

Implementing Innovation: knowledge transfer and stakeholder involvement

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Specific questions for this section of the conference

- How to assess valorisation methods? Do we have examples?
- Is there any motivation for researchers to transfer the results to end-users?
- How to implement innovation: knowledge exchange and stakeholder involvement?

From idea to improvement

Idea

- Scientific research and other studies
- Novel combination of existing knowledge

Invention

- Products, processes
- Forms of organisation & know-how

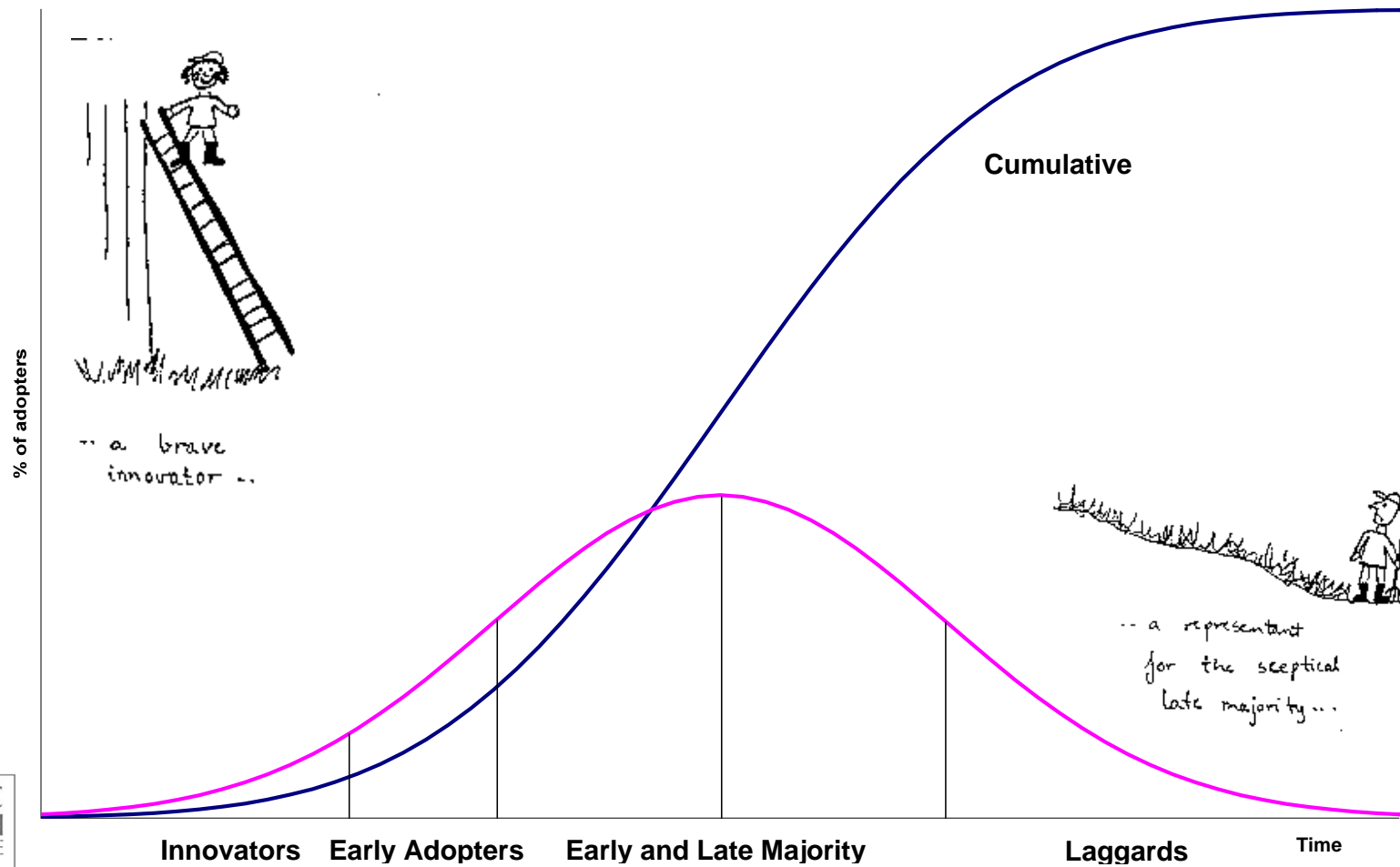
Innovation

- Tested in the real world group
- Limited numbers

Diffusion

- Widely used
- Genuine improvement

Adoption/diffusion model (Rogers & Shoemaker)

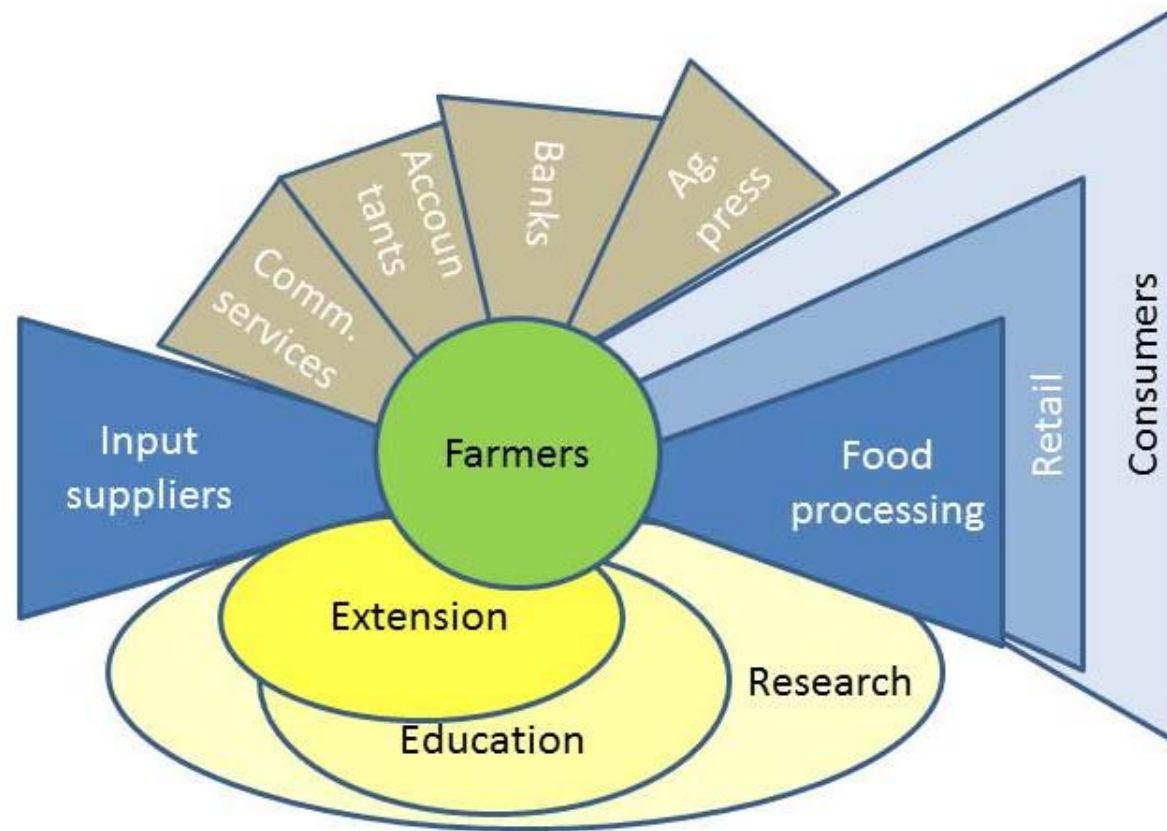




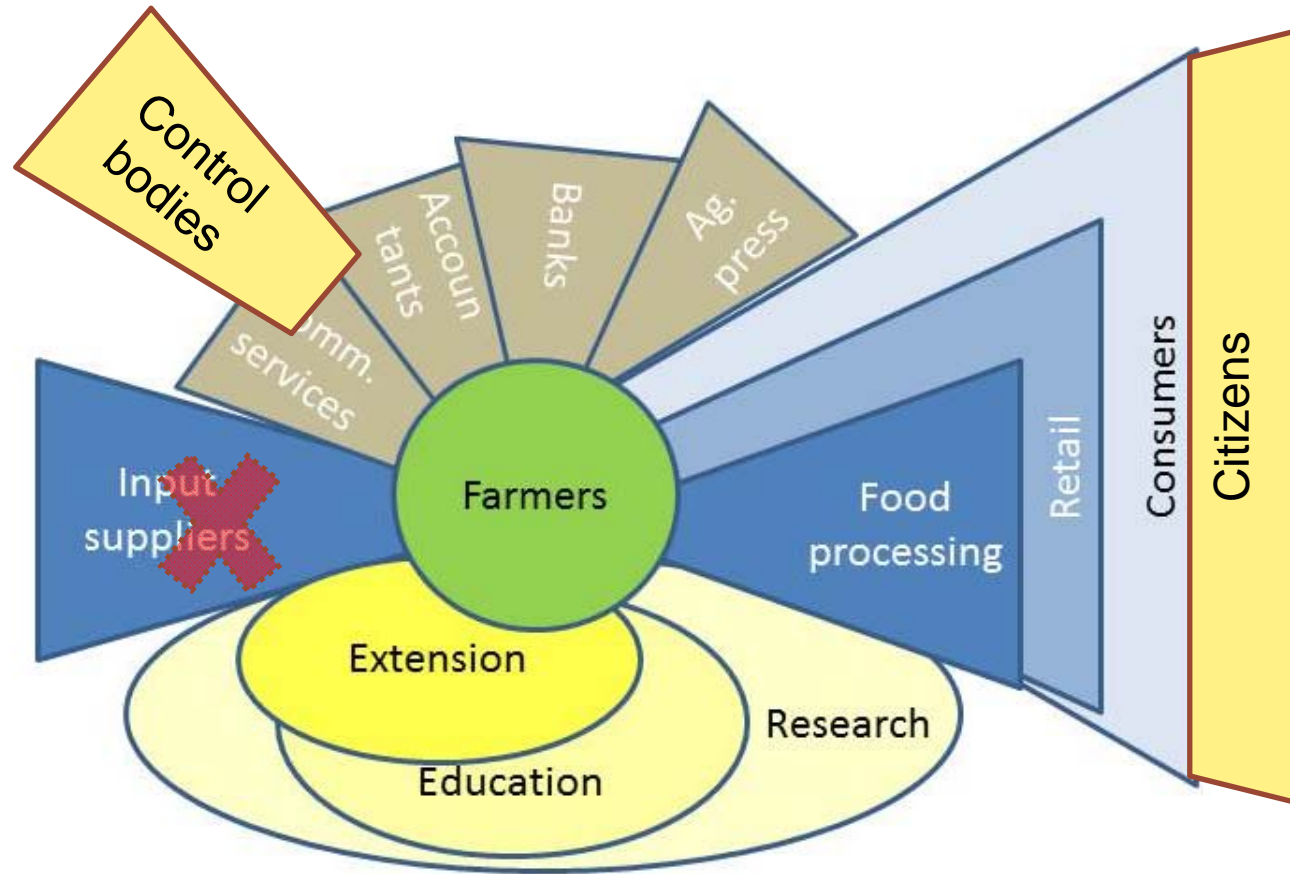
The innovation process

- Main stages all build on existing knowledge
- Require social/learning and networking processes

Actors in agricultural knowledge and innovation systems (SCAR-AKIS)



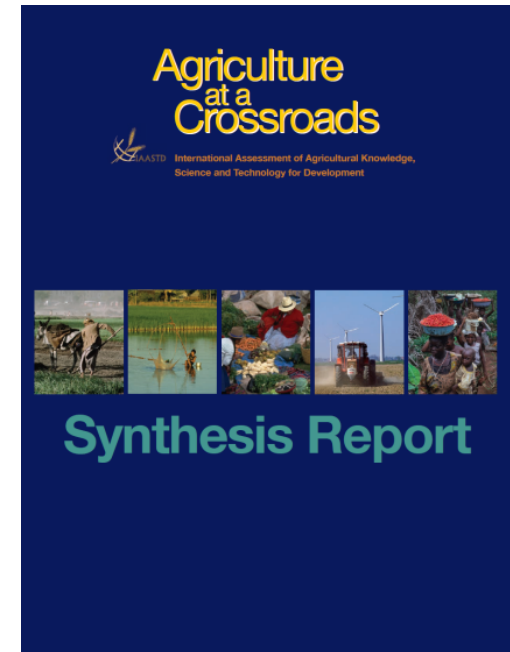
And in organic agricultural knowledge and innovation systems



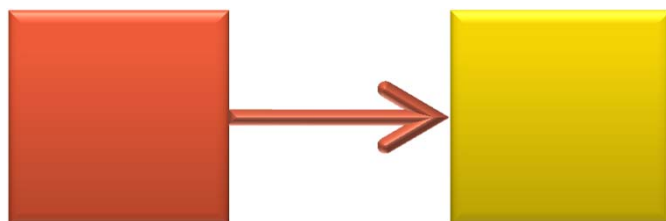
The challenge according to IAASTD

How to manage effectively

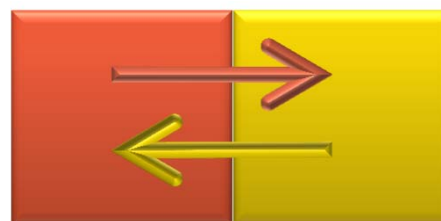
- Collaborative generation of knowledge
 - ◆ among increasingly heterogeneous contributors
- Flow of information
 - ◆ among diverse public and private organizational arrangements



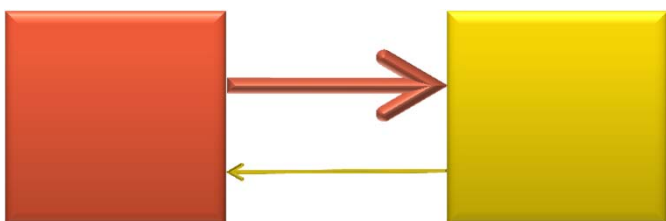
Involving stakeholders in knowledge generation



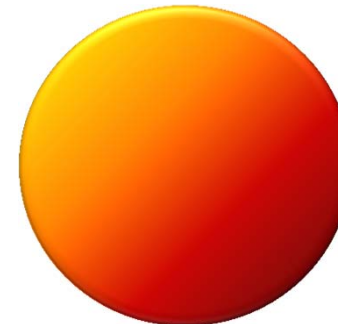
The linear model



The collaborative model



The feedback model



The joint production of knowledge model



After RELU (2007)

For Example Wheat Populations in SOLIBAM



- **Cross composite populations**
 - *Aiming for diversity*
 - *Increasing resilience*
 - *Reliability and stability of under different conditions*
- **Stakeholder involvement in WP participatory breeding**
- ***What about legal issues?***

Innovation through participatory research in **SOLID** (266367)



- Involving farmers in developing new management practices for low-input organic milk production
- Identify important problems in the context of the specific farming system
- Potential ideas for testing
 - Impact of sward diversity on production (AT)?
 - Is there a link between forage and cow health (UK)?



When is stakeholder involvement (participatory research) successful?

- ☺ Stakeholders are satisfied
- ☺ They make full use of the results
- ☺ They keep their independence and their sovereignty of knowledge and property rights
- ☺ Real improvements in sustainability
- ☺ Transferable findings
 - Relevant to the sector
 - That can be more widely communicated.

How to disseminate?

Focus on know-how rather than blue prints

- **Diverse geo-graphical conditions**
 - ◆ *Soils and climate*
 - ◆ *Access to markets and inputs*
 - ◆ **Various combinations under different conditions**
- **People diversity**
 - ◆ **Diversity of business and personal goals**
 - ◆ **Culture and traditions**
- **What knowledge is generic/ transferable?**
- **What is specific?**

For example cereal/grain legume intercropping

www.intercrop.dk



- Increasing Europe's production of protein feed
- Increase **knowledge** of multifunctional role of intercropping
- Design new methods
- Carry out demonstration
- *How can the results be more widely used?*

Exploiting knowledge about parasite life cycles to control them



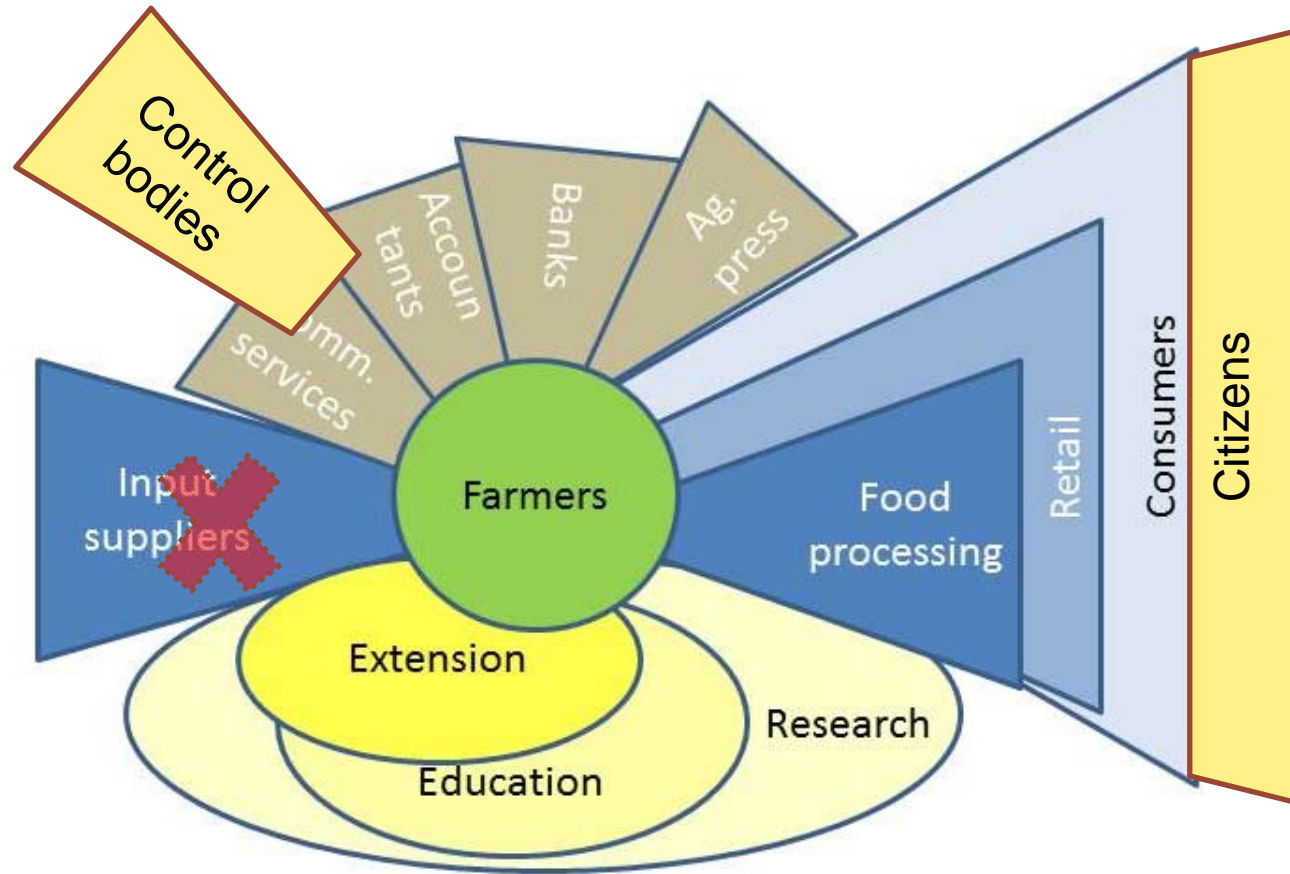
- Pasture ecology
- Novel forages

Can concepts be developed that work under different conditions?

Combining different types of knowledge for one innovation

- **Experience (traditional knowledge)**
 - ◆ In situ observation
 - ◆ Local knowledge about specific conditions
- **Economic context**
 - ◆ Markets and supply chains
 - ◆ Profitability and policy
- **Empirical and experimental knowledge**
 - ◆ Diagnostics tools
 - ◆ Agro-ecological context
 - ◆ Strategies for change

Can we meet the expectations of different actors?



Different ways of communicating knowledge

- **Reports and project websites**
 - ◆ Availability over time?
- **Publication**
 - ◆ Scientific journals
 - ◆ Sector specific magazines
 - ◆ Text books
 - ◆ New media
- **Events (conference, seminar)**
- **People (future researchers and practitioners)**
- **Is there another way?**

Conclusions

- **The innovation process requires knowledge networks and social learning**
- **Stakeholders must be equal partners**
 - ◆ Questions of time & funding?
 - ◆ Lack of institutions fostering rigour
- **Different types of knowledge**
 - ◆ What is transferable? What is farm specific?
 - ◆ Open access versus competitive knowledge
- **Bringing about real change requires enabling environment/institutions with vision and political commitment**