



Systems approach to scaling

CGIAR week of science and practice of scaling agri-food system innovation

22 November 2022

Nairobi, Kenya



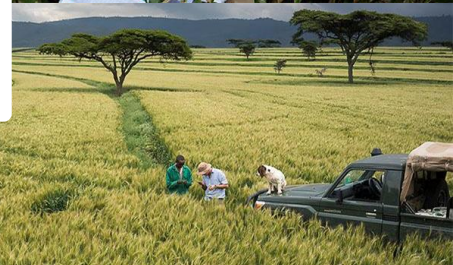
Lennart Woltering
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Eva Valencia
CIMMYT

@evalencia93



Ice breaker introductions

- Who are you, where do you work?
- What excites you about working on scaling?
- Are you interested in systems thinking approaches? If so, why?



Who are we?

Lennart Woltering

- MSc Civil Engineering- IWRM/ Hydrology
- 10 years CGIAR
- 10 years private consulting business
- 18 years Africa, Latin America, etc



Eva Valencia

- MSc Environmental Sciences, Policy and Management – Undergrad. In Law
- 10 years specializing in Sustainable Development
- Water-Food-Energy Focus



ToC to increase impact CGIAR

1. Learn

- Understanding role of projects and researchers in scaling
- How do researchers deal with scaling in practice
- Scaling as a lens to assess cross-regional work
- Learning networks: Scaling CoP, GIZ/CGIAR, SysInnovation, Doughnut Economics

2. Design

- Scaling Scan, Scaling Pyramid, Digital, etc

3. Advise

- Proposals, steering committees, CoPs and ad-hoc support

4. Action

- Scaling expert in bilaterals and Initiatives



Scaling – from “reaching many” to sustainable systems change at scale: A critical shift in mindset



Woltering L.^{a,*}, Fehlenberg K.^b, Gerard B.^c, Ubels J.^d, Cooley L.^e

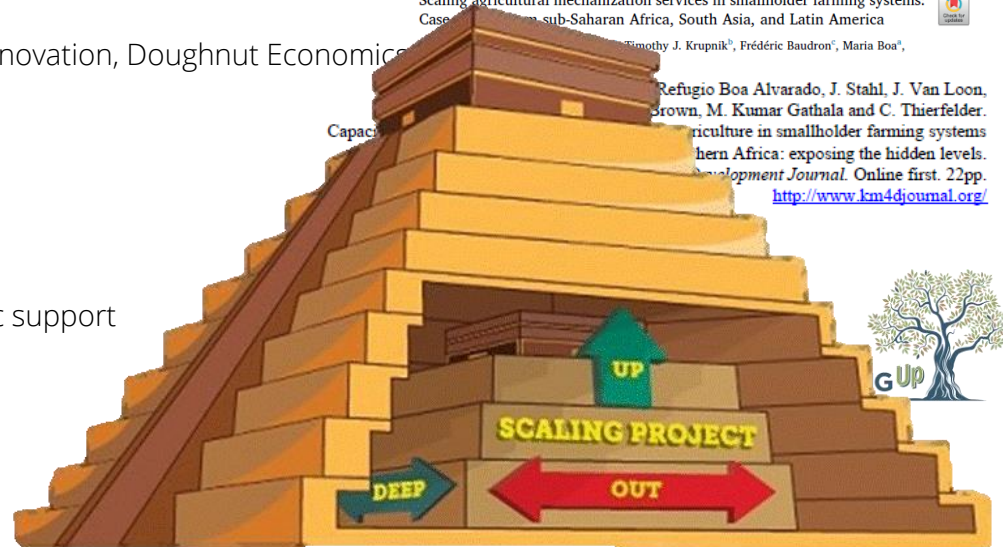
L. Woltering and M. Boa-Alvarado, 2021.
Insights on scaling of innovations from Agricultural Research for Development: views from practitioners
Knowledge Management for Development Journal Online First



Scaling agricultural mechanization services in smallholder farming systems: Case studies from sub-Saharan Africa, South Asia, and Latin America



Refugio Boa Alvarado, J. Stahl, J. Van Loon, Brown, M. Kumar Gathala and C. Thierfelder.
Agriculture in smallholder farming systems in sub-Saharan Africa: exposing the hidden levels.
Development Journal. Online first. 22pp.
<http://www.km4journal.org/>



Scaling Scan

- Anyone can make sense of scaling in their own context
- 3 A's"
 - Accessible (Spanish, French, English),
 - Accessible (no jargon, workbook, 17 pages),
 - Accessible (experience based)
- Sustainable scaling depends on, and impacts, local actors...let them decide what is good, bad, enough, too much, etc
- Designed to convey three lessons: 3 C's
 - Context is King,
 - Core innovations need supporting innovations,
 - Collaboration is critical- we are a piece of the puzzle

PPP
LAB
FOOD & WATER

and
CIMMYT
International Maize and Wheat Improvement Center

The Scaling Scan

A practical tool to determine
the strengths and weaknesses
of your scaling ambition



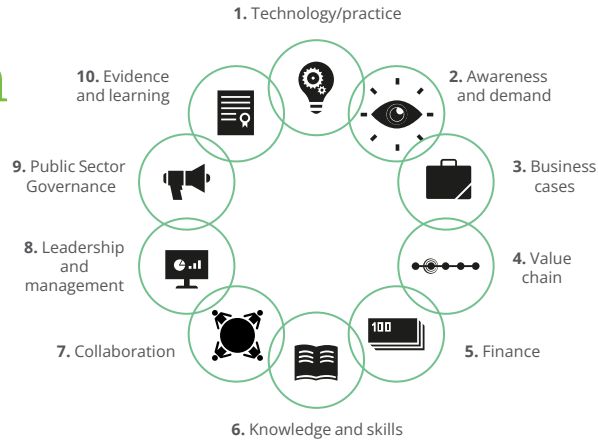
The Scaling Scan



Innovation

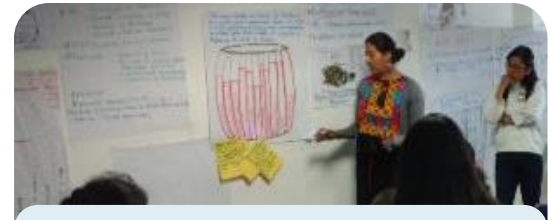
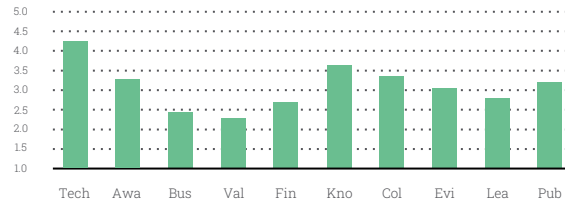
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Context



Rapid assessment of how “enabling” the context to reach the scaling ambition is?

Nicaragua (n=4)



Break it down into systems we can :
 Control
 Influence
 Interest



Adapted from Sartas et al., 2017

1 Define a scaling ambition

2 Assess the 10 scaling ingredients

3 Identify bottlenecks and opportunities

Where are we now?

- Manuscript: 5 years experience with the Scaling Scan
- Network of trainers, www.scalingscan.org
- Solution focused → doesn't do justice to complex, systems nature of SDGs
- Go beyond: Scaling in 2017 = Transformation in 2022 → learnings

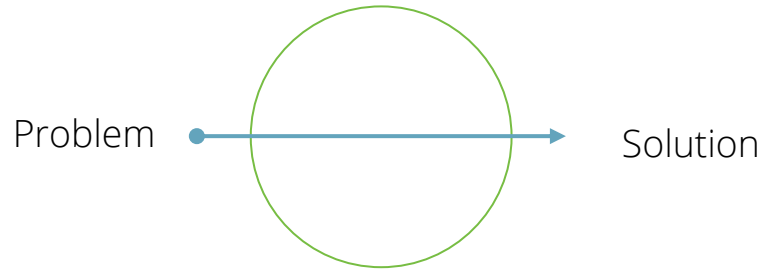
The screenshot shows the homepage of the Scaling Scan website. At the top left, there are logos for CGIAR and CIMMYT (International Maize and Wheat Improvement Center). The navigation menu includes 'Scaling Scan', 'The community', 'Let's Scale', and 'English'. The main content area features the title 'The Scaling Scan' in large blue letters. Below the title, there is a paragraph of text: 'Tired of innovations that don't perform at scale? Tired of project results fading away once funding stops? Try the Scaling Scan, and you will learn about the importance of context, that multiple innovations need to scale in parallel and how you can contribute'. A 'Try it out' button is located at the bottom left of this section. On the right side, there is a large circular graphic with a central gear labeled 'Technology / Practice'. The gear is surrounded by various icons representing different aspects of innovation and scaling, such as a lightbulb, a briefcase, a document, and a network diagram. The background of the graphic is a collage of images related to agriculture and food security.

A systems perspective on scaling

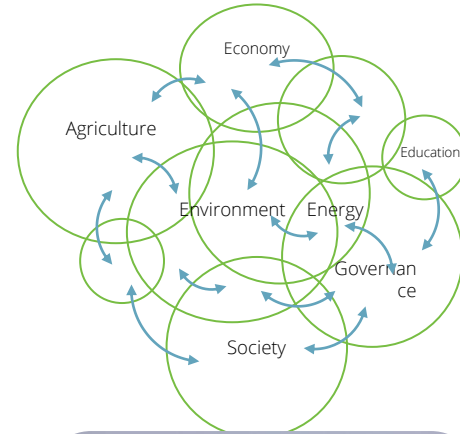


Insight 1: Don't address wicked problems with Quick fixes

Tame Problems



Wicked Problems



Insight 2: Systems always work

- Recognize that “problems” we perceive are a result of a system working perfectly well

(unsustainable systems with a business-as-usual goal ☹).



Example Land Restoration in Central America



Land Degradation

EVENTS

What just happened?

PATTERNS

What has been happening over time?

STRUCTURE

What policies, laws, physical structure
influence the patterns?

MENTAL MODEL

What are the mindsets, values and
assumptions?

Underinvestment in R&D

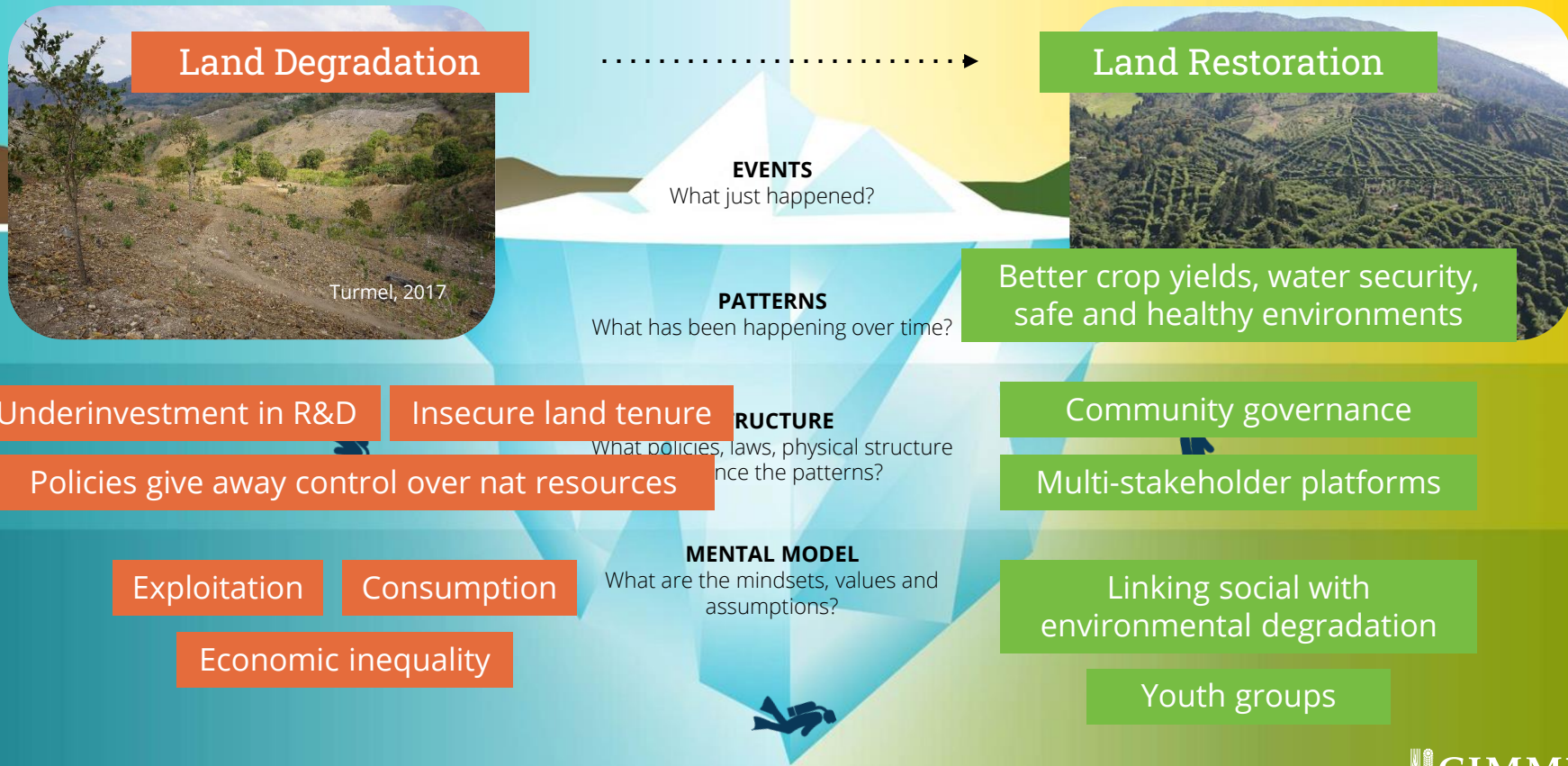
Insecure land tenure

Policies give away control over nat resources

Exploitation

Economic inequality

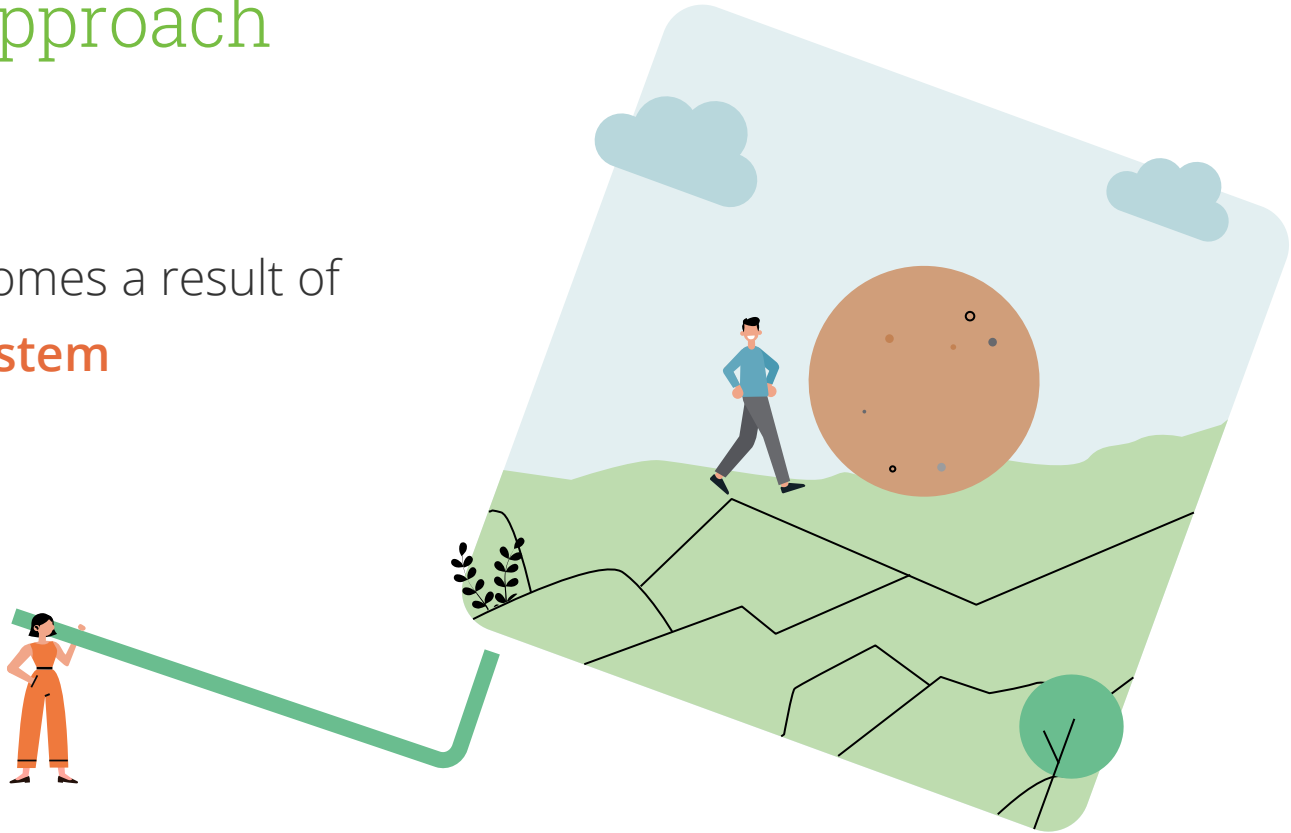
Example Land Restoration in Central America



NOTE: Adapted from the iceberg canvas by SystemsInnovation 2020

Systems approach to scaling

- Scaling becomes a result of **a better system**

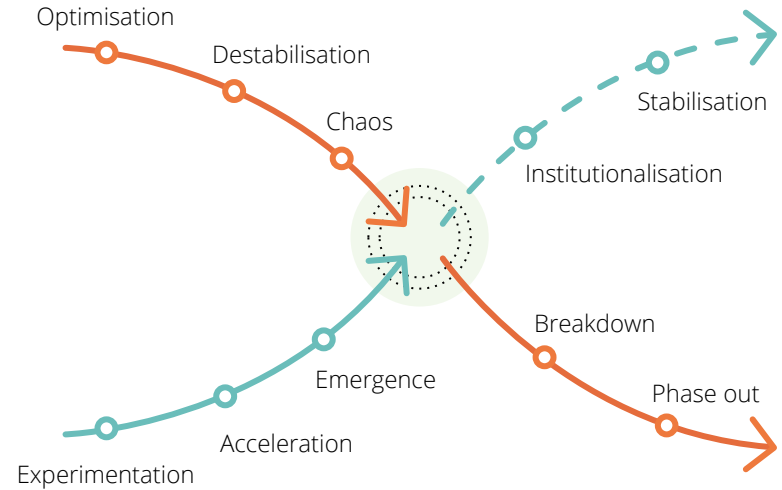


Scaling can also be the lever!



Some things have to die for others to live

- Bias for novelty to solve problems
- Investments in “scaling down”, phasing out and ex-novation?



Time to Put the Fossil-Fuel Industry Into Hospice

If humanity is to survive the climate crisis, we must manage a just and orderly transition away from fossil fuels. The correct models for this resolution are triage, euthanasia, and hospice.

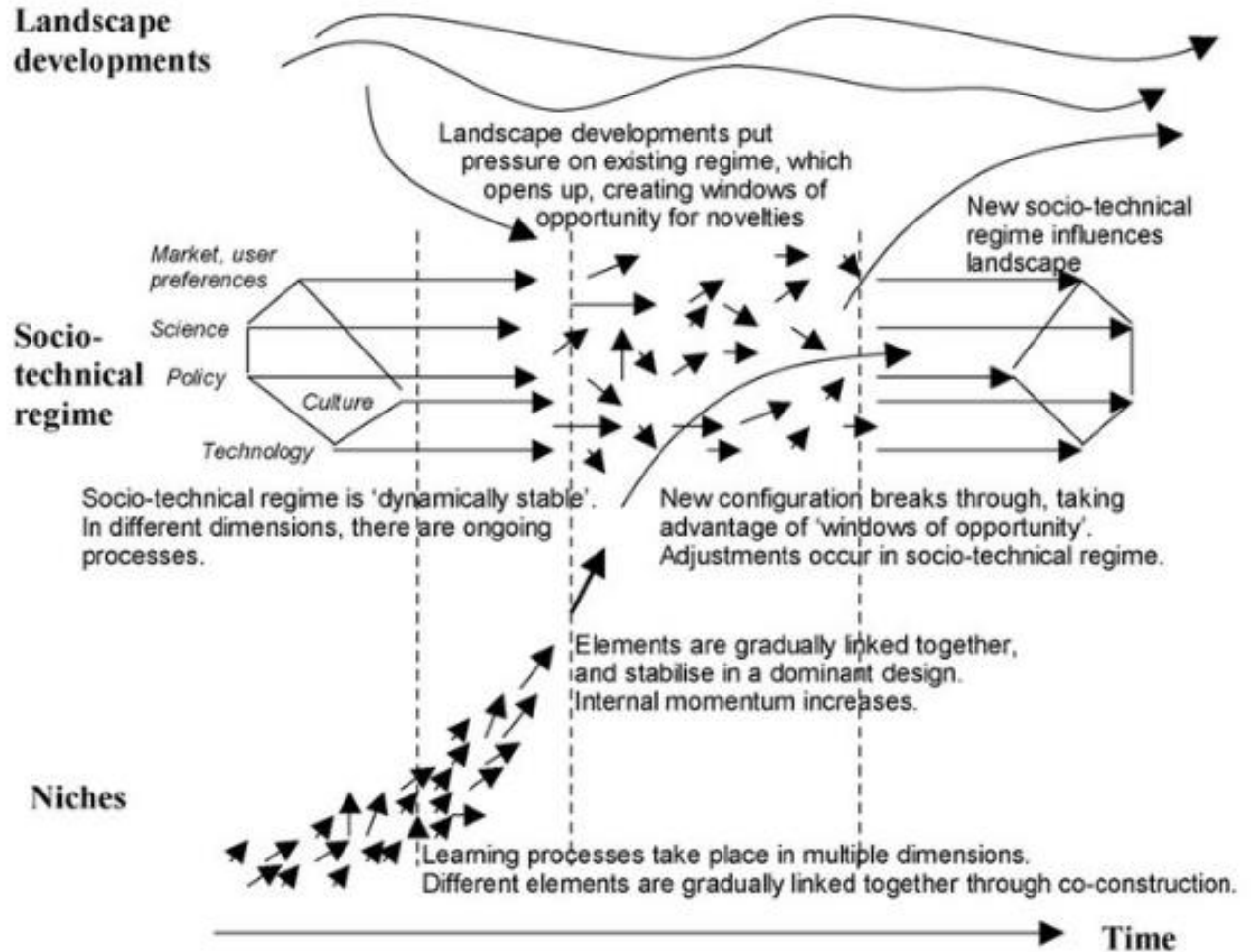
CITE SHARE COMMENT DOWNLOAD PRINT ORDER REPRINTS

By [Andrew J. Hoffman](#) & [Douglas M. Ely](#) | Fall 2022



How does change actually happen?

Multi-Level Perspective
(Frank Geels)



We are the system

Mindset & paradigm shift

Solving	→ dis-solving a problem
Solutions	→ responses
Testing and demonstration	→ exploring, searching and learning
Experts	→ multi-actor alliances across society
Attribution	→ contribution
Direct beneficiaries	→ indirect beneficiaries
More is better	→ responsible/ optimal scale
Ego	→ Eco (ecosystem of actors)
(Semi-) controlled env.	→ real-life societal context
Short term	→ long term



Systems thinking for collective action

- Not how to scale “my” innovation asap but → how to address multiple PAIN and LEVERAGE points in the system
- Not a **project problem**, but → a **social problem** that breeds social movements for change of power, relationships and mindsets.... including our own...

Changes in the project:

x direct beneficiaries adopt Y by

31 December

System

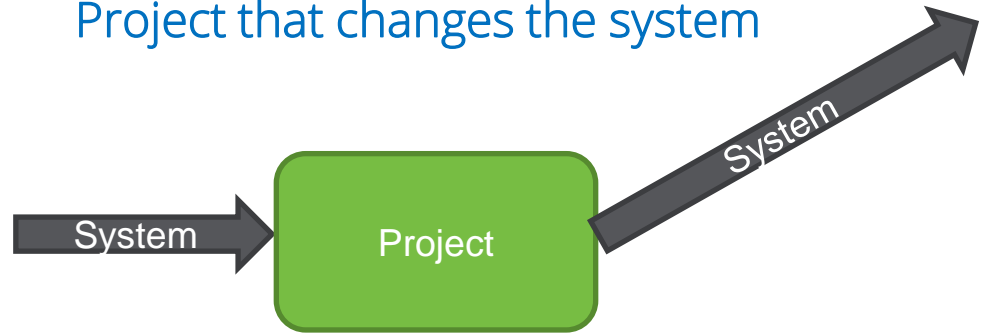


Project that changes the system

System

Project

System



Systems thinking for collective action (cont'd)

- No **short-term** window-dressing but → addressing deeper systemic causes of the problem and building a solid foundation for a range of solutions for the future
- A better system will produce better results...



System Scan

A practical tool on how to change systems for sustainable development

- Recognize complex systemic nature of big problems holding it in place
- Use systems thinking approaches and tools
- Focus on the societal change

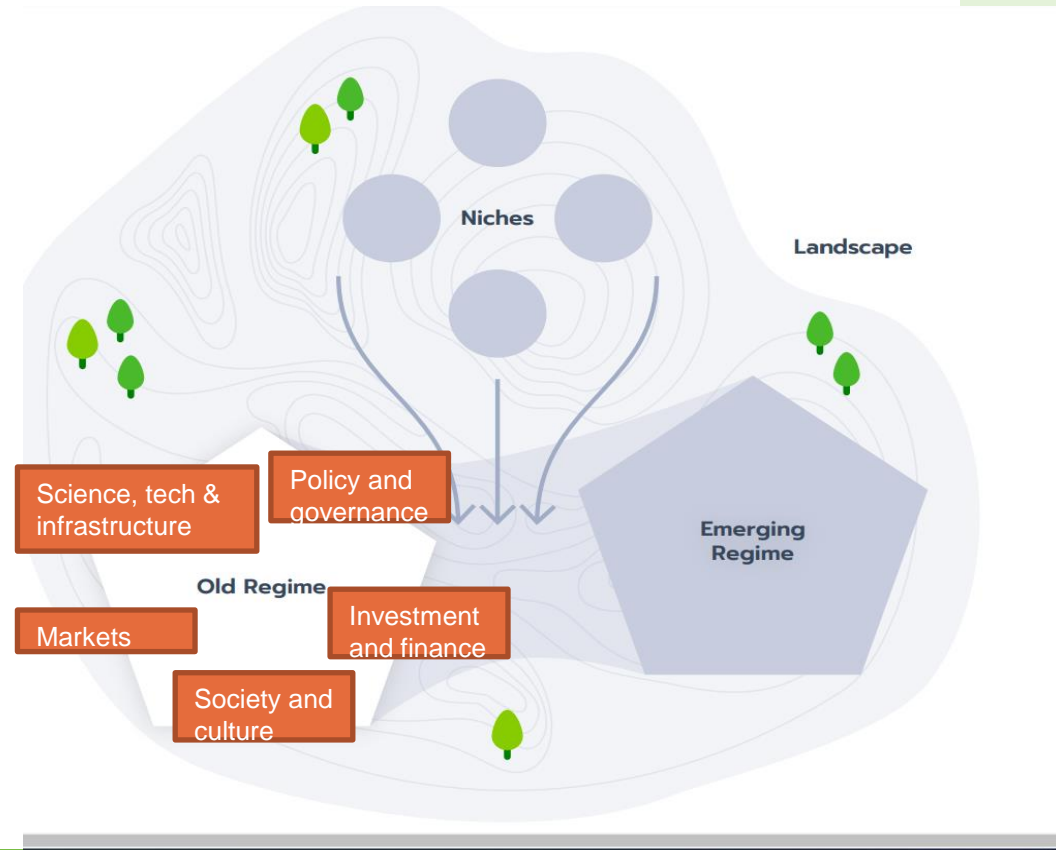
Inspired/ complementary to the **Scaling Scan**

- Accessible → 3 days, 3 hours, 30 minutes / Self-Assessments
- Actionable and Responsible
- Links to other tools

Scaling of innovations is a practical way for organizations to influence the system, if it is part of a bigger “system change strategy”



System Scan



- STEP 1: Understand the current regime
- STEP 2: Imagine the emerging regime
- STEP 3: Support the change



Q&A Plenary

- How can CGIAR integrate complex systems thinking approaches more effectively for food and agricultural systems transformation ?
- What should the System Scan be able to do to contribute to this?
- Do you **actively** want to contribute to the development of the System Scan?



Thank you!

Please connect with us

WEBSITE

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www.scalingcommunityofpractice.com

#scaling CoP

SCALING
SCAN TOOL



Addressing institutional obstacles to systems approaches

- Develop and strengthen understanding of systems thinking
- Build the evidence base
- Change our own mindset, organizational cultures, policies and procedures
- Engage donors to drive change
- Develop M&E for systems change
- Give room for collaboration with other stakeholders for common goals

