



SOLINSA

Support of Learning and Innovation
Networks for Sustainable Agriculture

Agricultural Knowledge Systems In Transition :
Towards a more effective and efficient support of Learning
and Innovation Networks for Sustainable Agriculture

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Agricultural Knowledge Systems in Europe: characteristics and main issues

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Trends in innovation research

	Diffusion	Farming Systems	Agricultural Knowledge and Information Systems	Agricultural Innovation Systems
Era	1950s- 1960s	1970s – 1980s	1990s	Since 2000
Model	Supply push from science	Constraints for adoption	Demand pull from farmers	Complex network of multiple actors
Farmers	Recipients of knowledge	Sources of information	Experimenters	Partners, entrepreneurs, innovators
Extension workers	Translators of knowledge		Commercial consultant	Innovation brokers
Scientists	Innovators	Experts	Collaborators	Partners

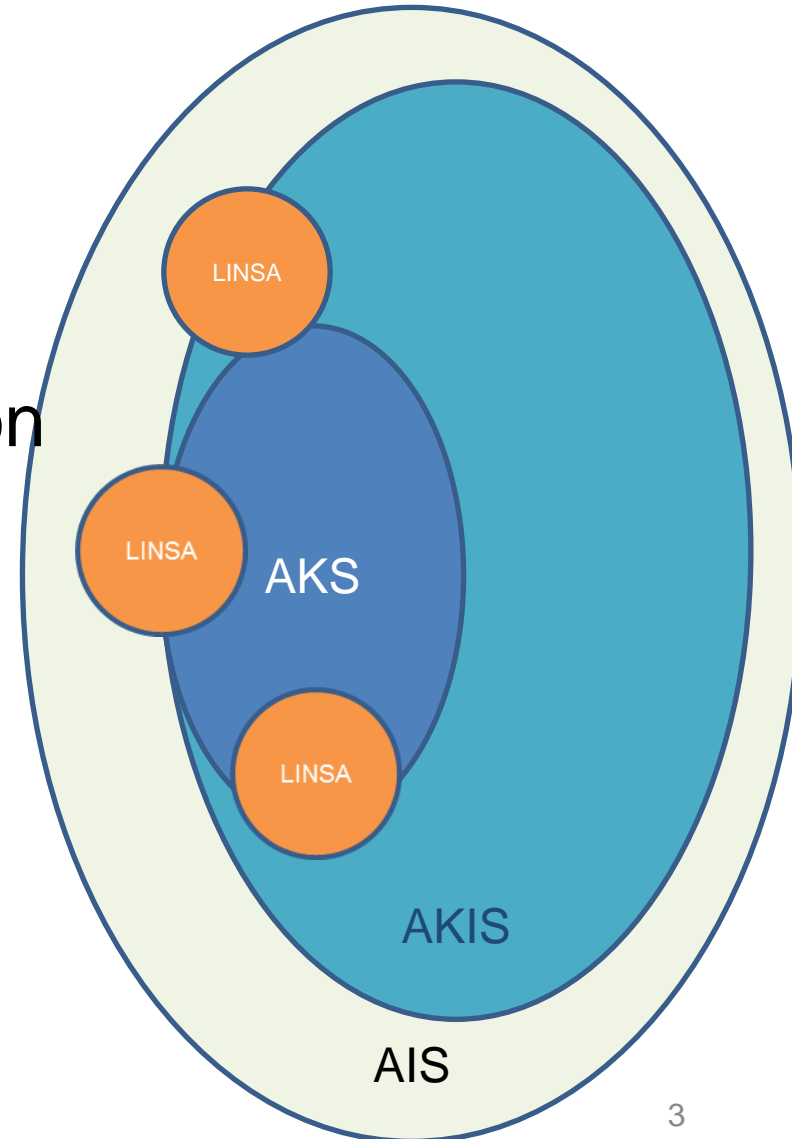
Key concepts

AKS: Agricultural Knowledge System

AKIS: Agricultural Knowledge and Information/Innovation System

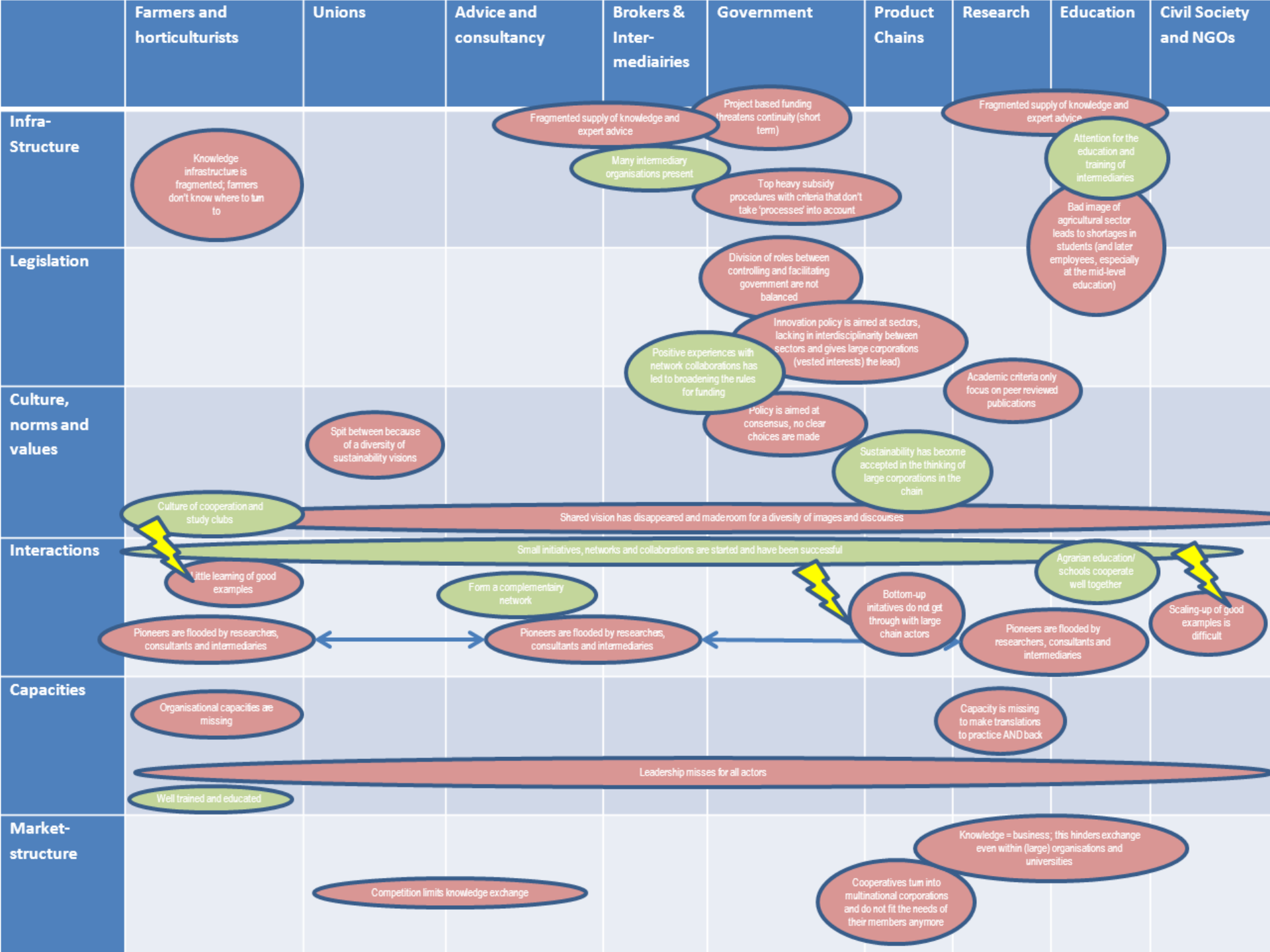
AIS: Agricultural Innovation System

LINSA: Learning Innovation Network for Sustainable Agriculture



Innovation systems matrix

	Universities & research institutes	Extension (public)	Education	Government	Consultancy and advice (private)	Farmers (unions /product boards / cooperatives)	Agro-industry	NGOs	Consumers
Infrastructure									
Legislation									
Values, norms and culture									
Networks and interactions									
Capabilities									
Market structures									



Comparative analysis

(Potential) opportunities and constraints for LINSAs in different types of AKIS:

8 European countries:

England, France, Germany, Hungary, Italy, Latvia, Netherlands and Switzerland

Diversity is very high!

makes comparison difficult

Laws and regulations / governance

Differences according to political organisation of the state:

- Sometimes decentralized: Federal and strong regions in Switzerland (cantons); Italy (regions); Germany (Länder).
- State driven AKIS, or dominated by other 'traditional' stakeholders (*=supply driven orientation*): Hungary; Italy; France
- Mix between public and private steering: Switzerland; Latvia; Germany
- Private/market orientation (*= demand driven orientation*): The Netherlands; England

Market structure

- Large differences in farm structure: small amount of big farms, and large amount of small subsistence farms (e.g. Latvia, Hungary, Germany)
- Farmer Capabilities
 - Great differences in farmer education
 - High (Switzerland, the Netherlands)
 - Low (Latvia, Hungary)

Some common elements

- Funds for basic research decreasing at national levels
 - More and more competition for EU funds
- Agricultural education in a difficult position
 - Lack of funds and/or students
- Bureaucracy and red tape perceived as problematic
 - In many countries no proper policy evaluation and monitoring schemes present
- Fragmentation of visions
 - No sense of direction

Conclusions

(Interactive) Innovation System Analysis:

- Can give clues of potential bottlenecks (or benefits).
- Can be used to analyse the internal qualities
 - (that the LINSAs can influence itself)and the external environment of the LINSAs
 - that the LINSAs has no power over,
 - but here it suggests the actors who do

Further Reading

- Klerkx, Van Mierlo and Leeuwis (2013): *“Evolution of systems approaches to agricultural innovation: concepts, analyses and interventions”*
- Van Mierlo et al.(2010): *“Reflexive Monitoring in Action: A guide for monitoring system innovation projects.”*
- Leeuwis: *“Communication for Rural Innovation; Rethinking Agricultural Extension”*, Blackwell Publishers, 3rd edition, 2004

Thank you



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