An Independent Center of Advanced Studies
in the Life and Sustainability Sciences

KLI

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NAVIGATING SCIENCE-SOCIETY COLLABORATION

LESSONS LEARNED FROM LIVING LABS

17 February 2023

Entering the era of science-society collaboration

HORIZON 2020 FUNDING FOR AGRICULTURE AND FORESTRY

€500 million invested in over 80 multi-actor projects

The Horizon 2020 Work Programme 2018-2020 will invest €500 million in over 80 multi-actor projects selected from over 30 topics flagged with the **multi-actor approach** (MAA). MAA proposals need to demonstrate that they target the actual needs of farmers, foresters, agribusinesses or other "end-users". In fact, the MAA requires that those who will apply the solutions help to shape them by being involved right from the start: from defining the questions to implementing activities, and then participating in demonstrations and dissemination. The cross-fertilisation of ideas and complementary knowledge between farmers, foresters, agribusinesses, farmers' groups, advisers, enterprises, researchers and others should lead to demand-driven innovative solutions that are more likely to be applied in the field.

eip-agri
AGRICULTURE & INNOVATION

Funding opportunities under Horizon 2020
2020 calls

IN THIS SECTION

Exploring all aspects of Short Food Supply Chain Logistic

The future of local food systems

Funding streams

Operational Groups

Horizon 2020

Multi-actor projects

Thematic networks

AKIS

Subgroup on Innovation

EIP-AGRI Support Facility

EIP-AGRI multiplier toolkit

▾ Intro

Multi-actor projects are projects in which end users and multipliers of research results such as farmers and farmers' groups, advisers, enterprises and others, are closely cooperating throughout the whole research project period.

The EU has allocated around one billion euros to fund around 180 multi-actor projects of interest to agriculture, forestry and rural development in the seven years of Horizon 2020 (2014-2020). Over 120 of these projects have already started.

Here below you can find the complete list of projects, organised per theme. Please note that individual projects can be linked to more than one theme.

Visit their websites, subscribe to their news, follow their social media accounts.

You can also find a short description of each theme and of related projects in the AgriResearch Factsheets.

Complexity of challenges

Complex problems require new approaches

Crises **cannot** be understood in isolation

→ Problems are multidimensional & multi-actor

→ Siloed solutions might reproduce & intensify existing problems

Disciplinary (and interdisciplinary) research is not enough

Going beyond disciplinary research & academia?

Real-life problems which scientists alone can't solve

- Different kinds of knowledge required

- Decisions affect different societal groups who need to have a voice too

- Mandate to apply results in practice

That's why we need science-society collaboration

Different kinds of 'Labs'

- 'Labs' have been conceptualised, designed & implemented as *transformative spaces*

- Different types of Labs: (Urban) Living Labs, Transformation Labs, Real-World Laboratories, Social Labs, Food Labs, Policy Labs...
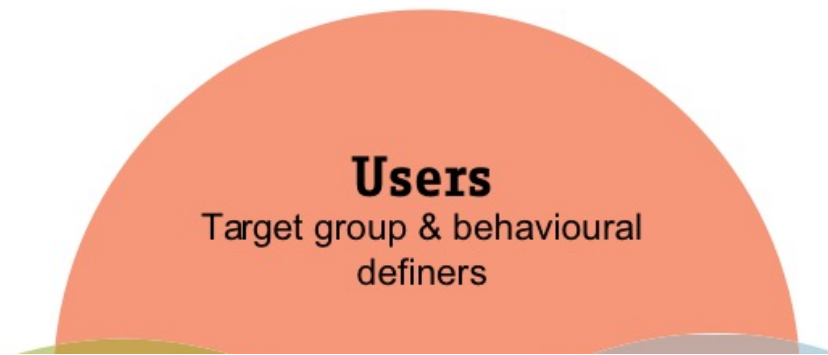
Definition of a Living Lab

- *Arena* (geographical / institutional space) AND *approach* for intentional collaborative experimentation

- Development & testing of new technologies, products, services, policy instruments, planning tools, governance arrangements, ways of living

Who

Users
Target group & behavioural
definers

# Taking Action: Turning Evolutionary Theory into Preventive Policies

Orsolya Molnár,[1,2] Marina Knickel,[1,3] and Christine Marizzi[4]

1 Konrad Lorenz Institute for Evolution and Cognition Research, Klosterneuburg, Austria
2 Eötvös Loránd Research Network, Centre for Ecological Research, Institute for Evolution, Budapest, Hungary
3 Department of Agriculture, Food and Environment, University of Pisa, Italy
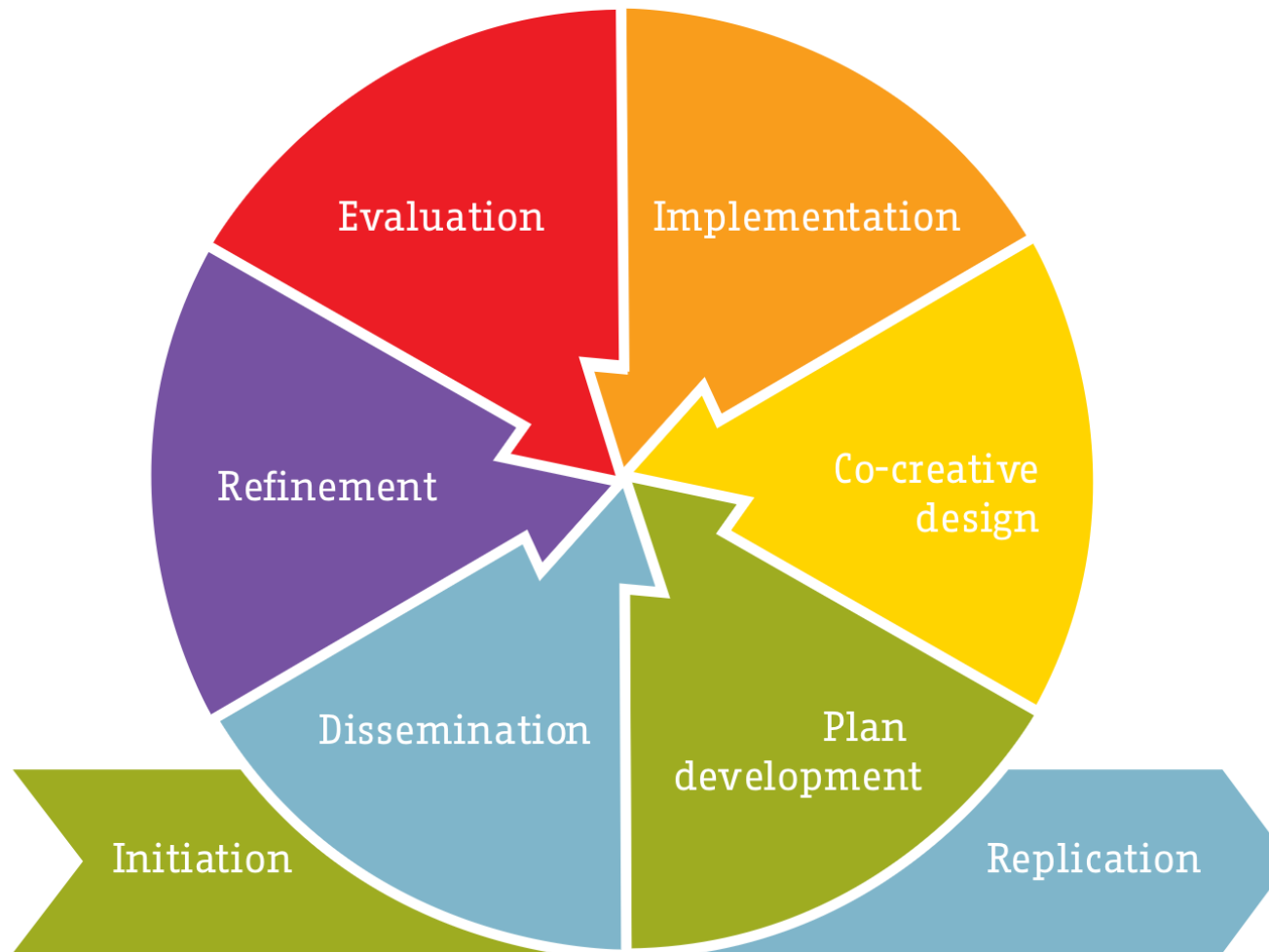4 BioBus, New York City, New York, USA
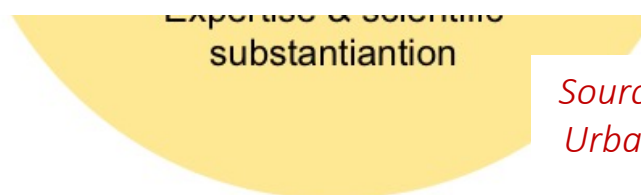
Expertise & scientific
substantiantion

Source: Steen, Kris, and Ellen van Bueren. 2017b.
Urban Living Labs: A Living Lab Way of Working.
First edit. Amsterdam: AMS Institute.

Where

- Real-life context
- Place-based (local, regional)

Living Lab way of working

Source: Steen, Kris, and Ellen van Bueren. 2017b. Urban Living Labs: A Living Lab Way of Working. First edit. Amsterdam: AMS Institute.

A Living Lab approach: Yes or No?

When to use a Living Lab

A transition or transformation is taking place in a social–ecological system

There is a complex problem related to this transformation

There are people with significant ownership over the problem and strong motivation to change it

There is confusion and disagreement about what is going on and why

There is a collective sense of urgency

When NOT to use a Living Lab

There is no interest in, or sense of ownership of, the problem

There is limited capacity or interest to invest significant time to the process

There is no flexibility to explore or change the focal question/challenge

Source: Pereira, L. et al. (2021). Transdisciplinary methods and T-Labs as transformative spaces for innovation in social-ecological systems.

Living Labs in
ROBUST:
Lessons Learned

ROBUST:
Unlocking Rural-Urban Synergies

11 Living Labs in 11 European regions

ROBUST

The ROBUST project includes 11 Living Labs that represent typical rural-urban settings throughout Europe. Click on the images below to explore what is happening in each ROBUST Living Lab.

Ede

Frankfurt

Gloucestershire

Helsinki

Lisbon

Ljubljana

Lucca

Metropolitan Area of Styria

Mid Wales

Tukums

Valencia

5 functional ties
of rural-urban relations

New Business Models
and Labour Markets

Public Infrastructure
and Social Services

Sustainable Food
Systems

Cultural Connections

Ecosystem Services

Synergies

How?
Transdisciplinary (TD) approach

- Emerged to address pressing & complex real-world challenges
- Changed the relationship between science & society
- Can help structure collaboration processes in Living Labs
- Growing need to complement disciplinary research with TD approaches
- Might be demanding to carry out to carry out BUT could be very impactful

BUT: What is a TD approach and how to work in such mode?
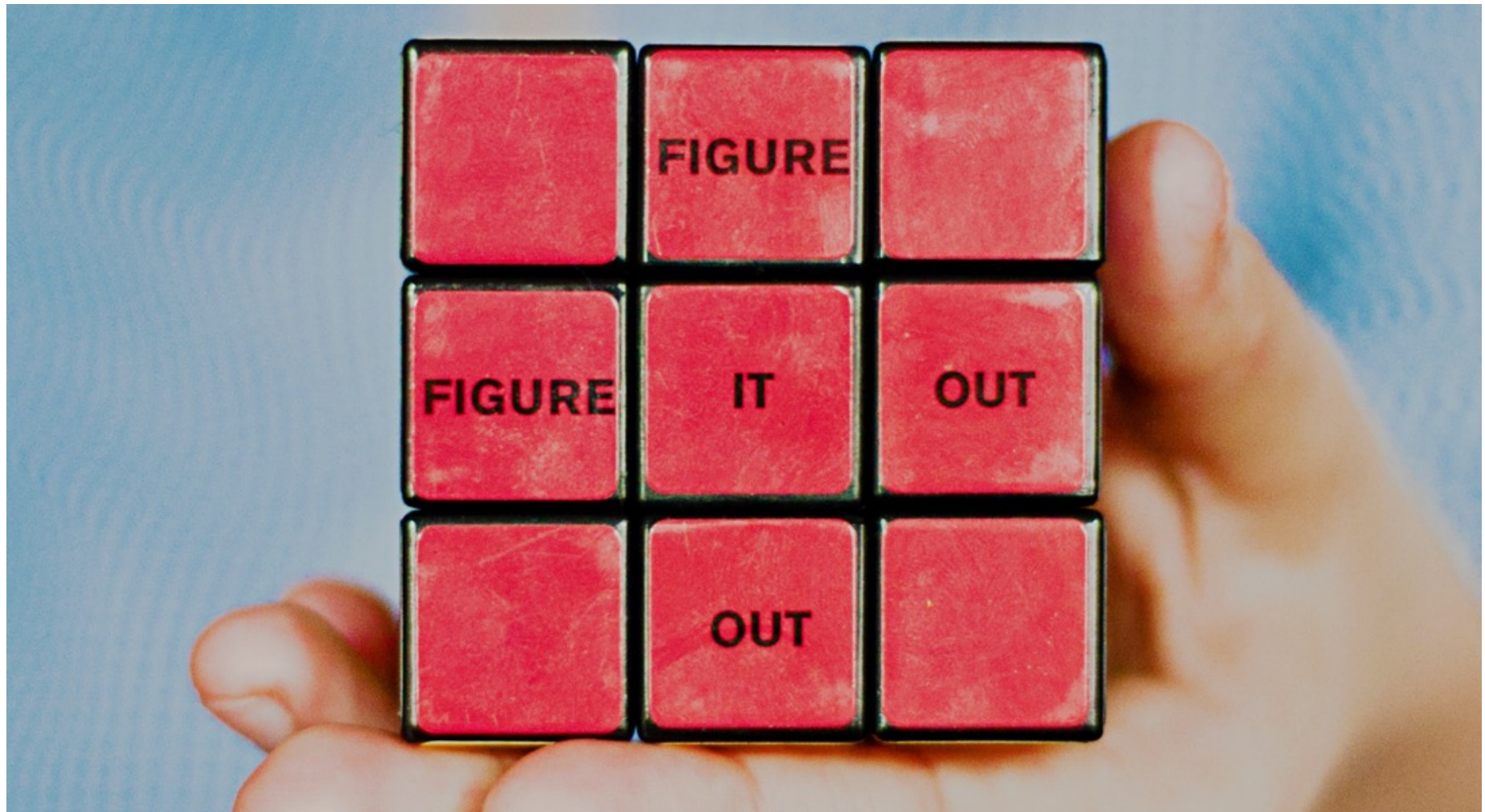
Key characteristics

Framing:

Focus on real-world problems

Normativity

Diverse theoretical frameworks

Implementation:

Interdisciplinarity

Inclusion of nonscientists

Recursive research process

Integration of different forms of knowledge

Contextualization of research

Outcome:

Production of different types of knowledge

Generating societal and scientific impact

Source: Ruppert-Winkel et al. (2015). Characteristics, emerging needs, and challenges of transdisciplinary sustainability science: experiences from the German Social-Ecological Research Program. Ecology and Society, 20(3), art13.

Definition

A critical and self-reflexive research approach that relates societal with scientific problems; it produces new knowledge by integrating different scientific and extra-scientific insights", thereby contributing to *"both societal and scientific progress*

Source: Jahn, Thomas, Matthias Bergmann, and Florian Keil. 2012. "Transdisciplinarity: Between Mainstreaming and Marginalization." Ecological Economics 79:1–10.

Methodology

Always participatory

Aimed at knowledge co-production

Mostly qualitative, sometimes mixed "Transdisciplinary social science methods"
(Source: Pereira, L. et al. (2021). Transdisciplinary methods and T-Labs as transformative spaces for innovation in social-ecological systems)

Different for different research phases

Depends on the needs, issues to be tackled

Examples*: Design thinking, Theory of change, Outcome spaces framework, Storywall, Scenario integration…

*More: TD-net website https://transdisciplinarity.ch/en/methoden/

Citizen science (CS) as part of a TD research framework

Transdisciplinary Sustainability Research and Citizen Science: Options for Mutual Learning

Authors: Pettibone, Lisa; Blättel-Mink, Birgit; Balázs, Bálint; Giulio, Antonietta Di; Göbel, Claudia; Heubach, Katja; Hummel, Diana; Lundershausen, Johannes; Lux, Alexandra; Potthast, Thomas; Vohland, Katrin; Wyborn, Carina

Open Access   Review

Towards a Transdisciplinary Theoretical Framework of Citizen Science: Results from a Meta-Review Analysis

by Andrea Spasiano [1,2,*], Salvatore Grimaldi [3], Alessio Maria Braccini [2] and Fernando Nardi [1,4]
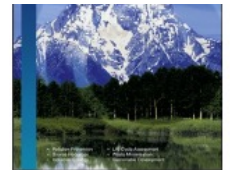
Impact

- Depends on how impact is defined: need for a re-focus of impact assessment from 'outcomes' as a tangible impact to how TD processes could foster *potentialities* for impact

- Challenge to evaluate whether impacts have actually been achieved (e.g. 'societal effects', change occurred) → Hard to track / link back the work completed within TD research

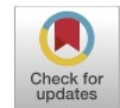→ *Work of Kok et al. 2023 on 'capacitating and creating change'*

Journal of Cleaner Production

journal homepage: www.elsevier.com/locate/jclepro

Exploring the practice of Labs for sustainable transformation: The challenge of 'creating impact'

Kristiaan P.W. Kok [a,*], Marjoleine G. van der Meij [a], Petra Wagner [b], Tomris Cesuroglu [a], Jacqueline E.W. Broerse [a], Barbara J. Regeer [a]
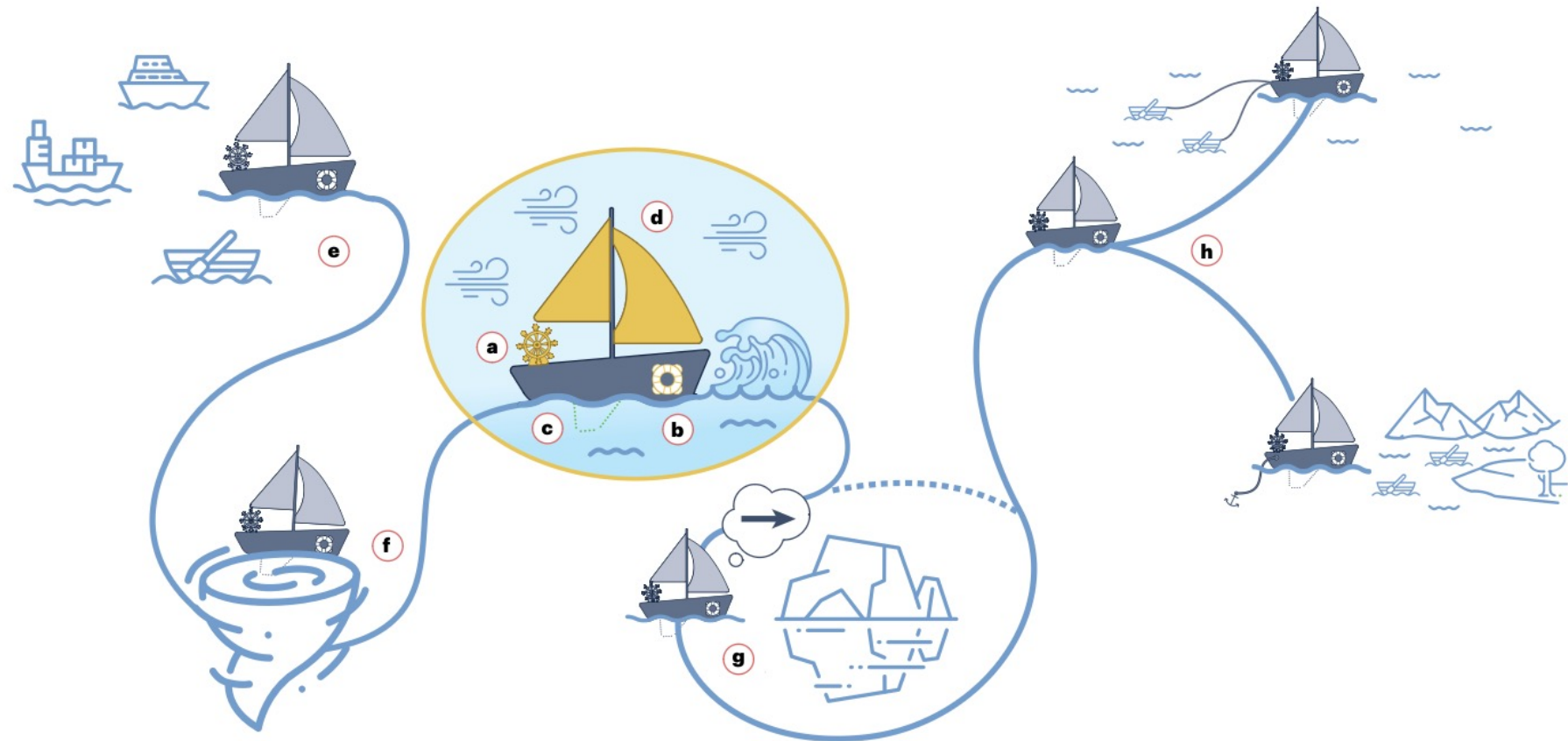
How to make collaboration in Living Labs more impactful?

Two inspiring approaches to practise Living Labs

Navigating the learning journey: Inspiration from theory

Practical wisdom as researchers' capacities:
'will' and 'skill'

Source: Caniglia, G. et al. (2023). Practical wisdom and virtue ethics for knowledge co-production in sustainability science. Nature Sustainability 2023, 1–9

Will

Through ...

- *Justice (attending to dynamics of participation and power)*

- *Care for relationships*

- *Courage (commitment towards justice & care despite possible adversities)*

- *Humility (learning from others)*

... researchers can develop a sense of direction and determination

→ Essential when navigating messy situations in knowledge co-production

... and Skill

Researchers' capacity to make decisions and take action in knowledge co-production

- Dealing with plural values
- Working through power
- Traversing principles & situations with "good judgement": general principles realised in specific processes ➔ *context-dependent*
- Developing multiple goals with strategy

Inspiration from practice: 'Stretch collaboration'

(Source: Adam Kahane, Collaborating with the Enemy)

Foreword by **Peter Block**
Bestselling Author of *Community* and *Stewardship*

Collaborating
with the
Enemy

How to Work with People You Don't Agree with or Like or Trust

Adam Kahane

Bestselling author of *Solving Tough Problems* and *Power and Love*

Collaboration as a *choice*!

Two Approaches to Collaboration

	Conventional Collaboration	Stretch Collaboration
How we relate with our collaborators	Focus on the good and harmony of the team (one superior whole)	Embrace conflict and connection (multiple diverse holons)
How we advance our work	Agree on the problem and the solution (one optimum plan)	Experiment our way forward (multiple emergent possibilities)
How we participate in our situation	Change what other people are doing (one paramount leader)	Step into the game (multiple cocreators)

Alternating 'power' & 'love' (e.g. asserting & engaging)

'Stretch collaboration' Take-away
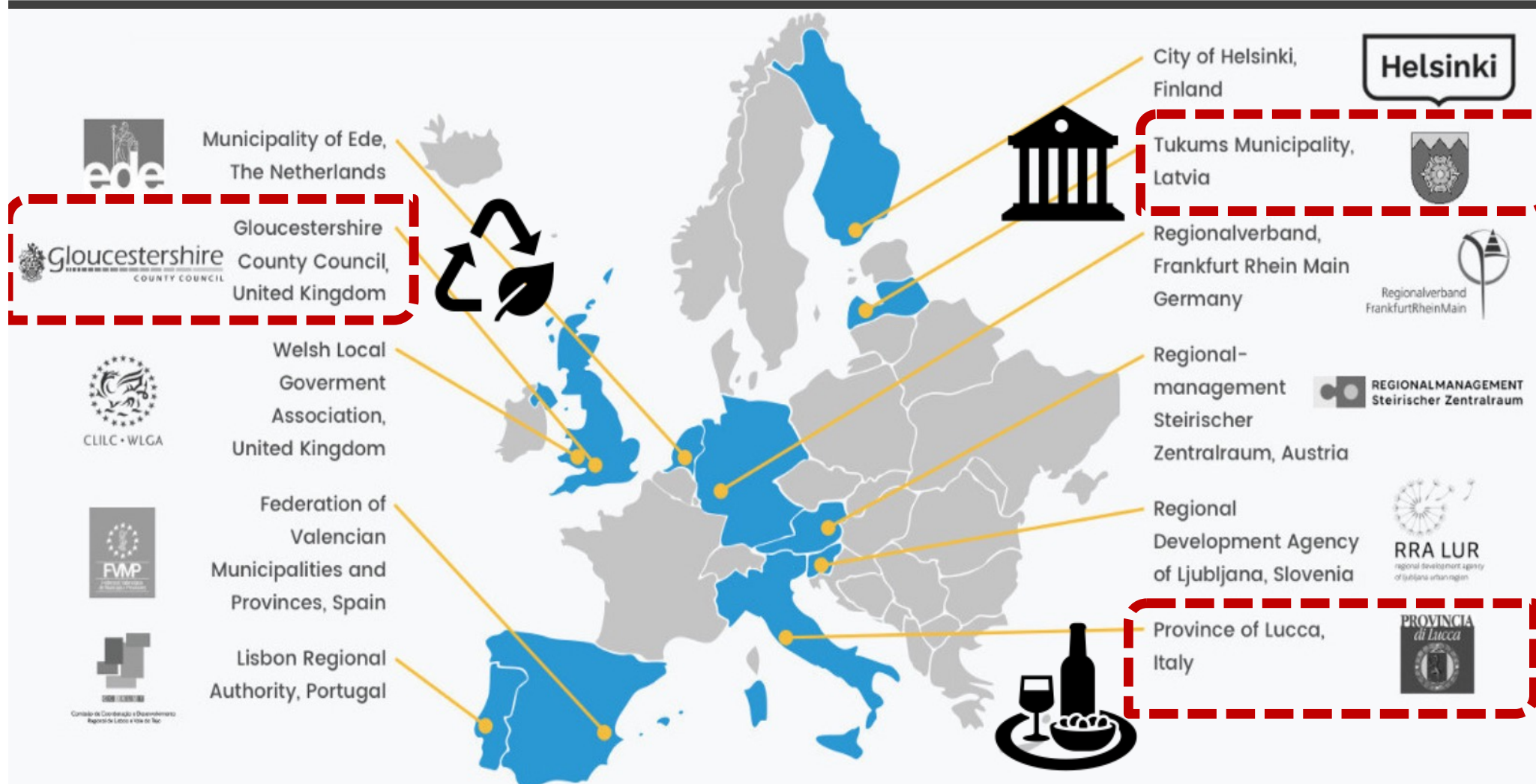
*"These stretches require us to **pluralise**:*

*to **move away** from*

__one__ dominant whole,

__one__ optimum plan,

__one__ superior leader

__towards__ attending to

__multiple__ diverse holons,

__multiple__ emergent possibilities

__multiple__ co-creators. ...

ROBUST: Unlocking Rural-Urban Synergies

3 case studies

What these LLs worked on

Accompanying joint work in Living Labs

Success factors in 3 ROBUST's Living Labs

NB: totally context dependent!

- Local stakeholder engagement
- Capitalising on resources
- Aligning with local dynamics
- Institutional support
- Co-leadership & decision-making
- Partners' Flexibility & Adaptive management
- "Safe space"
- Aligning interests & priorities
- Feasible goals
- Clarifying roles

Collaboration in Living Labs

How we might imagine it

Reality instead

Looking back: some lessons learned

- Learning is underrated ☹ but central for the success → Importance of learning & reflexivity *en route*

- Safe space & importance of care is underappreciated, not practised systematically

- Power issues: dominant individuals / institutions → limited instances of pluralising

- Striving for one perfect plan can result in getting stuck in negotiations for years

Looking back: some lessons learned

- Impact is problematic to measure → might lead to partners' frustration

- Struggling with emergent nature of TD research & experimentation → Risk-aversive attitude

- Hard to leave the comfort zone BUT manageable discomfort did teams well!

- Researchers struggled with their role in science-society collaboration

Summary & Orientations for practising future science-society collaborations

- Collaboration is a choice! Sometimes better options ("force, adapt, or exit")

- Mindset shift: different kinds of knowledge & ways of knowing matter. Pluralise!

- Conflict is okay!

- Connecting with others' perspectives

- Researchers' capacity to navigate such collaborations is paramount → *'will' & 'skill'*

Summary & Orientations for practising future science-society collaborations

- TD is NOT neutral: political dimension
- Step into the 'game', don't stay as an observer
- Mind the benefit: balancing the needs & getting everyone on board
- Practical wisdom: specific context > fixed rules
- Long-term research framework – it takes time for impacts to kick in

Food for thought
(Adam Kahane, Director of Reos Partners)

- *"Collaboration doesn't mean that either you prevail & get what you want, or your opponent does, or both of you sacrifice & meet somewhere in the middle.*

- *The potential of collaboration with others is that together you'll understand more of your situation*

- *& will create new options better than the ones you'd imagined by yourself"*

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THANK YOU!

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