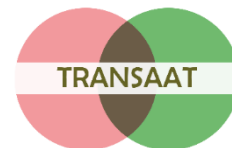


Focus Session #57#

Science-based pathways to sustainability in mountains

Place-based modes of knowledge sharing in agriculture: social learning and transformative capacities for the agroecological transition. Empirical results from three case studies in France.

Sabine Girard



Introduction

- Agroecology at the scale of agri-food systems attempts to respond to the crises of agricultural overproduction, erosion of biodiversity and climate change
- Agroecological transition involves a paradigm shift in terms of the production and transmission of knowledge and the support professions

Agroecology consists of using and enhancing different services provided by nature, to reduce synthetic inputs or regulate flows, working at different scales of space and time (Altieri, 1995)



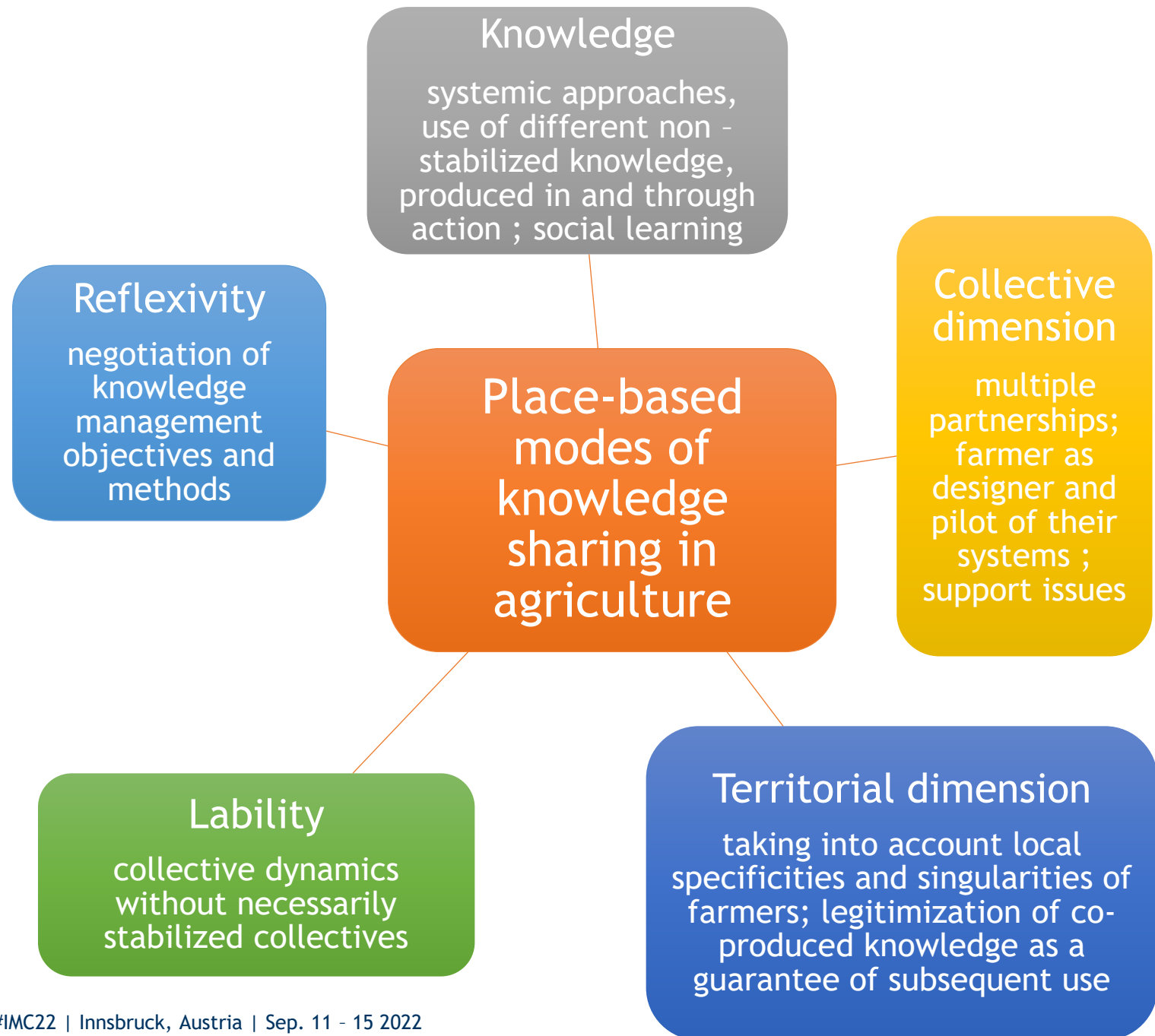
Co-production of knowledge is an iterative and collaborative process involving different types of expertise, knowledge and actors to produce contextualised and problem-focused knowledge (Norström et al., 2020), enabling the redesign of agricultural systems

Introduction

New forms of cooperation between farmers and others actors emerge to produce and exchange knowledge in agroecology

>> How can they contribute to the transition?

Focus on social learning (Reed & al., 2010) and the ways it can be supported



Method & case studies

- 3 years' monitoring of 3 groups in the Drôme valley (South-east of France)

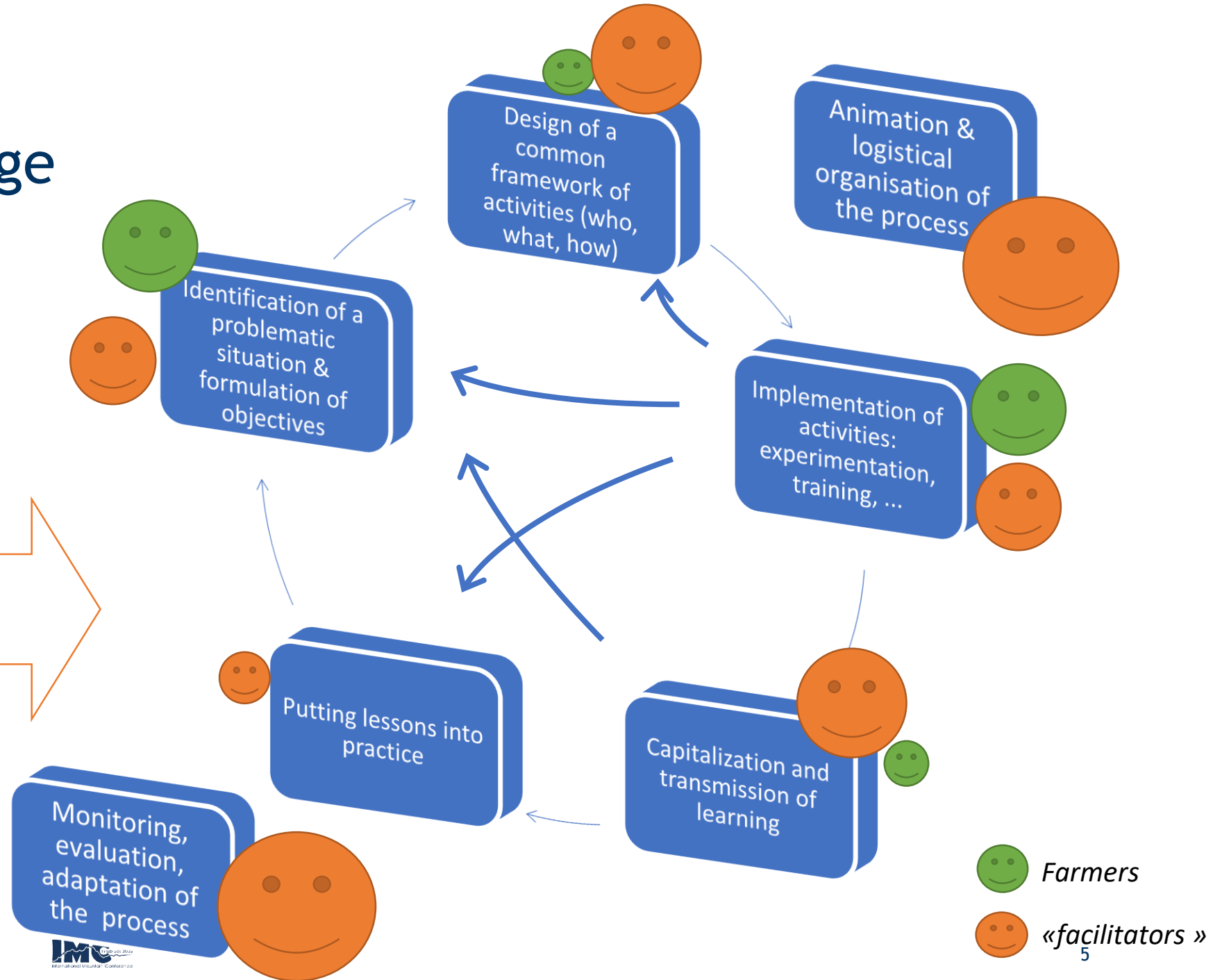
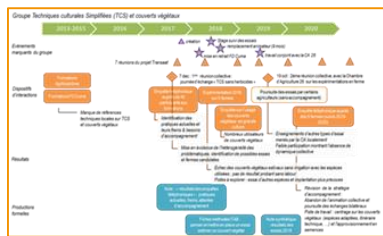
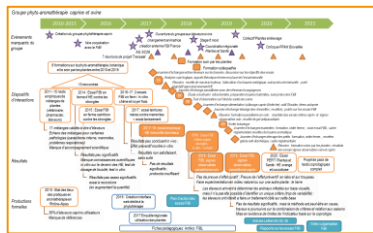
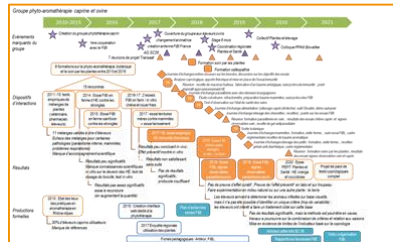
	goat and sheep phyto- aromatherapy	animal health in outdoor pig farming	No-till & plant cover working techniques
Creation	2011	2018	2017
Objectives	Well-defined : care alternatives	Unclear, to be defined	Imprecise : support practice changes
Participants	60 farmers & 5 “facilitators”	13 farmers & 4 “facilitators”	43 farmers & 5 “facilitators”
Activities	18 activities the last 3 years	7 activities en 2 years	8 activities in 3 years

- Farmers
- Rural development agents (union, NGO, local council)
- Researchers (biotech, SHS)
- Veterinarians
- Pharmacists



- Farm visit & farmer exchanges
- Training
- Exchange with experts
- Practical exercises
- Inquiries
- Experimentation on farm
- Group meeting (incl. reflexive ones)

Finding 1 : on the knowledge co-production process



Finding 2 : on social learning processes

Horizontal and vertical knowledge transmission

- >> *training (role of experts)*
- >> *peer-to-peer exchanges*

Pragmatic investigations

- >> ex: on-farm test in goat, sheep and pig - deterministic logic
- >> ex : on-farm experiment in TCS & plant cover - open logic
- >> ex : collective or facilitation work

Deliberative processes

- >> participatory meeting on framing on-farm experiment activities (pigs/goats)
- >> also some informal time

Reflective and critical processes

- >> Discussion on the scope of knowledge
- Ex : on the regulatory use of phyto-aromatherapy (Caprine Group)

the size of the blocks is proportional to the intensity of the mechanism observed within the TRANSAAT project groups

Finding 3 : on posture & tools to support agroecological knowledge coproduction and social learning

" Find the right time and the right form for the exchange to be fruitful and constructive, while leaving everyone free to make their own choices."

COMPASS
building meaning,
ensuring coherence

TOOL BOX
provide means &
resources

*"help solve technical, economic and labour time problems" ;
"provide a resource for farmers to reflect on each other"*

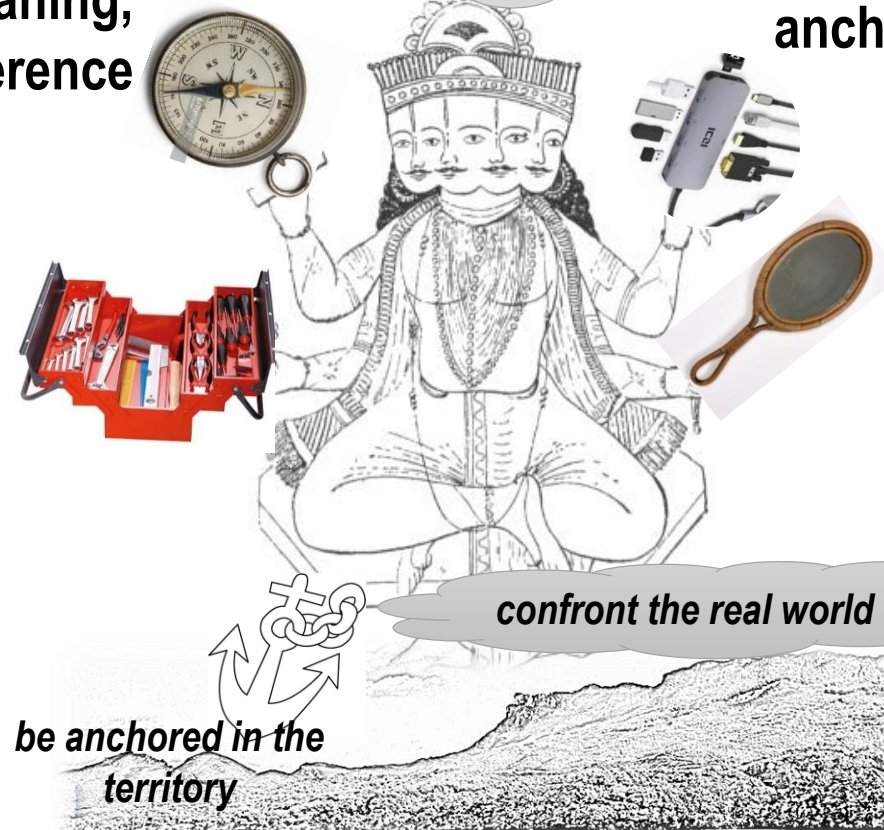
imagine the unthinkable

HUB
networking, local
anchoring, influencing

MIRROR
take a step back, monitor,
draw lessons

"facilitate exchanges and capitalise on what its produces" ; "we do things intuitively without formalising them : we ask ourselves questions about our methods of action, but we don't have a miracle solution"

"in 2016 breeders were tinkering, today breeders can really help each other, advise each other"



Conclusion

Some points to highlight regarding conditions that favor the transformative capacities of co-production activities in agroecology



- Better understanding and cooperating with a variety of actors is **learning** in itself >> *takes time and method*
- Participants need to share not only resources, but also a **common framework** of activities to last over time and reach more farmers >> *find consistency between everyone's needs and what collective work can provide.*
- **Sharing normative orientations** seems necessary when the group aims not for political or social changes >> *group cohesion, collective commitment and more structured and readable discourse*
- **Reflexive monitoring and evaluation** >> *motivation, individual commitment, social learning*