

# Promoting creativity and learning through agricultural knowledge systems and interactive innovation'

3-4 December 2015 Dublin, Ireland

All information of the workshop available on <a href="www.eip-agri.eu">www.eip-agri.eu</a> at the event webpage

http://ec.europa.eu/eip/agriculture/node/1336





# The European Innovation Partnership (EIP) "Agricultural Productivity and Sustainability"

**Moving Innovation in Agriculture Ahead!** 



EIP seminar on Knowledge Systems and Interactive Innovation 3-4 December 2015 Inge Van Oost - DG Agriculture and Rural Development





# 1. What are AKIS?





# Knowledge Systems

- AKIS: <u>Agricultural Knowledge and Innovation System</u>
- The AKIS concept aims at describing **knowledge infrastructures**: institutions, organisations and interactions
- Parts of the AKIS are: farmers, advisors, research, education/training, input suppliers, retailers, media, services, ministries,...: they all produce and need knowledge
- The AKIS concept aims at better understanding knowledge flows within the system, focusing on the issue of knowledge access for a diversity of actors (Hall et al. 2006)
- AKISs mostly work at a national and/or regional scale





# Knowledge Systems

- The various parts of the AKIS influence more or less daily on-farm decisions, depending on how knowledge exchanges are organised
- A dedicated Strategic Working Group (SWG AKIS) of the Standing Committee of Agricultural Research (SCAR) has been reflecting and exploring AKIS systems since 2008
- The linear "knowledge transfer" system is not sufficiently adapted to and ready to solve new and complex challenges





# 2. Views from the SCAR and the SWG AKIS





# Background of the SCAR and the SWG AKIS

- 1974: Standing Committee on Agricultural Research
  (SCAR): Representatives of Member States and associated
  Countries that advise the European Commission and Member
  States on coordination of agricultural research
- 2005: SCAR started "Foresight" exercises
- 2006, Krems (Austria): "[SCAR to] include questions of advisory services, education, training and innovation in their discussions"
- 2007 1st SCAR Foresight: "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"





# Background of the SCAR and the SWG AKIS

- 2009 The 2nd SCAR Foresight shed a 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."
- Currently: a changing policy context: the financial crises, global food security, the EU 2020 strategy: "Smart, sustainable, inclusive growth", European Innovation partnership, CAP post 2013





# 3. The EIP-AGRI supports the building of an EU AKIS





### The EIP-AGRI in short

- 2010: <u>European Innovation Partnerships</u> want to speed up innovation through **cooperation and linking** existing policies and instruments (EIP-AGRI: COM (2012)79)
- The EIP-AGRI applies an <u>overarching concept</u> based on the interactive innovation model (applied in Operational Groups and Multi-Actor projects):
  - Collaboration between various actors to make **best use of complementary types of knowledge** (scientific, practical, organisational, etc) in view of **co-creation** and diffusion of solutions/opportunities **ready to implement in practice.**
- **EU wide EIP network** linking actors: communication, partnering, dissemination, knowledge flows and collecting practice needs



Having potential innovative knowledge is one thing, turning it into reality is another.

# "The value of an idea lies in the using of it."

Thomas Alva Edison – inventor of the light bulb





### **European Innovation Partnership**

### Rural Development

- Funding for setting up of an "Operational Group": farmers, advisors, agribusiness, researchers, NGOs, etc planning an innovation project
- Project funding for the Operational Group's project. This co-operation could be combined with other RD measures (e.g. investment, knowledge transfer, advice)
- Supporting innovation support services



EIP networks in MS/regions

### Horizon 2020

- European research projects, to provide the knowledge base for innovative actions
- Interactive
   innovation formats
   such as multi-actor
   projects and
   thematic networks
   genuinely involving
   farmers, advisors,
   entreprises, etc....
   "all along the
   project"





# What is an Operational Group?

- EIP operational groups funded under rural development programmes are multi-actor, project based and tackle a certain practical problem or opportunity which may lead to an innovation
- The operational group is tailored to this problem/opportunity and makes the best use of different types of knowledge (practical, scientific, technical, organisational, etc) in an interactive way.
- The operational group is composed of those key actors
   (farmers, advisors, researchers, businesses, NGOs etc)
   which are in the best position to realize the project's goals
   and to share experiences broadly.





# Operational Groups – State of play of Rural Development Programmes

- The EIP implementation via rural development programmes aims at a **flexible and open system** for the creation of a multiplicity of operational groups
- Around 90 MS/regions will be implementing the EIP in their 2014-2020 Rural Development programmes with regular calls for Operational Group projects during this period
- 116 of the 118 RDPs (incl. framework and NRN programmes) were adopted between December 2014 and end Nov 2015, last RDPs to be approved at the latest by end 2015
- Current estimation: more than 3000 planned OGs in 2014-2020

http://ec.europa.eu/agriculture/rural-development-2014-2020/country-files/common/rdp-approved\_en.pdf

### Horizon 2020 multi-actor projects

Minimum 3 MS in a project.

First calls in 2014.

Workshop "Interactive innovation in motion: multi-actor projects and thematic networks under Horizon 2020" on 24/11/2015:

Event page (incl. powerpoints):
<a href="https://ec.europa.eu/programmes/horizon2">https://ec.europa.eu/programmes/horizon2</a>
020/en/news/interactive-innovationmotion-multi-actor-projects-and-thematicnetworks-under-horizon-2020



Multi-actor approach and thematic networks - call 2016: video-streamed presentation (from 0:53:00 till 01:47:00) https://scic.ec.europa.eu/streaming/workshop-on-multi-actorapproach-and-thematic-networks-under-horizon-2020

+ questions & answers, project examples from call 2014



"I not only use all the brains that I have, but all that I can borrow"

Woodrow Wilson – President of the USA, 1913-1921





## 4. Towards an EU AKIS:

# The role of networking:

How can (National) (Rural) Networks' support and fit into the existing AKIS?





# EIP networking at national/regional level supported by Rural Development Programmes (NRNs)

Connecting actors and animating innovative actions:

- The action plan of the National Rural Network (NRN) should foster innovation and cover at least
  - the search of partners for Operational Groups
  - provide networking for advisors and innovation support services
- Existing networks and platforms can contribute to connecting stakeholders, preparing and discussing potential innovative ideas
- So, the NRN activities should connect within the region/country to existing networks and experience, and link to advisors and other actors to incentivise innovation projects and sharing





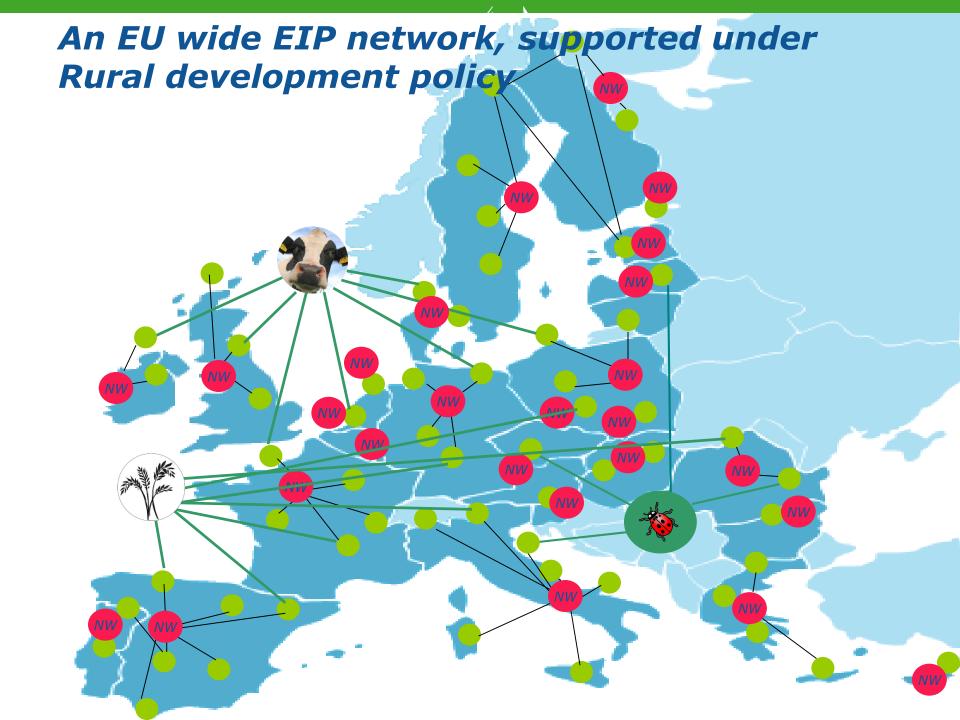
# EIP networking under Rural Development Programmes beyond national/regional level

 "Practice abstracts" (in the EIP common format) will announce and report on all Operational Group projects and all Horizon 2020 multi-actor projects, providing project visibility, long-term sharing of information and linking to other actors

http://ec.europa.eu/eip/agriculture/en/content/eip-agri-common-format

- Building critical mass: all EIP Operational Groups, H2020 multiactor projects and thematic networks will share practical info in this format through the EIP web database
- Thematically-focused networks of different actors help collecting practical innovative info: H2020 thematic networks.
- **NRNs:** <a href="http://enrd.ec.europa.eu/enrd-static/networks-and-networking/nrn-information/en/nrn-information en.html">http://enrd.ec.europa.eu/enrd-static/networks-and-networking/nrn-information/en/nrn-information en.html</a>







# 5. Knowledge Systems and Interactive Innovation:

Specific objectives for this seminar





## Starting position (farmers' stories)

- Knowledge no longer flows from researchers, trainers and technical experts only. **Mutual learning** between practitioners and other key actors is increasingly important.
- New forms of media and information technology provide new possibilities for working together and exchanging knowledge.
- Synergy and cooperation between the different parts of AKIS (governed by different incentives) is needed to close gaps between disciplines, sectors, institutes and organisations.
- **We need to understand** how farmers and other innovation actors create knowledge, where they get their information from. Is their AKIS providing sufficient support for interactive learning and innovation?





# A recent pilot project informs us on young farmers knowledge management

### What?

What kind of knowledge do they need?

### Where ?

Where are young farmers searching for it?

### Who ?

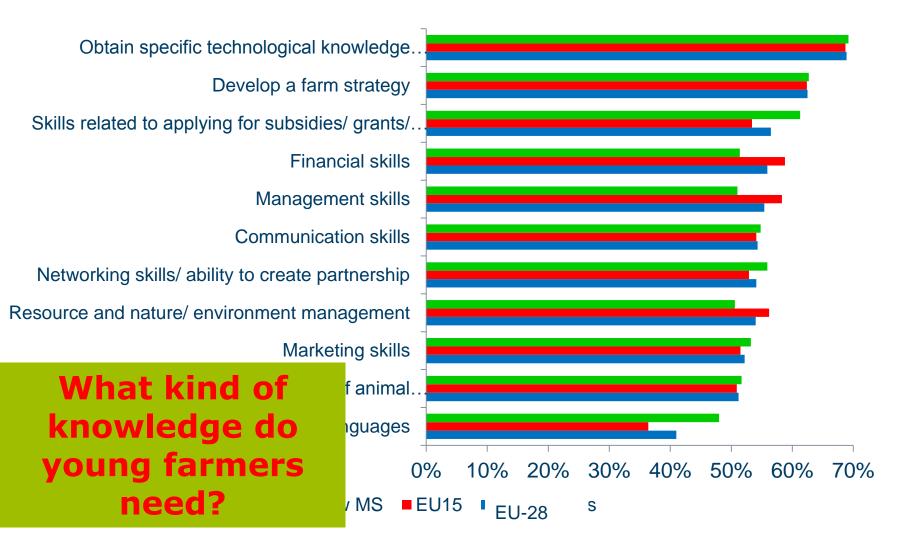
Who provides them the knowledge?

(interviews and focus groups with 2200 young farmers in the EU 28, done in 2015 by Ecorys)



# Knowledge needs of interviewed young farmers





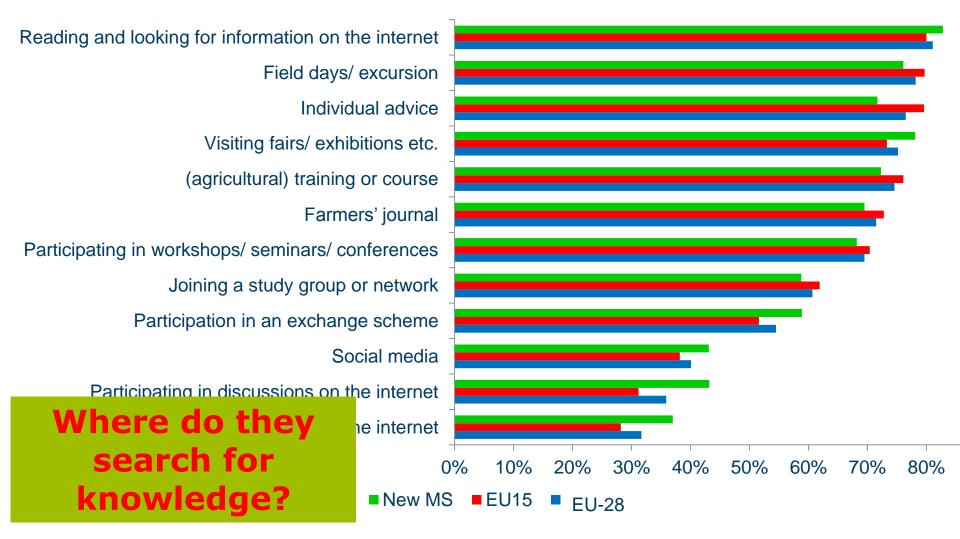






### Knowledge sources used by the interviewed young farmers





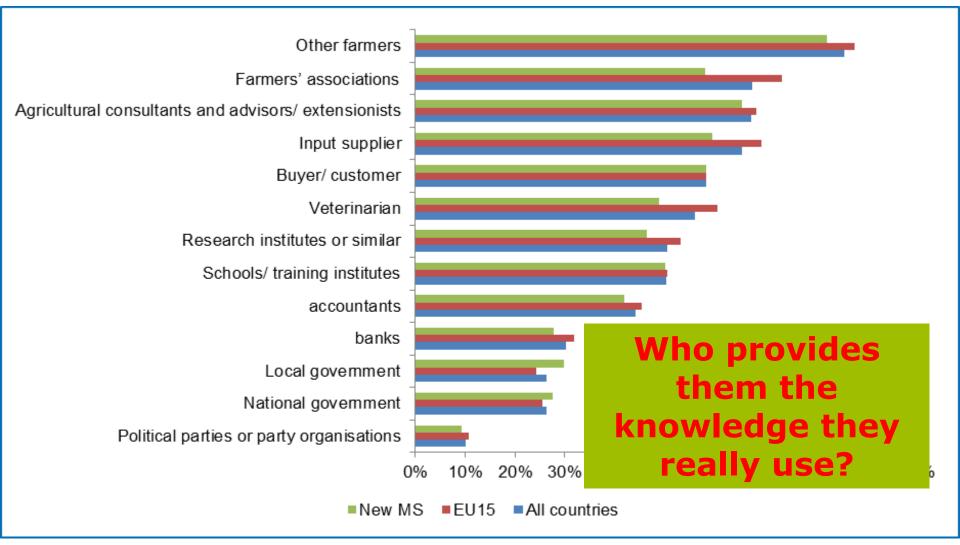






# Information sources for young farmers













# Findings from the Pilot project on knowledge flows of young farmers (Ecorys)

- What kind of knowledge do they need most?
   first of all technological knowledge, then farm strategy
- Where do they search for knowledge?
   Internet, field days and individual advice are most popular
- Who provides them the knowledge?

First: other farmers

Then: farmers' organisations, advisors and commercial actors

 Lack of time is most important hindrance to obtain information.





# Conclusions from the Pilot project on knowledge flows of young farmers (Ecorys)

- Young farmers still have a technological focus/are production oriented.
- Online training or e-learning, joining discussions on internet and social media are less important.
- Important factors influencing knowledge needs of young farmers are: the knowledge infrastructure/educational system, the possibility of getting 'real' independent advice and the quality of the knowledge available
- This indicates knowledge should be tailor-made and tuned to the specific needs





# Our work: From improving Knowledge Systems to Innovation through Interaction

- 1. Develop **understanding of AKIS** constantly creating opportunities for knowledge exchange and generating creativity. There are regional and national AKISs (posters Day 1)
- 2. Interactive innovation can develop new ideas and use existing knowledge for co-creation of new solutions: how to use all brains to get ideas, put into practice, with success? Day 1 questions, Day 2 sessions
- 3. Explore how farmers and innovation actors engage in current AKIS: **does AKIS meet the needs**, where can knowledge flows be improved? *Day 1 questions*
- **4. Which new/existing tools and approaches** are useful to enhance learning and innovation? *Day 2 sessions*





# Start building an EU AKIS





# Innovation is: an idea put into practice with success!



# Let's create a European AKIS:

To an "Agriculture of Knowledge" .....

Join the EIP

www.eip-agri.eu

Thank you for your attention!

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