questions are:

1. What systemic considerations need to be taken into account to improve the chances of achieving at least minimal sustainable impact at large scale, i.e., increasing impact, coverage and reach, especially to marginalized populations?
2. How should the extent to which systems are taken into account vary depending on what is being scaled, who is doing the scaling, where scaling is occurring, and the goals of scaling?
3. When in the process of scaling should systems be taken into account?
4. What practical challenges and organizational barriers (time, effort and resources) do scaling efforts face when taking systems into account? What changes in the ways funders and implementers operate would be needed to address those challenges and barriers?
5. Are there particular challenges associated with enhanced attention to systems in places characterized by dysfunctional governments and weak institutions? How can these challenges be addressed?
6. What are the implications for participation when scaling efforts incorporate greater attention to systems, in terms of both of who participates and their respective roles?

Scaling and Systems: Issues Paper

Dr. Richard Kohl¹

10 May 2021

Introduction

A recent Working Paper² for the Scaling Community of Practice (COP) identified a number of cross-cutting issues whose further exploration would benefit the entire COP membership. One of these was the relationship between Scaling and Systems. There has been a vigorous debate in the scaling community on the extent to which systems need to be taken into account in scaling efforts, or even if the starting point for change efforts should be systems change rather than scaling innovations.³ Accordingly, the COP decided to organize a Webinar to explore the relationship between systems and scaling. This note serves to provide background for that Webinar, to frame the issues and identify questions for discussion. It draws on a cursory review of some of the literature on scaling and systems as well as discussions with COP members on these topics. A bibliography is provided at the end.

Some consideration of systems in scaling is largely uncontroversial amongst scaling practitioners, though unfortunately this consensus is not yet reflected in many actual scaling efforts. The basic argument is that by taking systems into account, scaling efforts can align with systemic constraints and achieve a minimum objective of sustainable impact at scale. The debate arises over whether there should be greater engagement with systems in terms of breadth, depth, and explicit objectives for systems change (rather than taking systems constraints as largely given) in order to increase impact, coverage, reach and sustainability.

It is important to note that the scaling and systems discussion is not being conducted in terms of well-defined and commonly agreed upon parameters or dimensions, i.e., the terms of the debate are not clear. One of the goals of this note is to try to provide some common terms to facilitate a productive conversation. However, this is complicated by the fact that participants in this conversation are coming from different disciplines, sit in different types of organizations including funders, innovators, and implementing organizations, and play different roles in scaling. Perhaps most importantly, they likely represent a range of systems “takers” vs. “makers” in terms of their capacity to take systems into account, let alone effect systems change. Indeed, one of the findings of this paper is that a more thorough attempt to frame the parameters of systems and scaling is needed.

Some Quick Definitions

For purposes of this paper, we define scaling as achieving sustainable impact at (large) scale. We use as a working definition of systems a blend of definitions of social systems, recognizing that in the scaling

¹ The author wishes to thank Johannes Linn, Larry Cooley, Sabrina Storm and Jenny Perlman Robinson for their very helpful comments and feedback. The views and opinions expressed are solely those of the author and do not reflect those of the Scaling Community of Practice, any of its individual members or sponsoring institutions.

² See Richard Kohl (2021) “Crosscutting Issues Affecting Scaling: A Review and Appraisal of Scaling in International Development”. Washington DC: Scaling Community of Practice.
<https://www.scalingcommunityofpractice.com/crosscutting-issues-affecting-scaling-a-review-and-appraisal-of-scaling-in-international-development/>

³ In this paper we use the term innovations to refer to the “What” that is being scaled, whether it is a technology, process, intervention, programs or project.

context environmental considerations, i.e., natural systems, are often relevant. We define a (social) system as:

an interdependent set of interactions and relationships between individuals, groups, and institutions that form a coherent whole or can be thought of as a unit.⁴

A social system is an analytic construction that is useful, in this case, to understand the opportunities and constraints that affect all three dimensions of large-scale change; impact, reach/coverage, and sustainability. For scaling, social systems can be regarded as the set of enabling or constraining conditions that affect the pathway to – and sustainable implementation – at target scale.

Systems exist at different levels (depth) ranging from Micro (e.g., local social and cultural context) to Meso (e.g., delivery organizations) to Macro (e.g., national policy enabling environment, sectoral ecosystem) to Global (international policy regimes). There is a loose correlation between these levels and scale. Some systems cut across some or all of these levels, such as gender, climate change, and economic and power inequality. Christian Seelos, a thoughtful and nuanced voice regarding systems change, has argued that there are at least two ways of thinking about systems, a “hard” and “soft” systems perspective:

Hard system perspectives treat systems as real entities with defined boundaries that we can analyze objectively and improve with available knowledge and technologies to achieve uncontested objectives. Hard system perspectives seek to improve the performance of a system in a specific dimension.

Soft/critical system perspectives treat systems as ways of thinking and reflecting about subjective images that people hold about social situations and perceived problems. This perspective seeks to explore differences in purpose, power, and voice⁵

This distinction illustrates a shortcoming in some of the debate on systems and scaling. Many of the skeptics about systems perspectives, discussed below, tend to focus on the hard systems perspective. While many proponents of systems do incorporate hard systems perspectives like sophisticated systems mapping, others, including Seelos, seem to be arguing for a soft systems approach that is more of a state of mind, embraces complexity and emphasizes participatory, inclusive processes. From this perspective, their criticisms are not so much that large-scale change efforts like scaling ignore systems. Rather it is that even when they take them into account there is too much of an engineering mindset characterized by well-defined problems, clear technical solutions, and implementation plans with fixed timelines and objectives. At the same time, Seelos argues that there are inherent challenges with soft systems approaches and that finding the balance between the two is itself a challenge.

Viewed from the perspective of hard systems, “how many or much” systems are taken into account has three dimensions. These are: (i) the number and range of interconnected systems (breadth); (ii) the

⁴ This definition draws on <https://www.merriam-webster.com/dictionary/social%20system>, <https://www.thoughtco.com/social-system-3026595> and <https://www.encyclopedia.com/social-sciences-and-law/sociology-and-social-reform/sociology-general-terms-and-concepts/social-system>.

⁵ Seelos also adds a second distinction about systems, designed (i.e., explicitly man-made) versus organic systems that have developed naturally. This note does not address the potential implications for scaling efforts of engaging with designed versus organic system; this may be a subject for future research. See Christian Seelos (2020) “Changing Systems? Welcome to the Slow Movement”. *Stanford Social Innovation Review*. Winter. <http://www.christianseelos.com/SSIR%20Winter2020-Feature-Seelos-Changing-Systems.pdf>

levels of systems (depth); and (iii) the amount of change to be achieved in systems. In describing these and other relevant distinctions, we refer to five “approaches” to large-scale change in Box 1. These are meant to be illustrative composites of various views and do not accurately reflect or characterize any specific scaling or systems change effort, or the views of one author.

Box 1. Five Approaches to Large-Scale Change

1. **Traditional scaling.** In traditional scaling, the primary focus is on widespread adoption by individual adopters of what are often technical innovations. This is sometimes referred to as industrial scaling or diffusion of innovation. To the extent that these scaling efforts engage with systems at all, it is with production and distribution of an innovation. Breadth is very limited, depth is largely micro, the amount of systems change is none or incremental, and there is little or no systems analysis or participation.
2. **Scaling from a Systems Perspective (SPS).** Like traditional scaling, scaling from a systems perspective (SPS) starts with an innovation, though this approach may also include innovative business or delivery models, for example. SPS emphasizes that taking systems or “spaces”⁶ into account is critical to successful scaling. While in principle it considers all systems/spaces, it is implicitly instrumental in focusing on those systems that are necessary and sufficient for scaling, particularly funding and other resources, and large-scale production, delivery and implementation (what Kevin Starr and others call “payers” and “doers”, respectively).⁷ SPS emphasizes scaling **into** systems rather than transforming them. These efforts usually do some basic systems analysis⁸ at the beginning of the scaling process and conduct one-off multi-stakeholder consultations in the context of strategy development and advocacy efforts. It retains a largely engineering or hard systems perspective.
3. **Transformational Scaling.** Transformational Scaling takes SPS a step further by taking more systems into account than those necessary for achieving sustainable impact at large scale. It targets creating significant change by engaging with a broader and deeper number of systems to create more space for scaling, for example by addressing inequality so that marginalized places and populations are included in large-scale change. That means explicitly working at the Meso and Macro level to effect at least reform if not transformational change.⁹ This greater engagement with systems change is sometimes motivated by the desire to engage in “Responsible Scaling,” rights-based considerations, and/or the belief that creating greater space in higher level systems is necessary to achieve greater

⁶ The most explicit articulation of the need to focus on spaces and creating space is the seminal paper by Arntraud Hartmann and Johannes Linn (2008) cited in the Bibliography.

⁷ Starr, Kevin. (2021). “We’re Beating Systems Change to Death.” *Stanford Social Innovation Review*. 8 April.

⁸ For example, the MSI scaling framework toolkit includes systems analysis tools of Stakeholder Analysis, Network Mapping, and Forcefield or Drivers of Change Analysis, all of which can be done in the course of a day-long planning workshop. See MSI. (2020) Scaling Up: From Vision to Large-Scale Change. Tools and Techniques for Practitioners <https://msiworldwide.com/additional-resources/msi-scaling-toolkit> and (2021). Scaling Up: From Vision to Large-Scale Change. Tools and Techniques for Practitioners, 2nd edition.

file:///C:/Users/Richard/Downloads/MSI-Scaling-Up-Toolkit%20(2).pdf

⁹ In the US context, without taking a view on the merits of the case, the movement behind the introduction of charter schools and the Nurse-Family Partnership appears to be an example of Transformational Scaling (as cited by Jeffrey Bradach and Abe Grindle [2014] “Transformative Scale: The Future of Growing What Works” *Stanford Social Innovation Review*. Feb. 19.

<https://ssir.org/articles/entry/transformative-scale-the-future-of-growing-what-works#>

and more sustainable impact at scale. Such efforts often start with more comprehensive system mapping using advanced tools that require stand-alone efforts and more formal, structured multi-stakeholder processes that are quite inclusive. These processes are sometimes transformed into ongoing or regular consultations. The extent to which a soft-systems perspective is included in transformational scaling efforts is unclear.

4. **Narrow Systems Change.** Narrow systems change efforts start at the Meso and Macro level and focus on an individual system or aspect of that system (e.g., reforming an important institution like a Ministry, a law, or a practice such as the national procurement system), or an entire set of individual systems that are interrelated (e.g., a value chain). Their breadth is narrow, but the targeted amount of change is extensive; they aim for at least reform if not transformational change. They often do in-depth, systems analysis of the target system using multiple sophisticated tools. Participation is usually a formal, structured process composed of actors from the relevant system(s) or those affected by it, with at least some joint decision-making power. Participation usually is ongoing, continuing in some form beyond the initial analysis and strategy development. Such efforts tend to be adaptive and flexible within the parameters of the systems targeted.
5. **Broad Systems Change.** Broad systems change takes as its starting point the overall System, meaning that it is broad, inclusive, and deep, comprised of Macro, Meso and relevant Micro levels. Like Transformational Scaling, it targets transformational change and takes this a step further; the expectation is that by taking a comprehensive systems approach it will be able to create synergies across multiple interventions, achieving even greater impact and transformation. The package of solutions can contain micro innovations, but these are instrumental to the larger purpose; it favors Meso and Macro interventions. Broad systems change usually includes some mix of hard and soft systems perspectives. The former may include extensive formal systems analysis to map complexity, causal pathways and interrelationships. This analysis is usually part of a multi-stakeholder, participatory process¹⁰ to analyze systems, identify leverage points, develop a package of solutions, and create a strategy to implement them, such as the “Collective Impact.”¹¹ That process is often followed by the creation of ongoing collaborative mechanisms to coordinate implementation efforts and make adaptive pivots. These processes can take the form of either a hard or soft systems perspective, or something in between.

In terms of amount of change, we adopt the terminology used by GIZ in its *Transforming Our Work* publication: incremental, reform, and transformational (to which one might add “none”).¹² While Traditional Scaling efforts aspire to little if any systems change, even SPS efforts that engage with a broader set of systems often effect little or incremental systems change. More ambitious efforts such as those that also work at the Meso or Macro level, such as Narrow Systems Change, have more ambitious goals in terms of at least reforms. Transformational Scaling or Broad Systems Change by definition target transformational change in systems, such as major policy changes, and usually address the issues of power inequalities and ensuring that marginalized populations are included in any large-scale change.

There are two other aspects that help distinguish between different approaches to large scale change. The first concerns the starting point of any large-scale change effort. In many Traditional Scaling efforts this is a Micro technical innovation targeting individuals. Narrow Systems Change efforts start at the

¹⁰ For an extensive list and description of such approaches see <http://systems.geofunders.org/tools-resources>

¹¹ On Collective Impact, see John Kania and Mark Kramer (2011) “Collective Impact”. Stanford Social Innovation Review. Winter. https://ssir.org/articles/entry/collective_impact#

¹² See GIZ. (2020) *Transforming our work: Getting ready for transformational projects*. Bonn, Germany: February. https://www.giz.de/fachexpertise/downloads/Transfomation%20Guidance_GIZ_02%202020.pdf

Meso or Macro level with interventions designed to improve reach, coverage, effectiveness, throughput, or overall capacity. Broad Systems Change efforts start with the whole system and work down from there; though this often begs the question of system boundaries. As Seelos notes: "... defining the boundaries of social systems is generally impossible. When we think of systems as relevant wholes, as is usually the case, we end up easily with the universe: Everything is somehow connected. ... The practice of systems thinking, then, requires setting boundaries determined not only by the context of the problem discussed but also by our interests and needs."¹³

Closely linked to "where you start" is "who" initiates and drives the scaling process. It matters whether the change effort is driven by, for example, a researcher from a university or research institution, a social entrepreneur or startup, a large international NGO, a minister or prime minister of a country, or the head of a large multilateral development bank. The scope of engagement of any particular actor, the resources at their command, and the policy or political leverage that can be exerted will necessarily shape the nature and the extent of systems change they can effect, though it is often possible to enlarge that sphere of influence over time.

The Debate

Put crudely, there is a debate in the scaling literature and community about how much scaling efforts should take systems into account and how to do so. Unpacking this a little, this includes questions of whether scaling should shift to focus on systems change and start with the whole system rather than micro innovations, and whether scaling needs to shift from an "engineering" approach, or even one of a hard systems perspective, to a more participatory, softer systems mindset. In the next few paragraphs, we present some of the key arguments in this debate, noting that the points made in each of these paragraphs are a composite drawn from multiple sources and not actually those of an individual proponent. Similarly, while we portray this as if there were two clear sides, the reality is that this is a multi-faceted debate with a spectrum of views that mix and match along the dimensions of breadth, depth, amount of change, starting points, and hard vs. soft approaches.

Proponents of more attention to systems generally argue that current scaling efforts either fail entirely, or have less impact than they could or should, because they do not pay sufficient attention to systems. This is usually accompanied by calls for targeting at least reform if not transformational change, which proponents argue is much more likely with a systems approach. At the limit, some advocates argue that interventions that aspire to sustainable impact at scale need to shift entirely from a focus on scaling innovations to starting with the system, as characterized by the Broad Systems Change approach sketched out above. Advocates for a softer systems perspective propose shifting away from the engineering perspective of well-defined problems, solutions, timelines and objectives to a messy, ambiguous approach that starts with a common vision but pursues multiple pathways and has neither a fixed timeline nor pre-defined end states.

Supporters of more focus on systems typically favor starting with extensive (often participatory) systems analysis and inclusive, participatory processes. These are seen as particularly vital when dealing with complex problems where what you see and how you see it often depends on where in the system you are located. Proponents argue that greater participation of actors who represent diverse components of the system results in better systems analysis, greater alignment with felt needs, demand and priorities, and, when marginalized voices are included, increases the likelihood that power inequalities

¹³ See Christian Seelos (2020) *op cit.* p.40

will be addressed. Taken together, these factors increase the likelihood of successful transformational change at scale.

Critics of the systems view tend to agree that greater attention to or integration of systems considerations into scaling is good in principle. The disagreement is more about the extent to which this is practical, feasible, and cost-effective. They argue that we are able to analyze more than we can manage. This is particularly true in low-resource settings where governance institutions are weak and often dysfunctional.

Critics of systems approaches argue these approaches require investment of additional time, effort, and resources when existing scaling efforts are already underfunded and time constrained.¹⁴ They assert that the time and cost of applying sophisticated systems analysis tools can often outweigh the capacity of the actors concerned as well as the costs, and that it leads to paralysis by analysis. Of course, the counterargument is that there are no shortcuts, and that, depending on the scope of the problem, the failure to invest the necessary time, effort and resources is precisely why scaling has too often generated disappointing results.

Finally, critics of systems approaches note that if scaling is done right (e.g., SPS), systems change will emerge from scaling efforts. As they reach regional, national, and global scale, such efforts will inevitably have to engage with Meso, Macro, and even Global constraints, and at those levels and at that time they will more likely have greater resources available. This creates the opportunity to engage with systems iteratively, adaptively, and in what some have called virtuous circles¹⁵ or spiral scaling, suggesting at least some overlap with the softer systems perspective.

¹⁴ The Collective Impact model is a good example of what is required. In their article on Collective Impact, Kania and Kramer note that there are five factors for success of this approach: Common Agenda; Shared Measurement Systems; Mutually Reinforcing Activities; Continuous Communication; and Backbone Organization and that “[c]ollective impact also requires a highly structured process that leads to effective decision making.” John Kania and Mark Kramer. (2011) “Collective Impact” Stanford Social Innovation Review. Winter. https://ssir.org/articles/entry/collective_impact

¹⁵ See Kohl (2021) *op cit*.

Bibliography

- Agapitova, Natalia and Johannes Linn. (2016). “Scaling Up Social Enterprise Innovations: Approaches and Lessons.” *Global Economy and Development*. Working Paper 95. Washington, DC: Brookings Institution. June. <https://www.brookings.edu/wp-content/uploads/2016/07/WorkingPaper95ScalingUpSocialEnterpriseInnovationsRev.pdf>
- Akwanyi, B., James, P., Lelijveld, N., and Mates, E. (2021) *Scale up of severe wasting within the health system: A stakeholder perspective on current progress*. March 2021
- Banerjee, Abhijit et al. (2017) “From Proof of Concept to Scalable Policies.” *Journal of Economic Perspectives*. Vol. 31, n4, Fall 2017. Pgs. 73-102.
- Camagni, Marco and Mylène Kherallah IFAD, (2014) “How to do Commodity value chain development projects”. Sustainable inclusion of smallholders in agricultural value chains. October. Rome: IFAD.
<https://www.ifad.org/documents/38714170/40311826/How+to+do+commodity+value+chain+development+projects.pdf>
- Cooley, L. and R. Kohl. (2006). *Scaling Up-From Vision to Large-scale Change, A Management Framework for Practitioners*. First Edition. Washington, DC: Management Systems International.
- Cooley, L. & Ved, R. (2012). *Scaling Up – From Vision to Large-Scale Change: A Management Framework for Practitioners*. Second Edition. Washington, DC: Management Systems International.
- Crouch, L. (2020). *Systems Implications for Core Instructional Support Lessons from Sobral (Brazil), Puebla (Mexico), and Kenya*. Research on Improving Systems of Education (RISE).
- Ettenger, Allison and Krista Donaldson. (2020) A “Trends and Gaps in Funding and Scaling Maternal and Newborn Health Innovations”. Equalize Health in cooperation with Results for Development. 2 December. Retrieved from: <https://equalizehealth.org/blog/funding-mnh-innovation>.
- Fullan, Michael. (2016) “The elusive nature of whole system improvement in education”. *Journal of Educational Change*, OISIE, Univ. of Toronto.
- Gibbs, E. at al. (2020). Scaling and ‘systems thinking’ in education: reflections from UK professionals. *Compare: A Journal of Comparative and International Education*. 29 June
- GIZ. (2020) Transforming our work: Getting ready for transformational projects. Bonn, Germany: February.
- Grantmakers for Effective Organizations. (no date) *Systems Tools and Resources*. <http://systems.geofunders.org/tools-resources>
- Hartmann, Arntraud and Johannes Linn. (2008) “Scaling Up: A Framework and Lessons for Development Effectiveness”. Wolfensohn Center for Development Working Papers. Washington DC: Brookings Institution. <https://www.brookings.edu/research/scaling-up-a-framework-and-lessons-for-development-effectiveness-from-literature-and-practice/>.
- Kania, John and Mark Kramer (2011) “Collective Impact”. Stanford Social Innovation Review. Winter. https://ssir.org/articles/entry/collective_impact#
- Kania, John, Mark Kramer and Peter Senge. (2018) *The Water of Systems Change*. June
- Kherallah, Mylène, Marco Camagni and Phillip Baumgartner. (2015) “Sustainable inclusion of smallholders in agricultural value chains”. Rome: IFAD. January.
- Kohl, Richard. (2016) “Scaling Up of Sahel Rice Varieties in Senegal”. *Review of Successful Scaling of Agricultural Technologies*. Prepared by Management Systems International, a Tetra Tech Company for the USAID E3 Analytics and Evaluation Project. November 6.
http://pdf.usaid.gov/pdf_docs/pa00mdrc.pdf
- Kohl, Richard (2021) “Crosscutting Issues Affecting Scaling: A Review and Appraisal of Scaling in International Development”. Washington DC: Scaling Community of Practice.

<https://www.scalingcommunityofpractice.com/crosscutting-issues-affecting-scaling-a-review-and-appraisal-of-scaling-in-international-development/>

- Koorts, Harriet. and Rutter, H. (2021) “A systems approach to scale-up for population health improvement.” *Health Res Policy Sys* 19:27. <https://doi.org/10.1186/s12961-021-00679-0>
- Meadows, Donella. (1999) *Leverage points: Places to intervene in a system*. Sustainability Institute.
- MacLean, Robert and Garigni. *Scaling Impact: Innovation for the Public Good*.
- Mulgan, Geoff and Charlie Leadbeater. (2013) “Systems Innovation.” NESTA, Jan.
- Omimo, Antony et al. “Applying ExpandNet’s Systematic Approach to Scaling Up in an Integrated Population, Health and Environment Project in East Africa”. *Social Sciences*. **2018**, 7, 8. <https://doi.org/10.3390/socsci7010008>
- Perlman Robinson, Jenny, Rebecca Winthrop and Eileen McGivney. (2016). “Millions Learning: Scaling Up Quality Education in Developing Countries.” Washington, DC: Brookings Institution. <https://www.brookings.edu/research/millions-learning-scaling-up-quality-education-in-developing-countries/>.
- Perlman Robinson, Jenny, Molly Curtiss Wyss and Patrick Hannahan. (2019). “Millions Learning Real-time Scaling Labs: Emerging findings and key insights.” Washington, DC: Brookings Institution. <https://www.brookings.edu/research/millions-learning-real-time-scaling-labs-emerging-findings-and-key-insights/>
- Puri, Jyotsna, Martin Prowse, Emma De Roy and David Huang. (2021) “Assessing the likelihood of transformational change at the Green Climate Fund”. March. <https://ieugreenclimate.fund/document/assessing-likelihood-transformational-change-green-climate-fund>
- Seelos, Christian. (2020) “Changing Systems? Welcome to the Slow Movement”. *Stanford Social Innovation Review*. Winter. <http://www.christianseelos.com/SSIR%20Winter2020-Feature-Seelos-Changing-Systems.pdf>
- Seelos, Christian, Sara Farley and Amanda L Rose. (2021) “The ‘Thou Shalt Nots’ of Systems Change”. *Stanford Social Innovation Review*. January. https://ssir.org/articles/entry/the_thou_shalt_nots_of_systems_change#
- Simmons, Ruth, Laura Ghiron and Peter Fajans. (2009) *Practical Guidance for scaling up health service innovations*. Geneva, WHO.
- Simmons, Ruth, Laura Ghiron and Peter Fajans. (2011) *Beginning with the End in Mind*, Geneva, WHO, <https://expandnet.net/PDFs/ExpandNet-WHO%20-%20Beginning%20with%20the%20end%20in%20mind%20-%202011.pdf>
- Starr, Kevin and Greg Coussa. (2018) “Enough Innovation Already”, *Stanford Social Innovation Review*, 6 April. https://ssir.org/articles/entry/enough_innovation_already
- Starr, Kevin and Sara Miers, (2020) “Nowhere to Grow”, *Stanford Social Innovation Review*, 22 Oct. https://ssir.org/articles/entry/nowhere_to_grow#
- Starr, Kevin. (2021). “We’re Beating Systems Change to Death.” *Stanford Social Innovation Review*. 8 April. https://ssir.org/articles/entry/were_beating_systems_change_to_death#:~:text=We're%20Beating%20Systems%20Change,way%20to%20make%20the%20trip.&text=Systems%20change!
- Taylor, Paul. (2021) “Why Do we Believe in Silver Bullet Solutions”. <https://paulitaylor.medium.com/why-do-we-believe-in-silver-bullet-solutions-5fde7f2b0710>. 3 Feb.
- Woltering, L. et al. (2018) “Scaling--from “reaching many” to sustainable systems change at scale: A Critical mindset.” *Agricultural Systems*, 21 Dec.