

The European Agricultural Knowledge and Innovation System (AKIS) towards an interactive innovation model

Krijn J. Poppe (SCAR AKIS) with thanks to Inge Van Oost (European Commission DG AGRI) for Commission slides



My introduction

Co-chair Strategic Working Group AKIS
(Agricultural Knowledge and Innovation
Systems)

of the EU SCAR (Standing Committee
on Agricultural Research)

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Background of SCAR and the CWG

- Standing Committee on Agricultural Research (1974, renewed 2005)
- Representatives of member states that advise the European Commission and Member States on coordination of agricultural research
- Since 2005: coordination in the European Research Area: EU + candidate and associated countries (in total 37 countries)
- 2006, Krems (Austria): “ [SCAR to] include questions of advisory services, education, training and innovation in their discussions”

Mandate of the SCAR – CWG on AKIS

- 2008 Communication: “the Commission intends to make use of SCAR to identify agricultural knowledge structures in each Member State, with a view to eventually creating a corresponding CWG”
- 2009 France and the Netherlands volunteered to set up a CWG
- Chaired by Pascal Bergeret and Krijn Poppe

The issue

- 1st SCAR foresight (2007): the mounting challenges facing the agri-food and rural sectors in Europe calls for a review of the links between knowledge production and its use to foster innovation
- 2nd SCAR foresight: rather crude light on the current state of Agricultural Knowledge Systems in Europe:

“currently unable to absorb and internalise the fundamental structural and systemic shifts that have occurred. The remaining publicly funded AKIS appear to be locked into old paradigms based on linear approaches and conventional assumptions.”

In the mean time a changing policy context: the financial and food crises, EU 2020 strategy: “Smart, sustainable, inclusive growth”, European Innovation partnership, CAP-post 2013

EIPs - a new Europe 2020 Strategy approach

- The establishment of European Innovation Partnerships (EIPs) in different sectors represents a new approach under the Europe 2020 Strategy to advance EU research and innovation.
- The Europe 2020 **Flagship Initiative "Innovation Union"** specifies European Innovation Partnerships (EIP) as a new tool for fostering innovation through linking existing policies and instruments



The EIP-AGRI in short

- Agricultural Productivity and Sustainability (COM (2012)79)
- Overarching concept – funding in CAP-RD and H2020 Research funds, et al
- Based on **interactive innovation model**:
 - linking up multiple actors for creation and diffusion of knowledge.
- Key entities: Operational Groups
- EU wide EIP network: communication, partnering, dissemination, knowledge flows and collecting practice needs
http://ec.europa.eu/agriculture/eip/documents/eip-opportunities_en.htm#eip-origins-of-eip-agri

Innovation is a broad concept

- The implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations. [source: OECD]

- Also the public sector can innovate !
(and public aspects of agriculture)

Social Innovation

- The concept of social innovation originates in critiques of traditional innovation theory. By calling for social innovation, new theories point at the need to take the social mechanisms of innovation into account (*social mechanisms of innovation*)
- In the context of rural development, social innovation refers to the (social) objectives of innovation – that is those changes in the social fabric of rural societies, that are perceived as necessary and desirable in order to strengthening rural societies and addressing the sustainability challenge (*social inclusion / equity: the innovation of society as well as the social responsibility of innovations*)

Knowledge & Innovation System: 7 functions

1. Knowledge development and diffusion
2. Influence on direction of search and identification of opportunities
3. Entrepreneurial experimentation and management of risk and uncertainty
4. Market formation
5. Resource mobilisation
6. Legitimation
7. Development of positive externalities

Innovation by interaction in networks

- Innovation as a process has strong learning aspects: learn how to do new things, bottom-up.
 - Alternative: force (or pay for) quality standards, mandates
- Thematically-focused learning networks of different actors can help.
- Generating learning and innovation through interactions between the involved actors.
 - participation for all in the planning of work and experiments, their execution up until the dissemination of results and the demonstration phase
- Members can include farmers, extension workers, food industry, researchers, government and ngo representatives and other stakeholders.

Different objectives,
methods, and public
roles

Science

- Science driven knowledge development
 - Basic research
 - Linear model
 - Cross overs sectors
 - Society sets agenda
- PUBLIC TASK**

Market
driven
R&D

- Science for competitiveness or social issues
- Business sets agenda, helps to steer, uses results
- **PRIVATE-PUBLIC PARTNERSHIPS**

Innovation
in
partnership

- Prototypes // Localisation
- Change business models / finance
- Food chain is co-creator
- (De-)regulation, procurement etc.
- **LEARNING AND INNOVATION NETWORKS**
- **INFORMATION BROKERS**

Science versus Innovation driven research

Aspect	Science driven research	Innovation driven research
Incentive to program a topic	Emerging science that can contribute to solving a societal issue (or a scientific question)	An issue / problem in society that can be solved by new research, or a new idea to solve an existing issue
Participation of users	In demonstration phase / via research dissemination	In agenda setting, defining the problem and during the research process
Quality criteria	Scientific quality	Relevance (for the sector or a region)
Focus	Research organisations	Networks of producers and users of knowledge
Diffusion model	Linear model	System (network) approach
Type of government policy	Science / Research Policy	Innovation Policy
Economic line of thinking	Macro-economics	Systems of innovation
Type of research	Interdisciplinary with absorption capacity in AKIS (to work with material science, ICT, chemistry etc.).	Transdisciplinary and translational with close interactions.



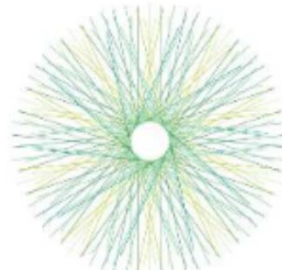
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European Innovation Partnership

Rural Development

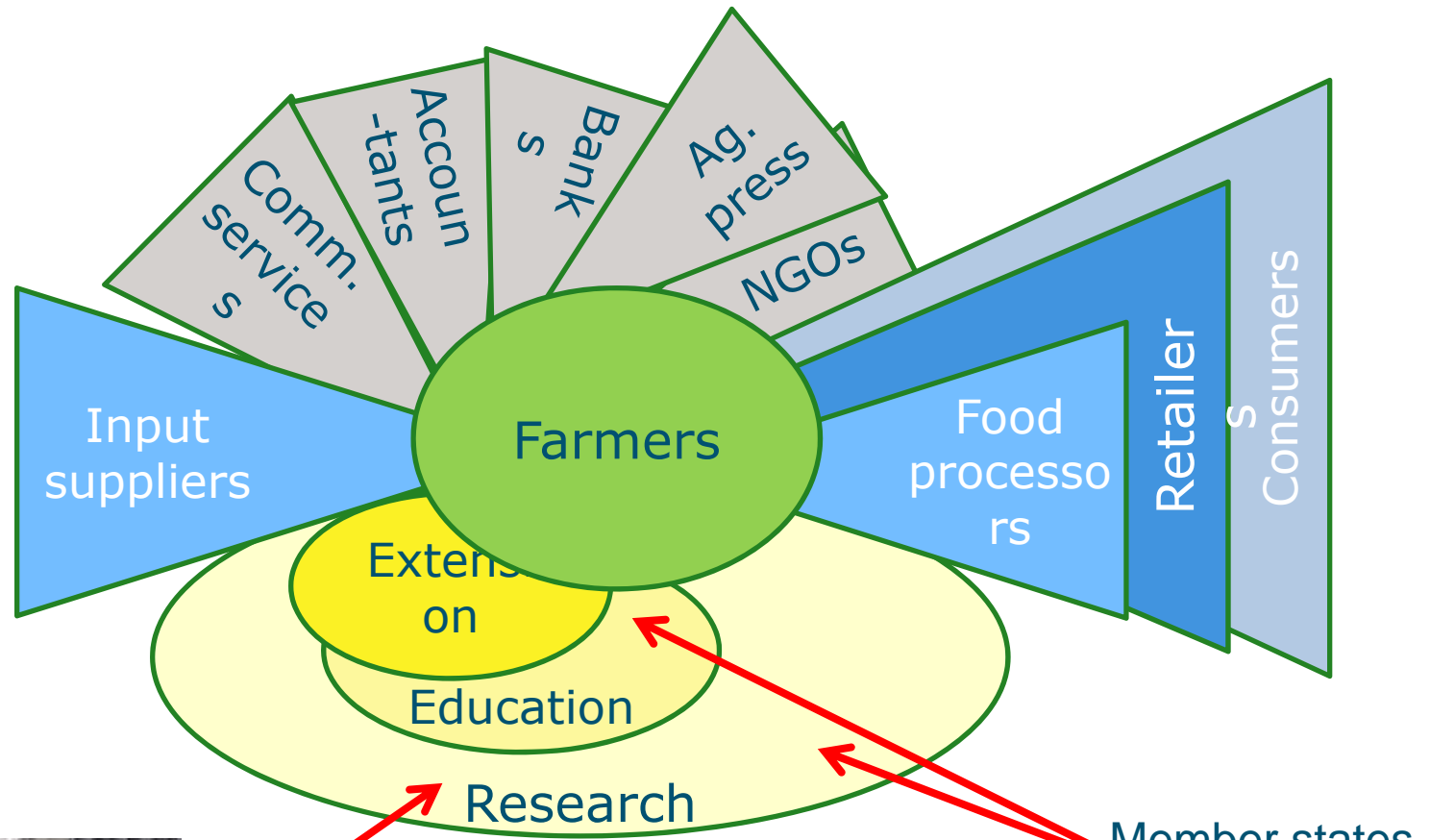
- **Funding for setting up of an “Operational Group”**: farmers, advisors, agribusiness, researchers, NGOs, etc) planning an innovation project (Art 35)
- **Project funding** for the Operational Group’s project (Art 35). This co-operation could be combined with other measures (investment, knowledge transfer, advice)
- Supporting **innovation support services**

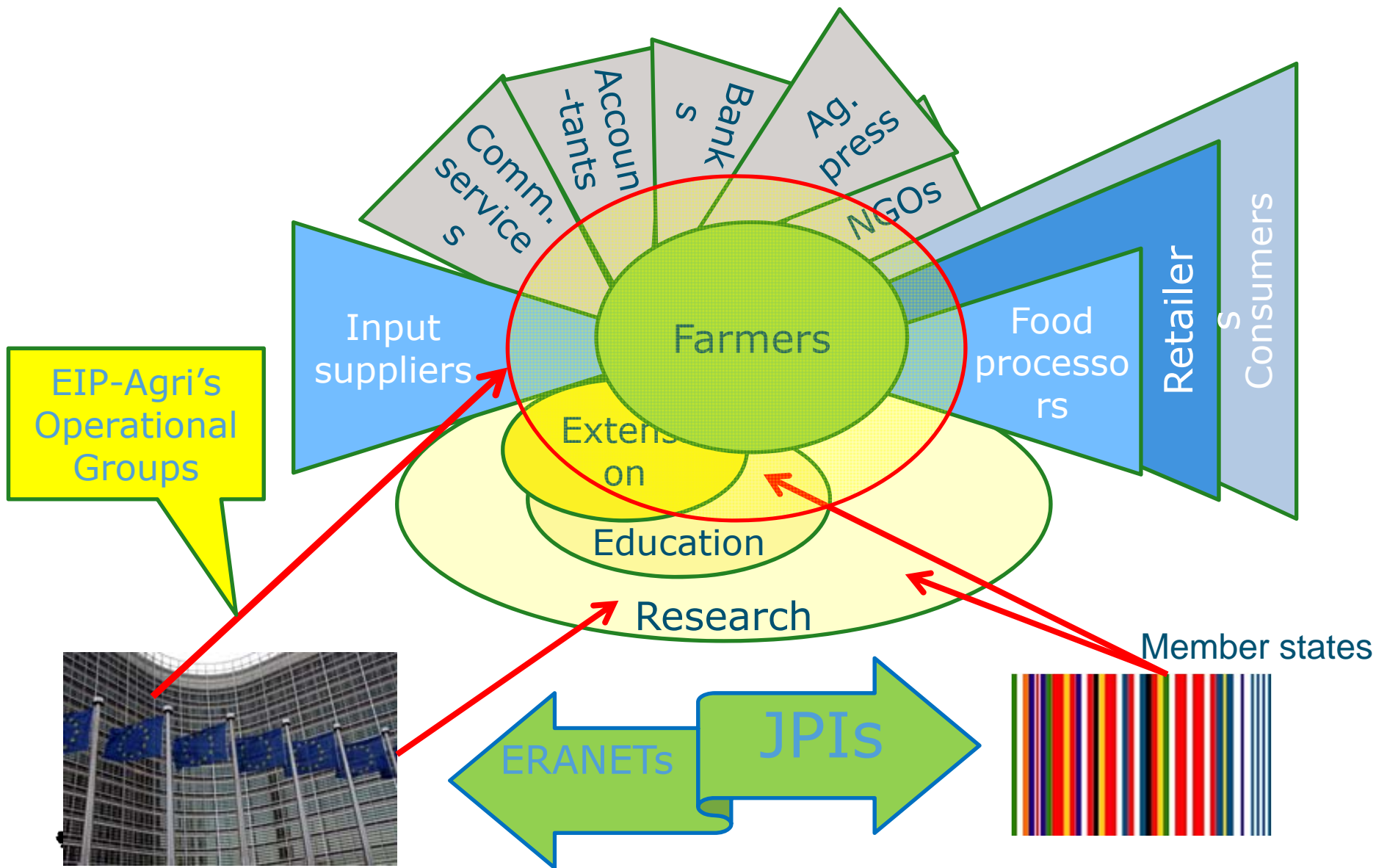


eip-agri
AGRICULTURE & INNOVATION

Horizon 2020

- Research projects, including on-farm experiments to provide the knowledge base for innovative actions
- Interactive innovation formats such as **multi-actor projects and thematic networks** genuinely involving farmers, advisors, enterprises,.... "all along the project"

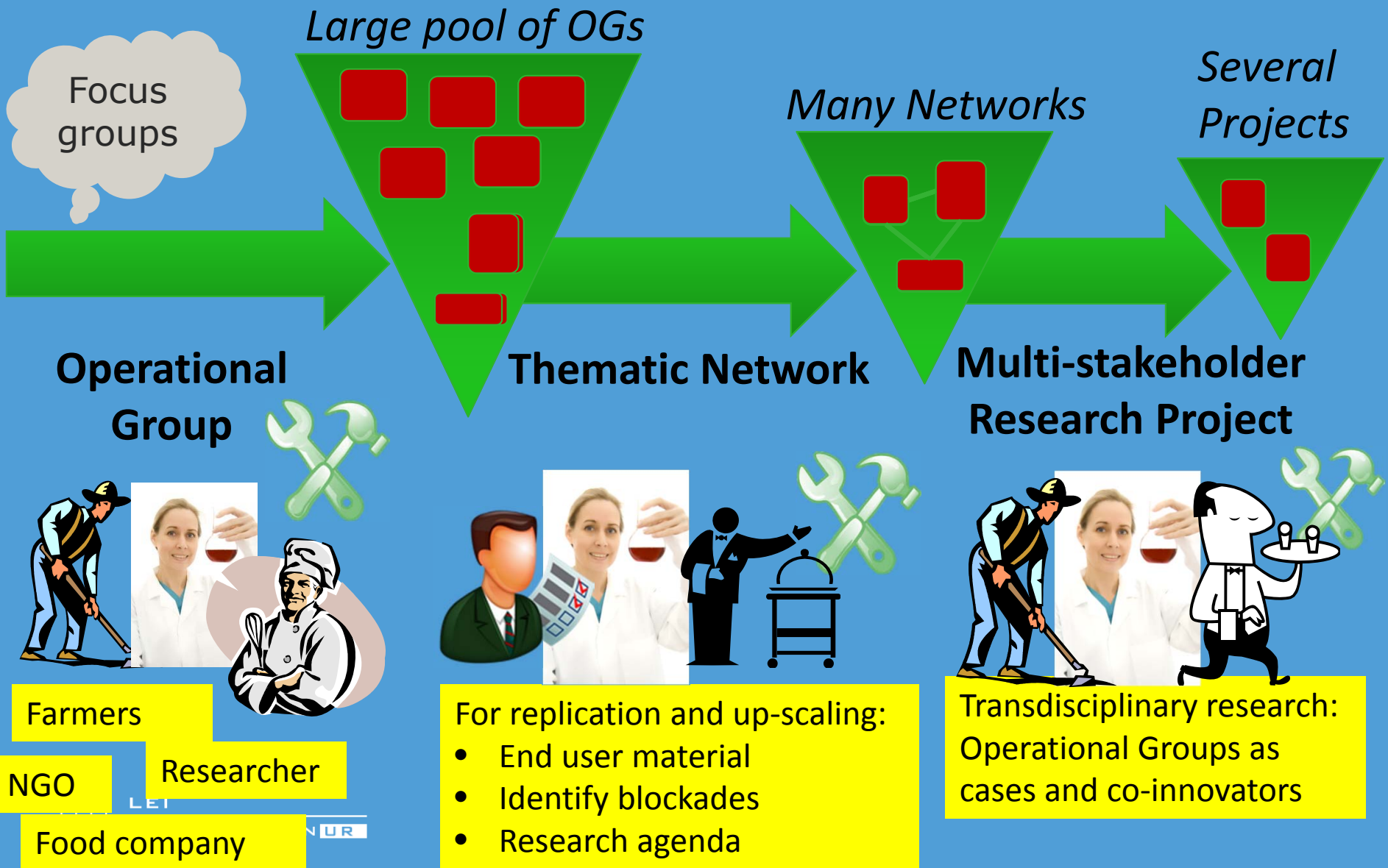




Operational Groups in Rural Development Programmes 2014-2020

- A group is implementing one concrete innovation project
- Combines the different competencies (practical and scientific: farmers, advisors, researchers etc), needed for the concrete project objectives
- The groups works action- and result-oriented, aiming to benefit from interaction for co-creation and cross-fertilisation (interactive innovation)
- Support for setting up the group and/or for the costs of the project of the group (Art 35)

Interactive innovation and transdisciplinary research



Wat betekent dat voor de WUR onderzoeker?

- Onderzoekers kunnen een rol spelen in Operationele groepen als afgerond of lopend/nieuw onderzoek kan helpen bij de innovatie
- Wellicht ook in het buitenland (bv. Catalonische POP)
- Een enkeling kan mee doen in een Focus Group
- Ontwikkelen H2020 voorstellen voor Thematische netwerken en Multi-stakeholder projecten >> Not Business as Usual
- Kritische monitoring en evaluatie van EIP-Agri (ook in vergelijking met andere EIP)
- Ontwikkel innovatie-wetenschap verder: de ideeën van afgelopen 20 jaar zijn nu staand beleid.

Thank you for your attention

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www.lei.wur.nl



References

- Reflection paper AKIS 1
- Orientation paper AKIS 2
- Summarizing powerpoint presentation available on SlideShare