



Prospects for Farmers' Support: Advisory Services in European AKIS

Selected Findings

Project Duration
December 2012- May 2015

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A multidimensional framework to produce knowledge on European AKIS

There is a wide consensus among scholars and policy makers that knowledge is a key resource to support European agriculture in meeting new challenges such as e.g. international competition, food safety, health or environmental issues. Organisations delivering farm advice are targeted by different EU policies, such as the “Farm Advisory System” (FAS) or the “European Innovation Partnerships” (EIP) regulations. But precise and up-to-date knowledge on these services were missing: current transformations of their funding, organisation, advisory methods, performance for different groups of farmers and rural populations.

Aim

PRO AKIS aimed to fill this knowledge gap and to answer the question: How and from what sources can farmers get reliable and relevant knowledge, orientation and support to continuously evolve, to successfully solve problems and to respond to external expectations and development opportunities?

Literature Review

Building on the literature, we specified alternative analytical frameworks and key concepts used in previous AKIS studies (see www.proakis.eu/objectives). The second review discussed the methods that are available to assess the effectiveness of farm advisory services. Some of these methods (inspired from systematic reviews) were applied to two major topics: farm labour exposure to pesticides and gender issues.

Stakeholders' Consultation

In addition to the debates in the stakeholder committee of the program, the AKIS inventories and the results of case studies were presented and discussed in 6 regional workshops involving various experts and stakeholders.

- The studies conducted in PRO AKIS focused on the current state of **farm advisory services** within the **infrastructure of Agricultural Knowledge and Information Systems (AKIS)**.
- **Farm advisory services:** the entire set of organisations that enable farmers to co-produce farm-level solutions by establishing service relationships with advisers so as to produce knowledge and enhance skills.
- **AKIS:** a system concept that links people and institutions to promote mutual learning, to generate, share, and utilize agriculture related technology, knowledge, and information. The system integrates farmers, agricultural educators, researchers, and advisors to harness knowledge and information from various sources for improved livelihoods.
- An **infrastructure perspective on AKIS** includes the analysis of institutions and regulations (public policies, coordinating bodies), but also tangible and intangible investments (Research & Development expenditures, experimental stations) supporting AKIS.

“The analytical framework focussed on the AKIS infrastructure.”



Regional workshop, photo taken by the Polish partners, 2014



PRO AKIS steering committee meeting, photo taken by the Portuguese partners, 2014

AKIS in Europe: Overview

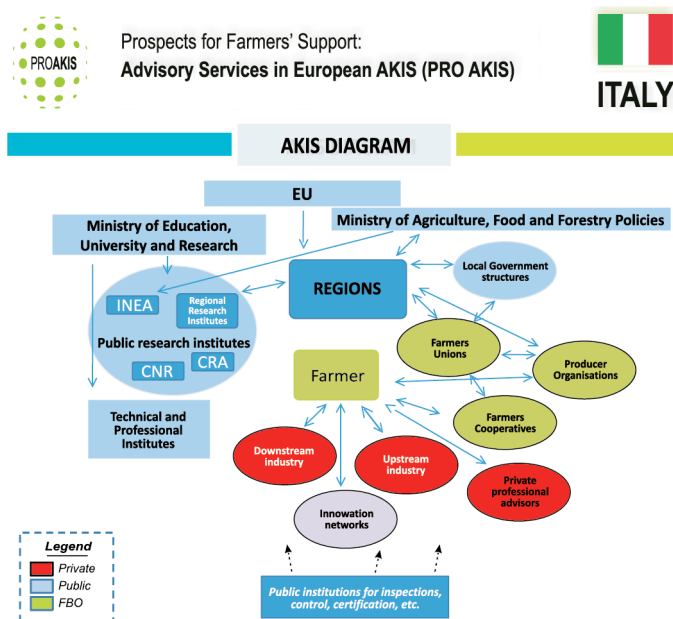
The research showed the great diversity of AKIS and advisory systems that exist in Europe; each country having developed a system that is adjusted to its particular institutional situation, needs and actors. In federal or devolved countries, this also applies to the regional level, so that for example, in Germany, the UK, and Belgium, the AKIS are characterised by diverse arrangements in each administrative unit of the country.

In most countries, the public sector functions as a supplier of information, advice and funding. Research and education actors (both private and public) create knowledge and induce innovation, provide education and - in many countries - also advisory services. The private sector is widely represented in AKIS, for example as many thousands of consultants that operate either independently (e.g. Italy) or as part of a large advisory organisation (e.g. Sweden) that may be a farmer-based (e.g. Finland).

There is a trend of decentralisation and fragmentation (vertical and horizontal) of advisory services (e.g. Greece, Portugal, Italy, Spain), partially as a result of commercialisation and privatisation of public organisations.

“European AKIS are characterised by institutional pluralism.”

This is coupled with increasing competitiveness between suppliers of advisory services and overlapping activities, as well as the emergence of new providers such as NGOs and farmer-based organisations. In France, for example, farmer-based organisations such as Chambers of Agriculture play a significant role. NGOs do not generally play a significant role in AKIS in most



Example of an AKIS diagram

surveyed countries. Given this institutional diversity, coordination of knowledge flows among the various AKIS actors is key for successful cooperation. However, in some countries (e.g. Greece, Poland, Portugal), there is a lack of coordination bodies for AKIS actors.

Overall, European AKIS are characterised by institutional pluralism, which may be, but is not necessarily, linked to fragmentation (see example diagram above). As PRO AKIS explored with various AKIS stakeholders in three regional workshops, held in Denmark, France and Poland in 2014, the AKIS concept is useful for generating an overview of a country's situation (see Table 1). However, it is not widely known yet, in particular by practitioners and policy makers, and its practical use may be restricted.

Table 1 Types of dominant advisory organisations in the EU-27

Type of dominant advisory organisation	Country
Public	Bulgaria Greece Hungary* Ireland Latvia* Poland* Romania* Slovakia*
Private	Estonia* The Netherlands
Farmer-Based Organisation	Austria* Belgium Cyprus Denmark Finland France* Lithuania* Portugal Slovenia* Spain Sweden
Public/Private	Czech Republic* United Kingdom
Public/Private/FBO	Germany* Italy Malta
Public/FBO	Luxembourg*

Note: Countries with an agricultural chamber are marked with an asterisk. Croatia has not been included.

AKIS in Europe: Agricultural Advisory Services

Agricultural advisory services are the entire set of organisations that enable farmers to co-produce farm-level solutions by establishing service relationships with advisers, so as to produce knowledge and enhance skills. European countries differ greatly in the way they organise advisory services. To allow for an overview of different types, European member states were characterised according to their dominant advisory organisations. Such a typology can be used as a basis for analysing and evaluating advisory services across countries, and for clarifying discussions about the relative merit of different providers.

“PRO AKIS has produced the first systematic database of advisory services within the EU.”

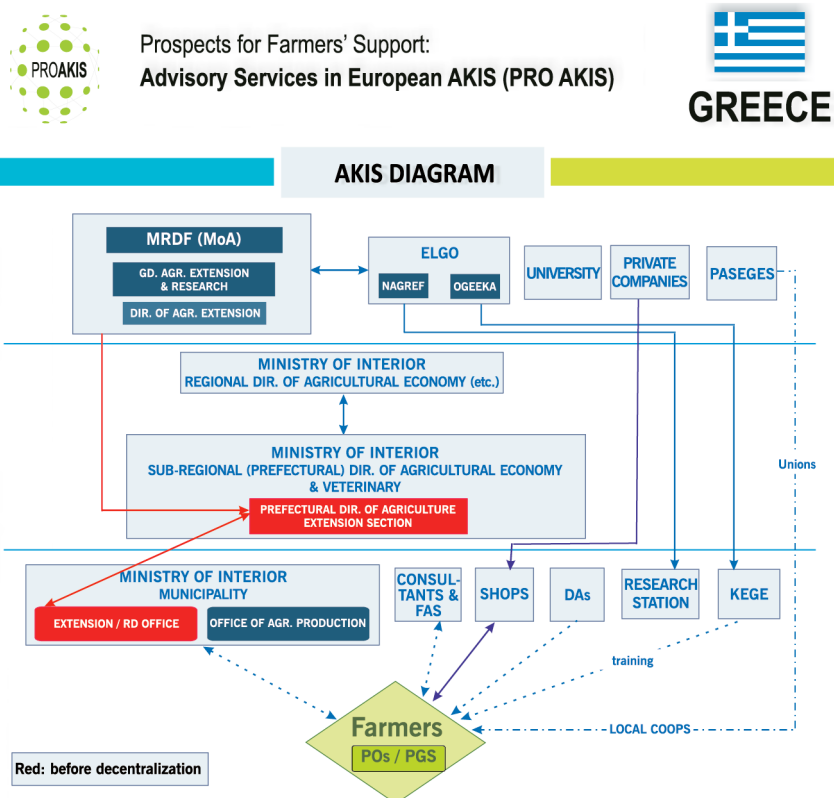
Therefore, PRO AKIS applied a simplified typology where the dominant advisory service provider was identified and categorised according to the types ‘public’, ‘private’, ‘farmer-based’ and ‘other NGO’. We found no instances where the main advisory organisation was of the type ‘other NGO’. However, also hybrid categories were encountered in practice.

For example, Chambers of Agriculture could be classified as part of the public sector or farmer-based third sector organisations. Another example is private consulting companies owned by farmers’ unions, and private universities that charge for advice provided.

The best way to deal with this diversity would be to describe and characterise every advisory system with regard to a) the providers and b) the funding sources of advisory services (see individual country reports at: www.proakis.eu/countryreports).

No straightforward classification – Simplified typology with overlaps

Overall, there is a majority of countries in the EU where either a farmer-based organisation (11 countries) or a public organisation (8 countries) is the dominant advisory organisation. This does not preclude others types of organisations from e.g. the private sector to be actively involved in providing advice. A mixture of dominant organisations can be found in countries with a federal or devolved structure (Germany, UK, Italy), but surprisingly also in relatively small countries (Malta, Luxembourg). A further observation is that agricultural chambers exist in 13 countries, but there is no pattern as to whether they take on the role of the main advisory organisation.



Example of an AKIS diagram

The effectiveness of advisory services in responding to demands of small-scale farmers

Case studies from Bulgaria, Poland, Portugal and the UK

The Challenges

The challenges small-scale farmers pose to advisory services are primarily related to the wide range of topics and specialised knowledge requirements of these often diversified farming enterprises (e.g. production of multiple commodities, in addition to subsidy access, regulatory compliance and business diversification). Due to the limited financial turnover of small farming enterprises, there is a need for affordable local services. Small-scale farmers rely heavily on local tacit knowledge, particularly for commodity production, but this is often not up to date. There is also a fear of penalties associated with non-compliance to regulations, which make farmers reluctant to ask for advice. There is therefore a need to enable risk-free updating of local knowledge.

The Case Studies

Small-scale farmers and advisors were studied in Bulgaria (South Central Region near Plovdiv), the UK (crofters in the West of Scotland), Poland (agri-tourism enterprises in the Carpathians) and Portugal (new entrants to berry farming).

The small scale nature and limited profitability of these farms represents a challenge to formal advisory services, which increasingly rely on fee for service models to fund their activities.

Without additional government support, providing formal advice is costly for them. Fewer private consultancy businesses are established in regions dominated by small-scale farming. In some cases, small-scale farmers will seek 'free' advice, available from input suppliers, which often recommend purchasing specific products/ services. Farmers are more likely to access formal advisory services for assistance with accessing subsidies and grants, than for production advice.

Highlights

There was evidence in these case studies of:

- Pluralist advisory services including non-agricultural activities and farm diversification;
- Networking and informal advice between different stakeholders;
- An increase in the bureaucratic tasks in public administrations and farmer-based organisations at the expense of supplying targeted advisory services;
- New entrants to small-scale farming were active in seeking new knowledge from a variety of sources, and brought considerable transferable knowledge;
- Often a disconnect from academic research.

We identified a need for:

- Lifelong learning and training for both advisors and farmers;
- Appropriate training for private advisory services and input suppliers;
- Medium term strategies to support new entrants and small-scale farm development;
- Advisory methods that draw on and enhance local, tacit knowledge held by local leaders;
- Individually tailored and locally available advisory services;
- Targeted Research & Development to respond to the growing knowledge needs of small-scale farmers.



Typical crofting landscape, West coast of Scotland, photo taken by the Scottish partners, 2014

The capacity of advisory services to bridge research and knowledge needs of farmers

Case studies from Bulgaria, France, Germany and Poland

The Challenges

A key determinant for the successful development of innovations and the spread of new information are well-functioning linkages between research and practice, both as a major source of knowledge and as the intended applicant of new insights, practices and technologies. Creating and maintaining such linkages are traditional functions for advisory services. The increasing diversity of AKIS actors on the one hand and shrinking public funds for agricultural R&D on the other give these intermediary functions even more importance. New technologies (e.g. ICTs), new actors (knowledge brokers, intermediaries) and new public policies (e.g. the EIP Agri) provide opportunities to directly connect research and practice in Europe. In this context, is there still a role to play for agricultural advisory services?

The Case Studies

We studied interfaces between agricultural research and practice in four cases: In Bulgaria, three scientific institutes, one experimental station and the Agricultural University of Plovdiv were selected to identify knowledge transfer mechanisms from science to practice.

“Well-functioning linkages between research and practice are key for spreading information and innovation.”

In Germany, the AKIS in the federal state of Bavaria was chosen where the advisory service organization recently underwent a reform process from a pure public to a combined advisory system that includes both private and public advisors. In France, we studied the development of decision support tools (DSTs) by different public and private research organisations. These tools aim at providing scientific evidence directly to farmers (e.g. is a pest present in a given field? How much nitrogen to spread when and where?). In Poland, demonstration farms perform various functions in the knowledge system, they are places where research is being conducted, where meetings, training courses and workshops are organised for farmers, advisors, and researchers.

Highlights

- Both small and large scale farmers in Bulgaria receive information from research bodies e.g. through personal contact at organised events. While small-scale farmers also rely on informal and indirect knowledge sources, large scale farmers make use of formal consultants and scientists. Farm location with regard to the district administrative centres influences access to advice.
- Neither farmers nor public research in Bavaria call for closer contact and direct exchange – farmers’ research needs seem to be well taken into account within the multi-level, multi-actor AKIS in Bavaria.
- The farmer-adviser relationship is still needed to integrate heterogeneous knowledge and support farmers’ decision, but DSTs as new shared cognitive resources could have a great impact on the back-office dimension of advisory services, and downsize its contribution to R&D within AKIS.
- The result of the cooperation of researchers, advisors and farmers in demonstration farms is the generation of new knowledge, its dissemination and adaptation for practice.



Presentation during a demonstration farm meeting, photo taken by the Polish partners, 2014

Agricultural innovation networks to enhance farmers' ability to innovate in cooperation with other rural actors

Case studies from Germany, Italy, Portugal and UK

The Challenges

The European Innovation Partnership "Agricultural Productivity and Sustainability" takes an innovation systems approach which understands innovation partly as the result of interactive learning processes involving multiple actors in knowledge networks. How can these networks be created and sustained, and how do they link with existing knowledge infrastructures and advisory services, in particular in countries where the state disinvests in advisory services? A challenge is that networks exhibit diverse configurations and dynamics, as a result of the different problems they address, the national AKIS they are embedded in, as well as the diverse socio-economic and cultural contexts.

The Case Studies

The studied networks were all place-based, a feature that was conducive to the creation and exchange of knowledge required at local and regional level. Some were initiated based on a government initiative (research project in Germany, skills development programme in Scotland), while others were initiated by local actors (Anti-Mafia network in Italy and Berry network in Portugal). The networks functioned as learning platforms and facilitated social interaction and knowledge exchange between farmers and relevant actors. Networks were able to cover diverse topics and respond to knowledge needs expressed by participants. The examples ranged from delivering advice in particular agricultural sectors (small fruits in Portugal) to providing holistic learning experiences (Monitor Farms in Scotland). The networks did not necessarily focus on promoting technological innovation but rather supported small-scale and incremental adjustments, as well as organisational, behavioural and social innovations.

Farmers particularly valued the ease of joining, low costs associated with participation (membership free of charge), the opportunities to socialise with others, and the opportunity to learn, gather ideas and exchange knowledge. The networks were assessed to be stable while there was an associated (often public) funding stream. With the end of programmes or projects, these networks are likely to dissolve. This emphasises that they cannot be used to counter disinvestment in agricultural knowledge and advisory infrastructure.

Highlights

- The studied agricultural networks contributed to productivity and sustainability goals, with profitability being a relevant goal for farmers; rural networks encompassed broader goals related to smart, inclusive and sustainable development.
- Networks complement the existing advisory infrastructure through the involvement of researchers, experts, experienced advisors and other technicians.
- Networks can fill gaps in the AKIS that result from structural weaknesses due to disinvestment in the public sector.
- The agricultural networks exhibited a pattern of small-scale, incremental innovations, building on continuous marginal improvements in farming practices and business models. These innovations are enhanced by mixing tacit and explicit knowledge through informal inter-personal and professional relationships among network actors.

"Innovation networks cannot be used in place of investment in agricultural knowledge and advisory infrastructure."



Blueberry plants, photo taken by the Portuguese partners, 2014



PRO AKIS outputs

INVENTORY
www.proakis.eu/inventory

Posters

- Posters of the AKIS in the 27 member states that follow a common format and layout to aid comparison.
- They contain AKIS diagrams that visualise the components, structure and - in some cases - the relationship between AKIS components in each country.
- They provide an overview of the key organisations and actors in each AKIS, the main sources of funding, clients and advisory topics.

Searchable Database

- The database highlights the dominant type of advisory organisation in each country, and is linked to an interactive map with a search function and fact files on each country.
- The colour-coded map also provides an overview of the spread of advisory organisations.

DIRECTORY
www.proakisinventory.eu

Country Reports

- **27 full country reports** describing the national AKIS and advisory organisations.

Directory

- This is a publicly accessible directory of agricultural advisory organisations in European member states.
- This directory can be searched by country, year of establishment, type of organisation and advisory topics.
- The directory is passed on for maintenance by the Service Point of the European Innovation Partnership - Agriculture.

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