

# From beneficiaries to partners:

Extending the role of farmers in co-creating knowledge for agricultural research and technology development

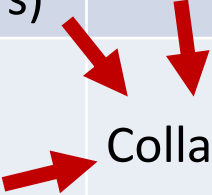


Photo: F. Rattunde

Anja Christinck

# Why?

Focus on knowledge	Focus on action/change	Focus on institutions
Complementarity of knowledge (held by farmers and researchers)	Human activity systems and actor-orientation	(...)
Knowledge integration (tacit and explicit knowledge)	Collaborative learning	(...)



# Complementarity of knowledge (1)

... held by farmers and researchers

Researchers	Farmers
Do usually <u>not</u> know the local context, within which an innovation has to work	Know the local context, including cultural, socioeconomic and agroecological aspects of it
Usually take observations at various test sites over short time periods (cross-cutting study set-up)	Usually take observations at one location over longer time periods (longitudinal case study set-up)
Tend to reduce complexity via experimental designs in order to clearly identify and quantify relevant cause-effect relations	Work under complex conditions, and observe i.e. many fields or large herds of livestock under highly variable conditions
Take observations at defined points in time (e.g. stages of plant growth)	Take observations at many times, while working in the fields or with their animals
Have access to information from databases and libraries worldwide	Have access to local information networks (mainly based on oral communication)

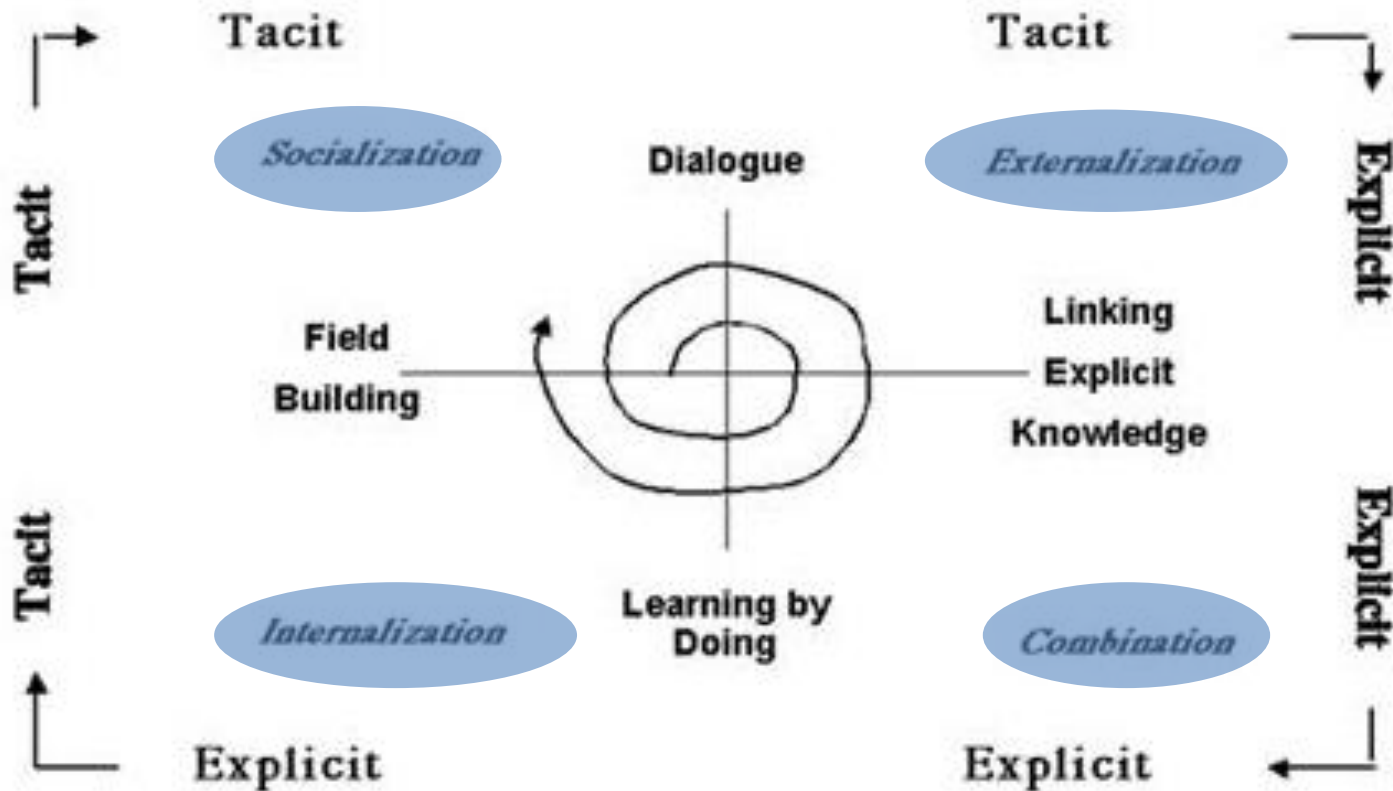
# Complementarity of knowledge (2)

## ... tacit (implicit) and explicit knowledge

Tacit (implicit)	Explicit
Can not be easily communicated: We know more than we can tell.	Can be communicated in oral or written form
Can only be transferred through direct social interaction (requires a social 'field' where exchange can take place)	Can be communicated via books, journal articles, internet, radio etc.
Can be 'embodied' in practices, tools, 'ways of doing'	Is not necessarily embodied in anything
Is ususally deeply rooted in the local (agroecological and sociocultural) context	Can or cannot be rooted in any specific context
→Much of farmers' knowledge is implicit	→Much of researchers' knowledge is explicit

# Knowledge integration

...the knowledge spiral model (SECI)



# Human activity systems

...an alternative approach to assessing farming /food systems

- Established and maintained by humans
- Depend on human management
- Involve multiple actors
- Involve collective and individual purposes
- Are embedded in broader agroecological and sociocultural contexts
- Interdependence of actors and actions occurs at various levels/scales



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Checkland, 1981; Banathy, 1997

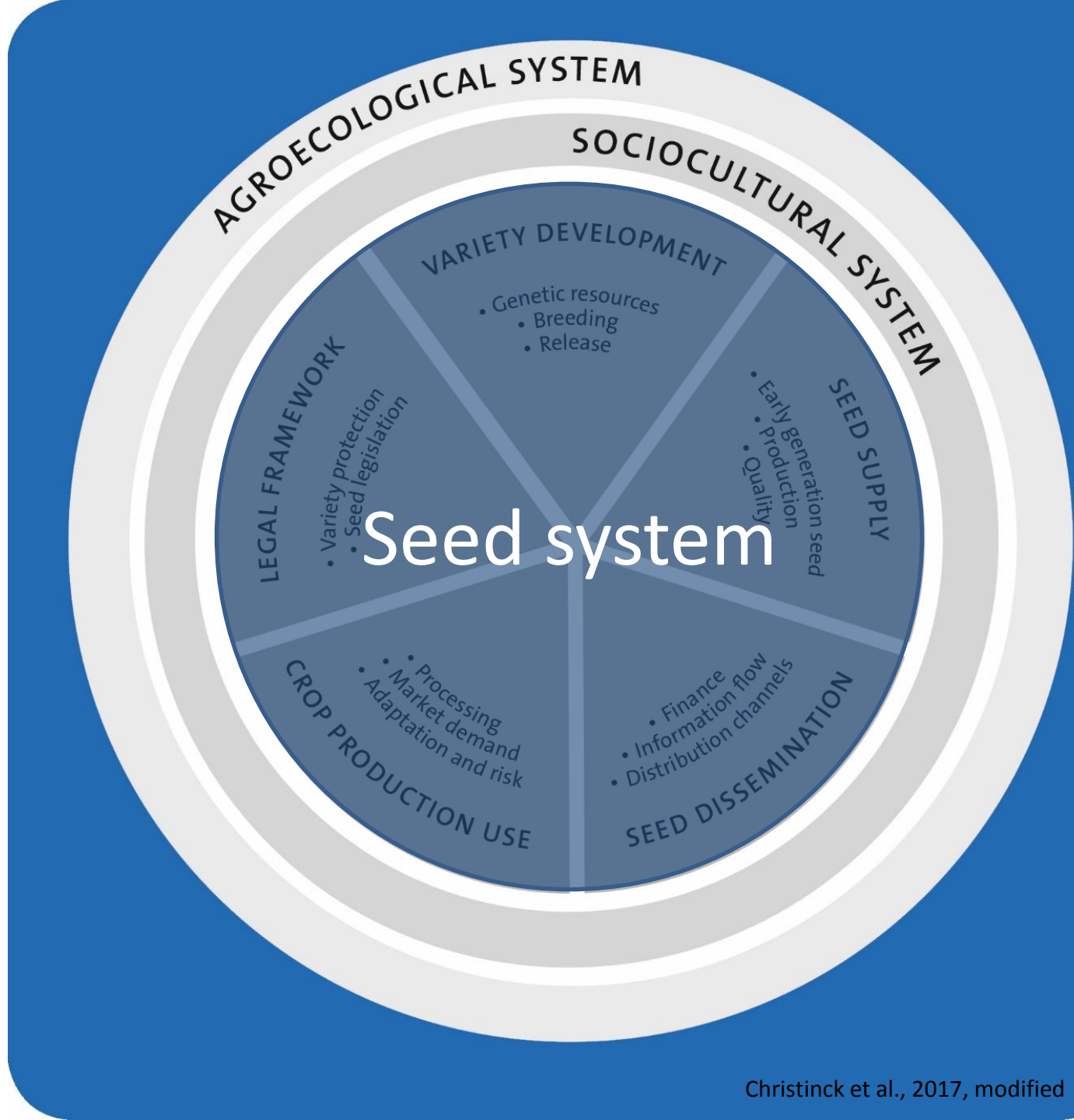


seed4change  
anja christinck

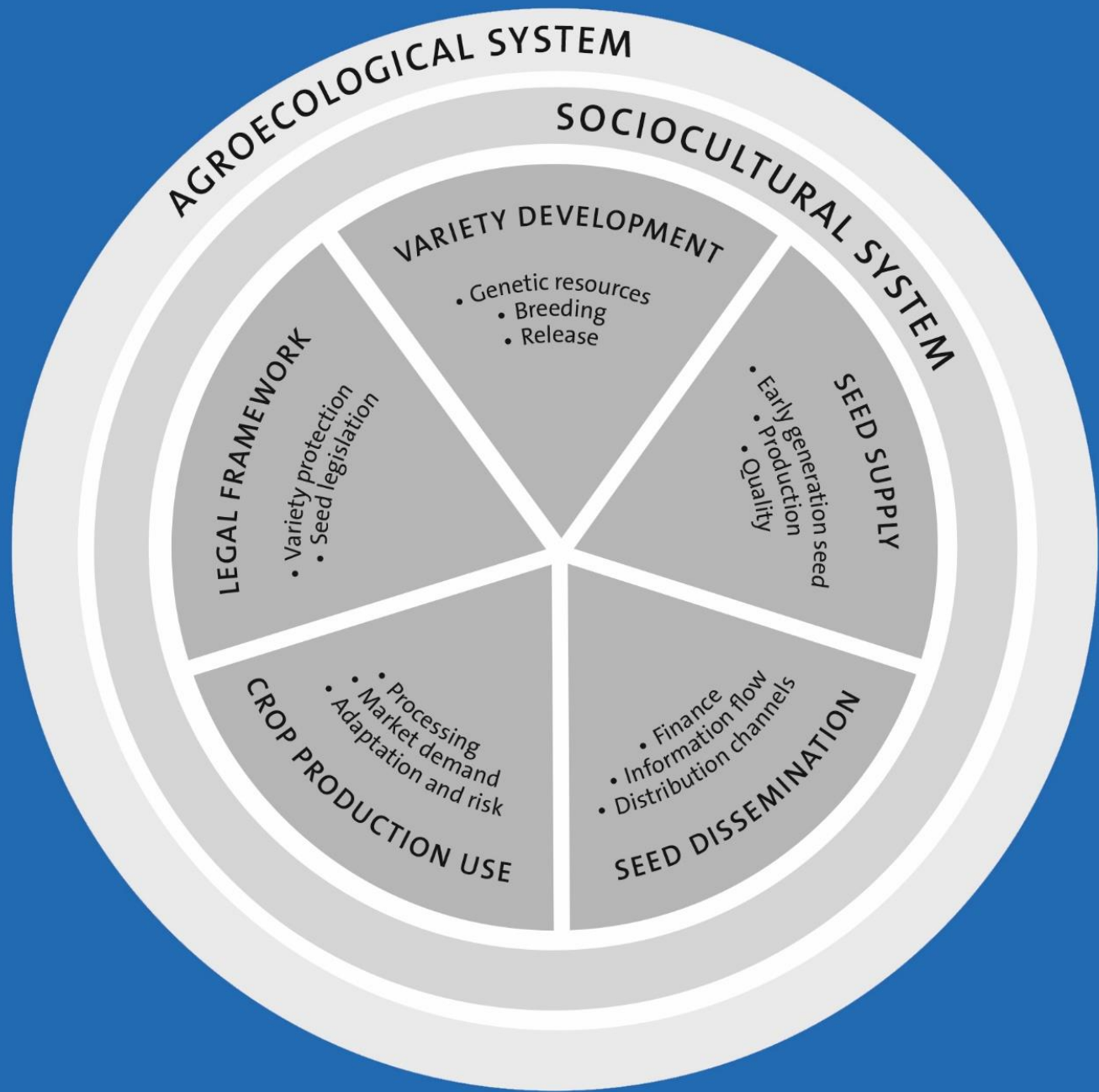
Research & Communication / German Institute of Tropical and Subtropical Agriculture

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where science meets people

# Seed system as human activity system



# Seed system as human activity system





# Actor categories

**OTHER ACTORS**  
E.G. ASSOCIATIONS,  
DONORS,  
SERVICE PROVIDERS,  
GOVERNMENT OR  
NGO REPRESENTATIVES

GENETIC RESOURCES MANAGER

PLANT BREEDER

SEED CERTIFICATION AGENT

SEED PRODUCER

SEED COMPANY

SEED SELLER

EXTENSION AGENT

FARMER

GRAIN TRADER

GRAIN PROCESSOR

# Change in human activity systems

... requires a focus on actors!

➤ **Change can only happen when actors modify their actions!**

## Motivations to change

- External → as a result of e.g. incentives, prohibition (policy)
- Internal → by gaining new insights and understanding, or improving their cooperation towards jointly identified goals

**Learning of and among actors =  
A key element for facilitating change**

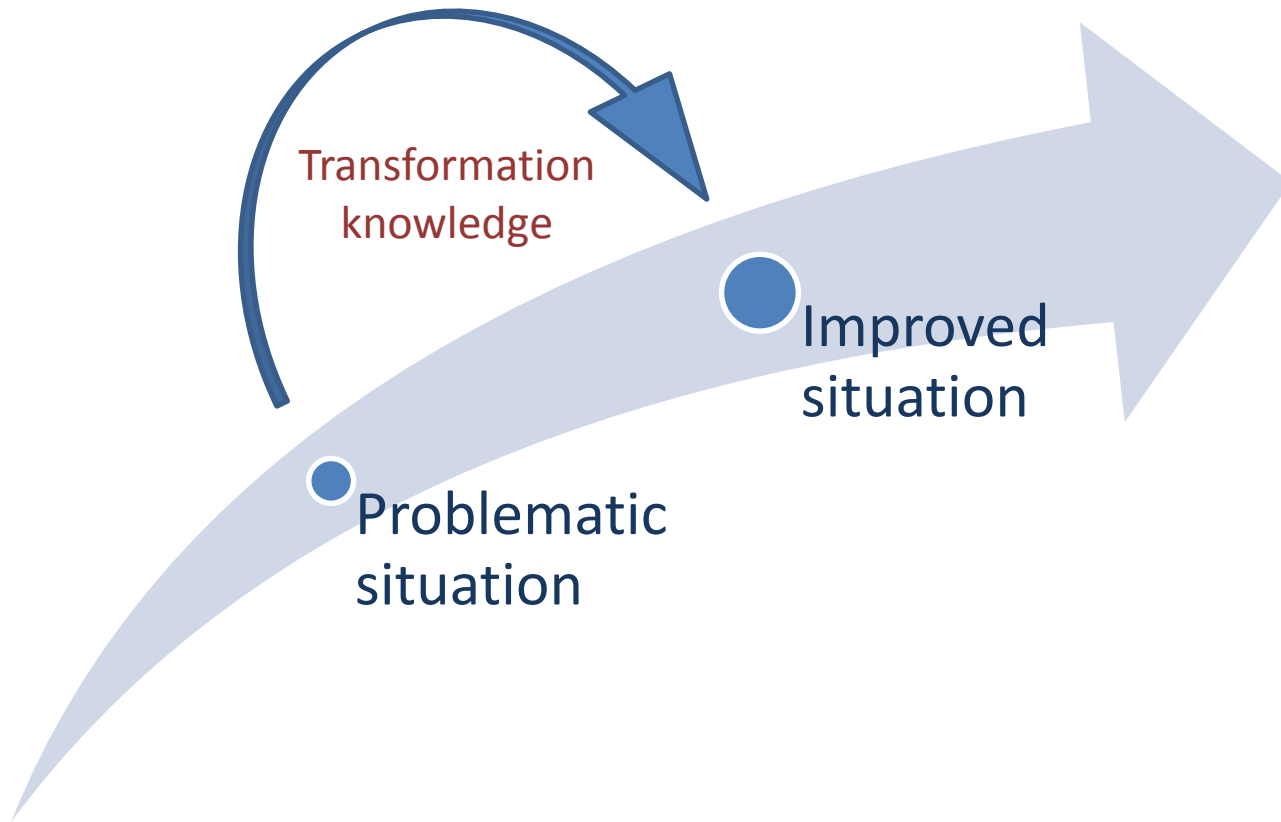
Christinck and Kaufmann, 2018

# How?

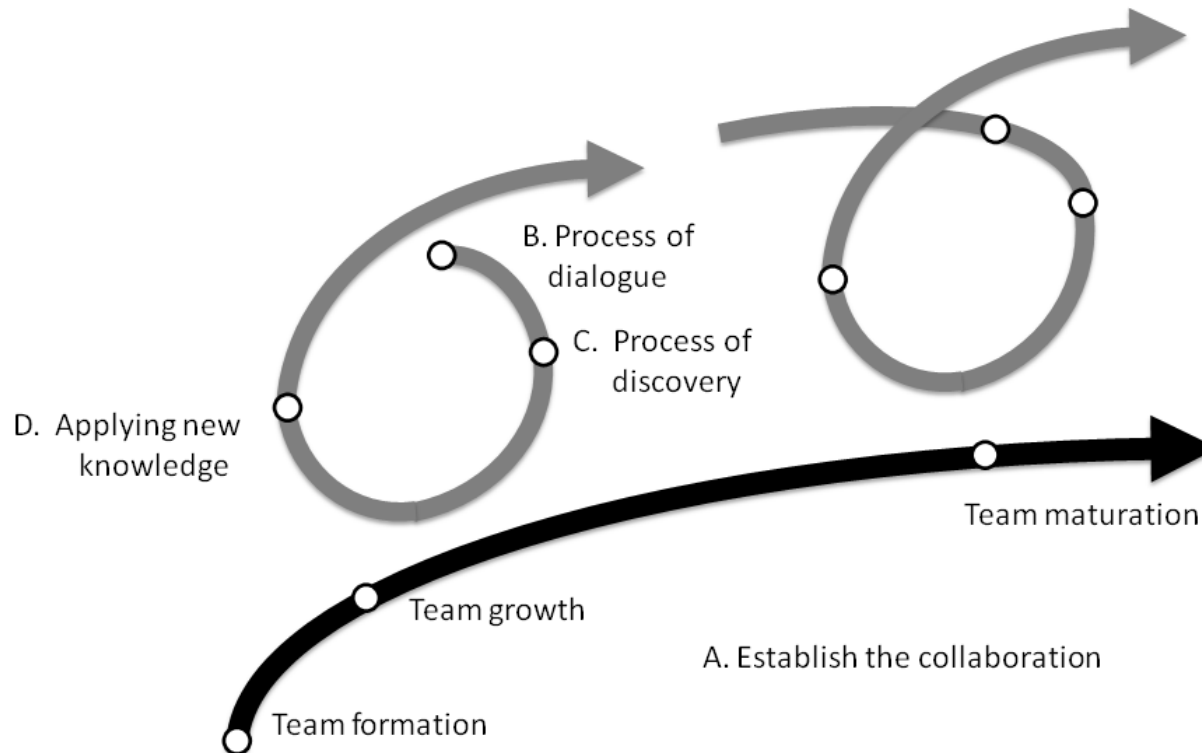
- Create transformation knowledge
  - Collaborative learning
  - Knowledge integration

# Transformation knowledge

A key concept for a theory of change

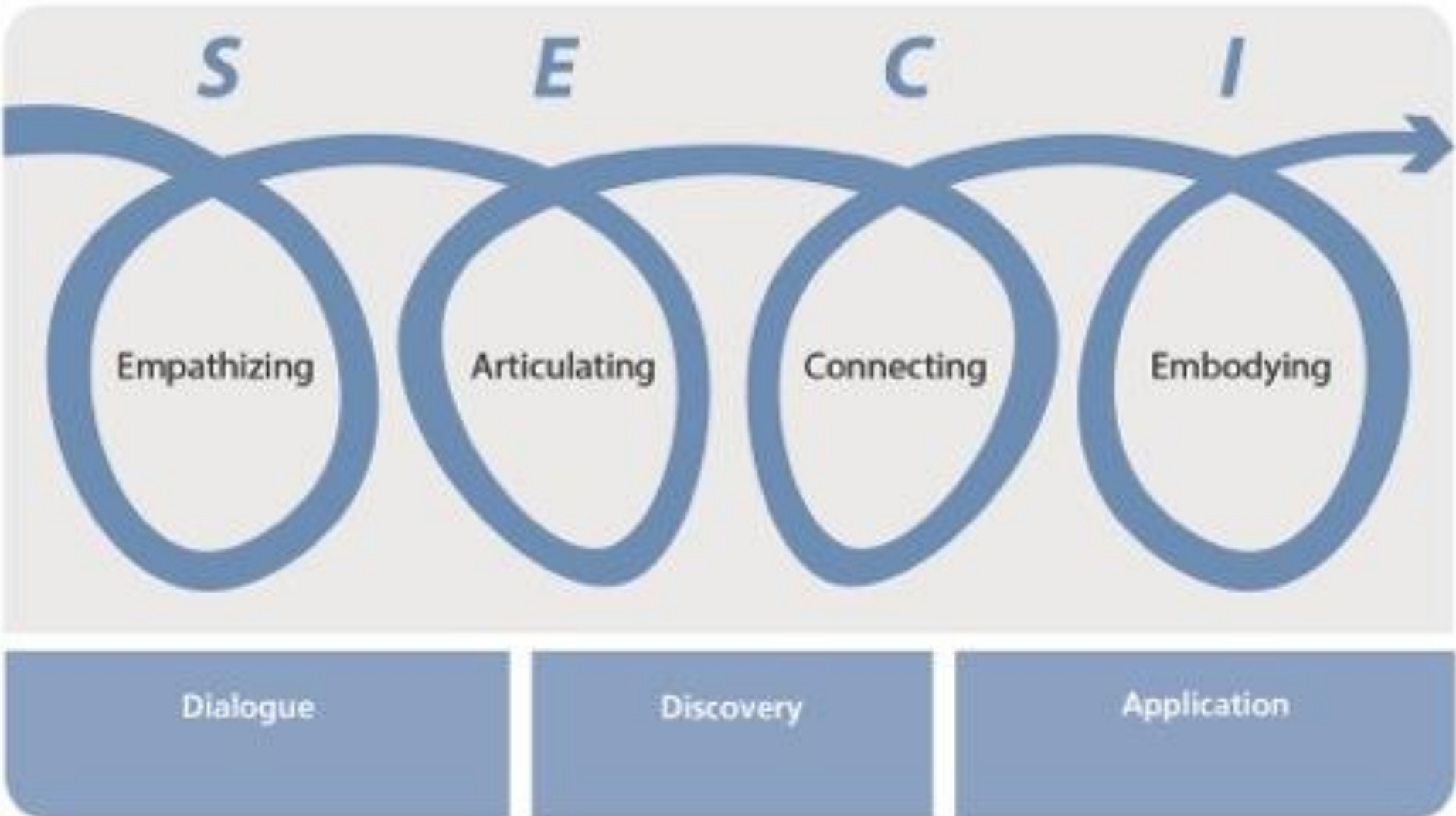


# Collaborative learning

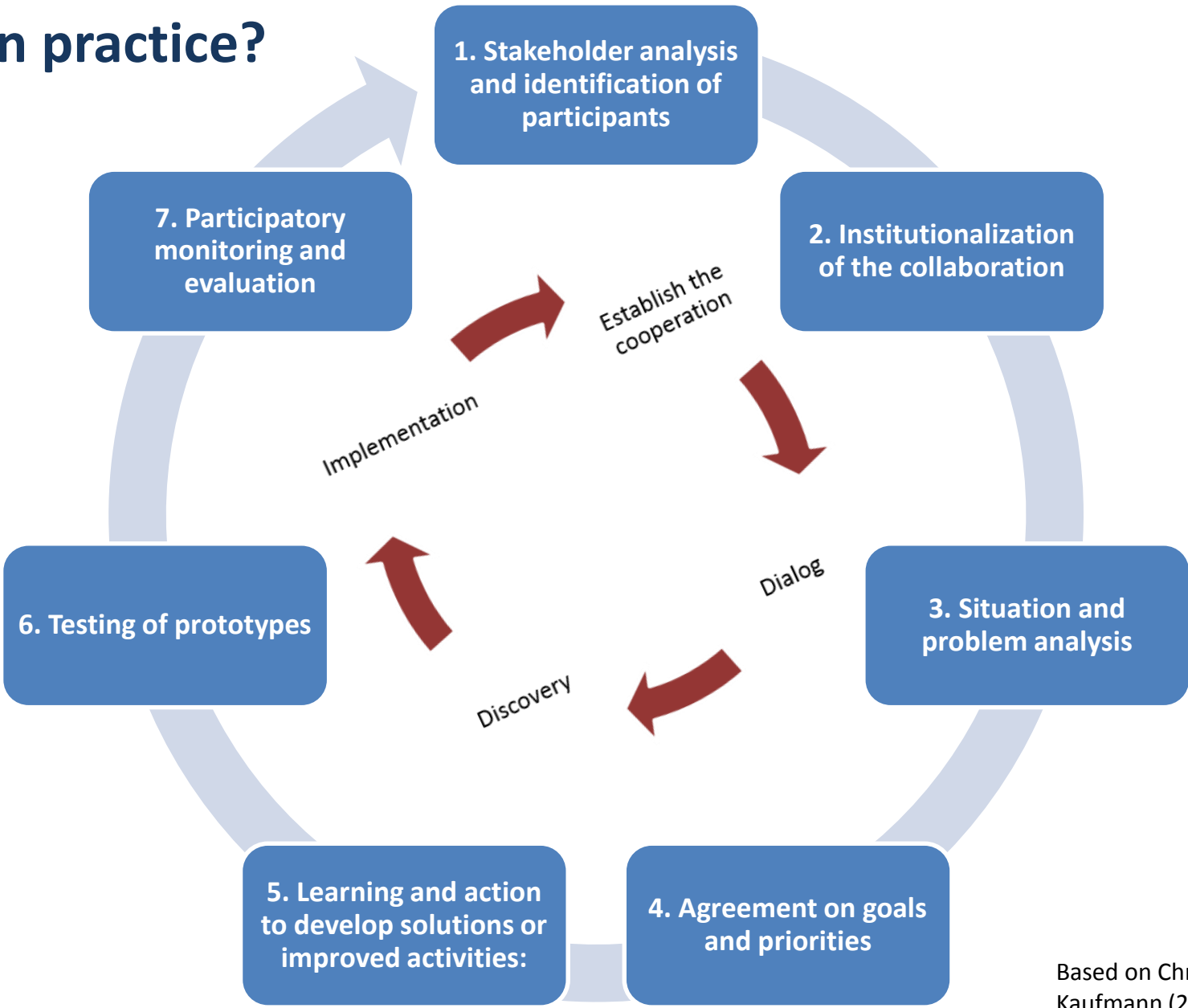


Restrepo et al. (2014)

# Knowledge integration and collaborative learning combined



# How can this be done in practice?



Based on Christinck and Kaufmann (2018); Restrepo et al..(2014)

# Outcomes of collaborative learning

...for all involved

- **New knowledge and practices**
  - Explicit and shared!
- **Increased action possibilities**
  - Enhanced problem-solving capacity
  - Orientation towards collectively identified goals
- **Promotion of ownership and agency**
  - Enhanced trust among actors
  - New networks, collaborations

Based on Restrepo et al. (2014), modified



# Thank you for your kind attention!