





SCAR SWG AKTS Strategic Working Group on Agricultural Knowledge and Innovation Systems

"MAIN RESULTS AND FORTHCOMING ACTIVITIES"

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INTRODUCTION. BACKGROUND



EIP. MINISTRY OF AGRICULTURE







INTRODUCTION.BACKGROUND

Background of the SCAR

- 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] deals with questions of advisory services, education, training and innovation in their discussions"

Background of the SCAR

- 2007 1st SCAR Foresight : review of the links between knowledge production and its use to foster innovation
- 2009 2nd SCAR Foresight: Agricultural Knowledge Systems in Europe: "<u>currently unable to absorb and</u> internalise the structural and systemic shifts that have occurred.
- 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







AKIS 1-4 MANDATES





SWG Agricultural Knowledge & Innovation Systems

AKIS 1: a reflection paper AKIS 2: towards H2020 AKIS 3: a foresight paper AKIS 4: an ambitious mandate

AKIS 1: a reflection paper (2012)

- R&I Systems are very different between countries, regions and sectors.
- No guarantee they are fit to challenges posed by the need to increase productivity and sustainability.
- Different parts of AKIS face different challenges and are governed by different incentives:
 - Education: weakly connected to Research, extension &Business.
 - **Applied research**: reviewed on scientific output, much less on practical relevance.
- Networking and cooperation between research and extension or farmers groups is crucial



Agricultural Knowledge and Innovation Systems in Transition – a reflection paper

> Standing Committee on Agricultural Research (SCAR) Collaborative Working Group AKIS

AKIS 1: a reflection paper (2012)

- Agenda setting by farmers and food business more important than just more research dissemination
- CAP should allocate budget to encourage innovation driven research

- H2020 could focus on science-driven agricultural Research
- Linkage between H2020 and CAP should guarantee the collaboration between both types



Agricultural Knowledge and Innovation Systems in Transition – a reflection paper

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AKIS 2: Towards H2020 (2014)

Need for Innovation

- How to feed 9 billion in 2050 in a sustainable way
- Climate change
- Agriculture and food industry as an attractive sector

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

Innovation by interaction in networks

 Innovation as a process (bottom-up) / Learning aspect Thematically-focused / wide range of relevant actors.



Agricultural Knowledge and Innovation Systems Towards 2020

Standing Committee on Agricultural Research (SCAR) Collaborative Working Group AKIS-2 an orientation paper an linking innovation and research

AKIS 2: Towards H2020 (2014)

- AKIS need to innovate themselves and adopt new ways of working to address the challenges.
- Governments can stimulate innovation by implementing the EIP through operational groups that work in a participatory way. This should be translated in an instrument portfolio that:
 - Gives incentives for research, development and innovation;
 - Stimulates knowledge exchange
 - Supports the activities of facilitators, innovation brokers and tutoring paths for farmers to implement innovations;
 - Value the input and knowledge of farmers;
 - Supports operational groups also to develop cross-border interactions



Agricultural Knowledge and Innovation Systems Towards 2020

Standing Committee on Agricultural Research (SCAR) Collaborative Working Group ARIS-2 an orientation paper on linking innovation and research



Main project paradigms of the **EIP-AGRI**

Operational Groups (OG): **EARDF** (Measure 16)

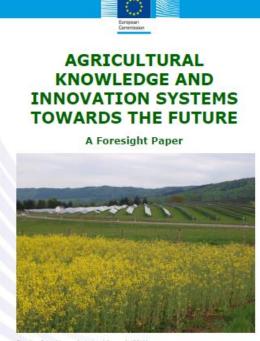
Multi-Actors Projects (MAP) - **RIA: Horizon 2020** (40% in SC2)

Thematic Networks (TN) - CSA : Horizon 2020

AKIS 3: a foresight paper (2016)

- Innovation and the role of AKIS
- AR and ARD: worlds that could come together
- ICT as a drivers of change in the agri-food sector
- The role of e-science in agriculture: how escience technology assists participation in agricultural research

 A changing role of advisory services is needed



Standing Committee on Agricultural Research (SCAR) Strategic Working Group AKIS-3 Report

EUR 27692 EN

AKIS 3: a foresight paper (2016)

AKIS Organisation

- Public authorities have a range of responsibilities and many options for action when it comes to organization and governance of AKIS
- Farmers in pluralistic AKIS need support for "finding their way around" (among public and private providers of advice)
- Big Data and other ICT developments will not only influence agriculture but also science, research and development and the innovation processes within the AKIS.
- Agriculture should not be treated as an isolated entity, but AKIS should identify cross-overs (ICT, Food and other bioeconomy related sectors).



AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS TOWARDS THE FUTURE

A Foresight Paper



Standing Committee on Agricultural Research (SCAR) Strategic Working Group AKIS-3 Report

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AKIS 3: a foresight paper

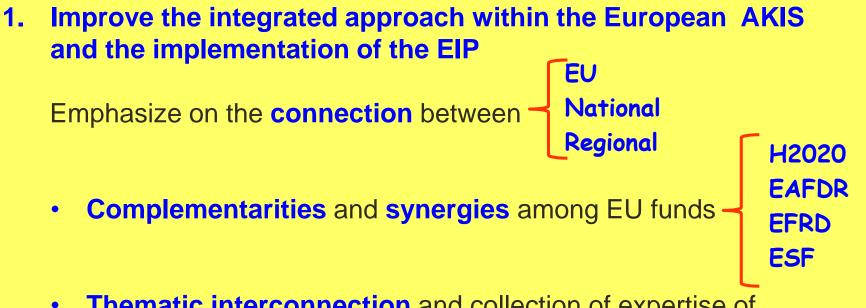
Policy framework for AKIS governance

- Research funding should facilitate cross-overs to other research field
- Further explore Public Private Partnerships in research and innovation programs for agriculture
- Excellent Research Infrastructures are relevant.
- International collaboration is attractive for cross-fertilization
- A real European Research Area is needed

Research issues

- Research on ICT including E-Science, and especially its governance and interoperability is needed.
- Social sciences, including economics, are an important discipline, not to be neglected in programming research

AKIS 4: an ambitious mandate



- Thematic interconnection and collection of expertise of interactive innovation projects at different levels
- Further **development** of the **EIP approach**. With a consideration to cross cutting issues:
 - New approaches for agricultural education systems (Policy brief)
 - Future of Advisory services (Policy brief)

AKIS 4: an ambitious mandate

- 1. Learning and feedback from interactive project approaches (multi-actors projects, thematic networks, operational groups)
- 2. Reflection on more "integrated" approach along the hole value chain, working together with SCAR SWG Food systems
- 3. Cross-fertilization with other EIPs and sectors
- 4. Analysing the perspective of AKIS in Food and Nutrition Security and Sustainable Agriculture across developing countries (together with SCAR ARCH Group)

(explore successful experiences from other countries that could be scaled up and investigate how to influence the common research agendas)







EIP-AGRI in SPAIN

Implementation EIP-AGRI SPAIN

CAP Rural Development.....EIP AGRI......H2020



European Innovation Partnership Rural Development Horizon 2020 **RE/AUTONOMOUS** Funding for setting up of an "Operational Group": farmers, to provide the advisors, agribusiness, knowledge base for researchers, NGOs, etc) innovative actions eip-agri planning an innovation Interactive project (Art 35) innovation formats Project funding for the such as multi-actor **Operational Group's** EIP projects and project (Art 35). This cothematic networks networks AGRICULTU operation could be genuinely involving in combined with other RD measures (e.g. investment, knowledge combined with other RD farmers, advisors, MS/regions entreprises, etc.... "all along the transfer, advice) project"

Supporting innovation support services

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Research projects,

 $\mathbf{\Sigma}$

EI/CD-

First call Multiregional Operational Groups. Ministry of Agriculture

FOCUS AREA	Subvention applied (€)	Number of proposals	Subvention applied (average, €)
Modernization of farms	5.580.268	107	52.152
Industry and competitiveness	4.835.333	92	52.557
Biodiversity and natural resources	1.437.941	35	41.084
Irrigation	353.947	8	44.243
Renewable energy. Circular economy	1.242.941	25	49.717
TOTAL	13.450.430	267	50.376

OG: Autonomous regions

Rural Development Programs at regional level

Andalucía: 73
Galicia: 49
Extremadura: 31
Cataluña: 24
La Rioja: 18 proposals
País Vasco: 6









CONCLUSIONS





CONCLUSIONS

This kind of SCAR groups serve as a forum for sharing experiences on how we do develop our research&innovation agenda for facing the challenges to adapt to a changing landscape that demands resilence not only for the soils, animals and crops, but also for the R&I policy framework

Overcome the bottlenecks/fill gaps/roadmap policy tools available/tackle the demand side

Thank you for your attention

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