



Agricultural Knowledge and Information Systems in Europe: Weak or strong, fragmented or integrated?

What are AKIS?

The term Agricultural Knowledge and Information System (AKIS) is a concept to describe the exchange of knowledge and the services which support these exchanges in rural areas. Recently, AKIS are also referred to as 'Agricultural Knowledge and *Innovation* System', for example by the European Commission (EU SCAR 2013).

We define an AKIS as a system that links people and organisations to promote mutual learning, to generate, share, and utilize agriculture-related technology, knowledge, and information. Components of an AKIS are diverse actors from the private, public and non-profit sectors relating to agriculture. The system may include actors such as farmers, farm workers, agricultural educators, researchers, non-academic experts, public and independent private advisors, supply chain actors, and other actors in the agricultural sector.

Inventory of AKIS in Europe

In order to capture the multi-faceted AKIS in 27 European member states, the PRO AKIS project compiled an inventory of the AKIS actors and organisations, and their linkages, documented in country reports¹. For the diagrammatic representation of each AKIS, an infrastructural perspective was adopted (Knierim *et al.* 2015). The diagrams provide an overview of the organisational diversity, allow a better understanding of who produces and exchanges agricultural knowledge, and help to identify any gaps or missing links. Examples are shown in Figure 1-4. Diagrams were produced by different teams which led to differences in representation, e.g. use of colours, terminology, or structure. Example diagrams are shown here for illustration purposes but should be read together with the respective country report for better understanding.

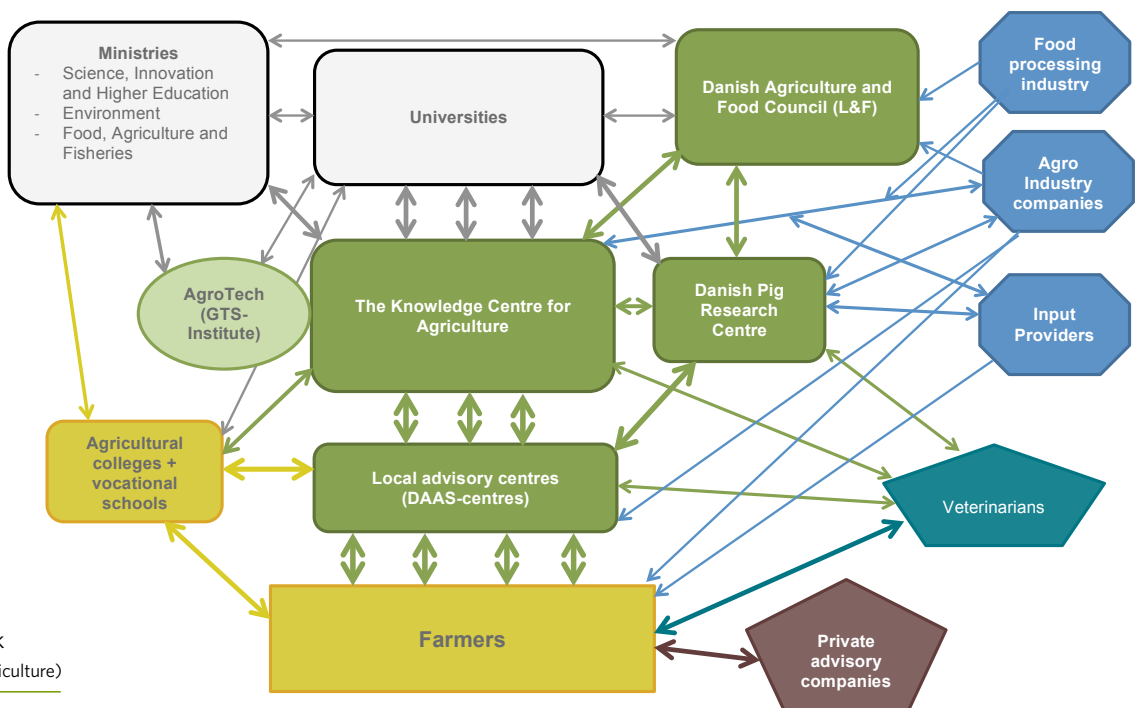


Figure 1: AKIS in Denmark
(Source: Knowledge Centre for Agriculture)

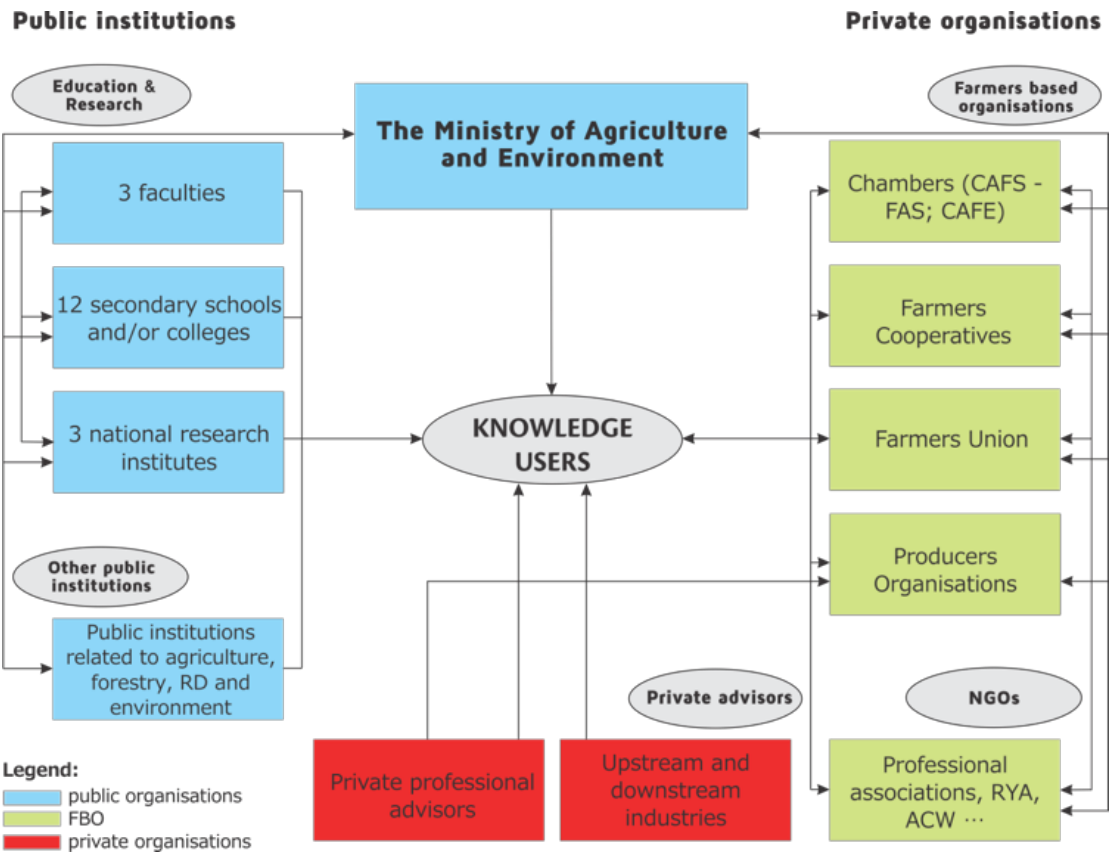


Figure 2: AKIS in Slovenia
(Source: V. Erhart)

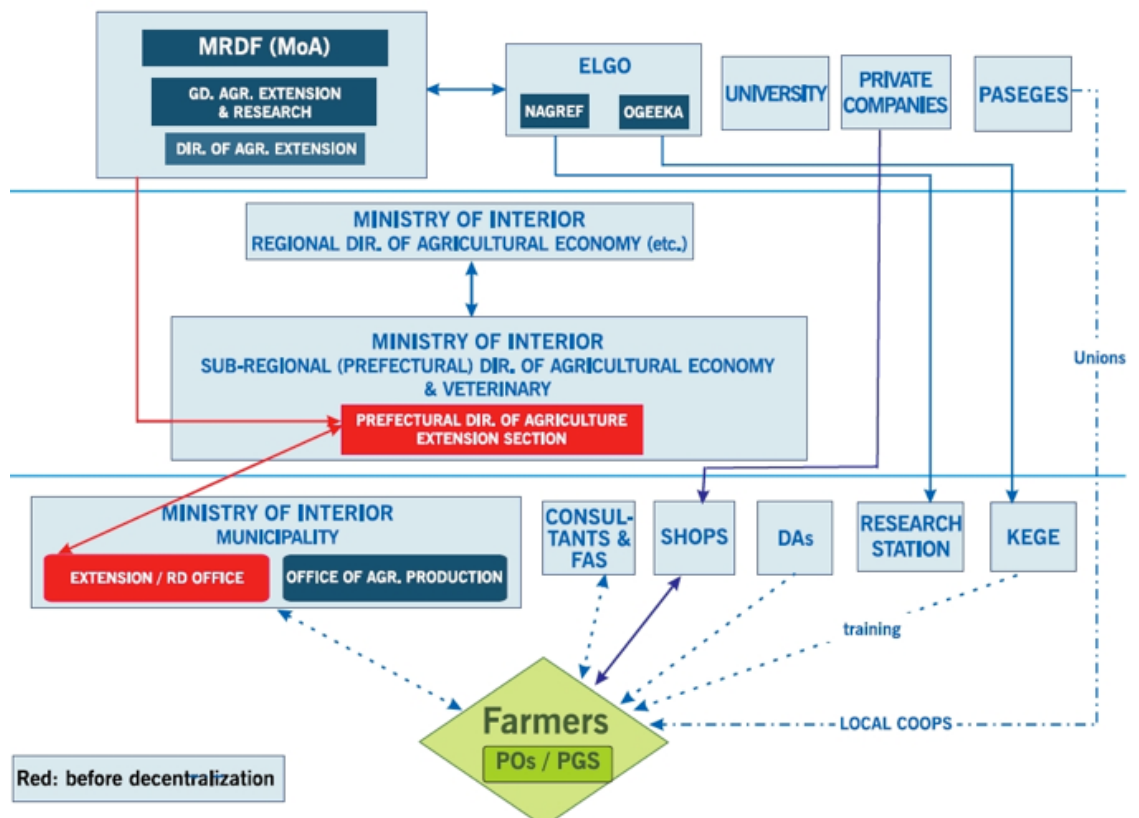


Figure 3: AKIS in Greece
(Source: A. Koutsouris)

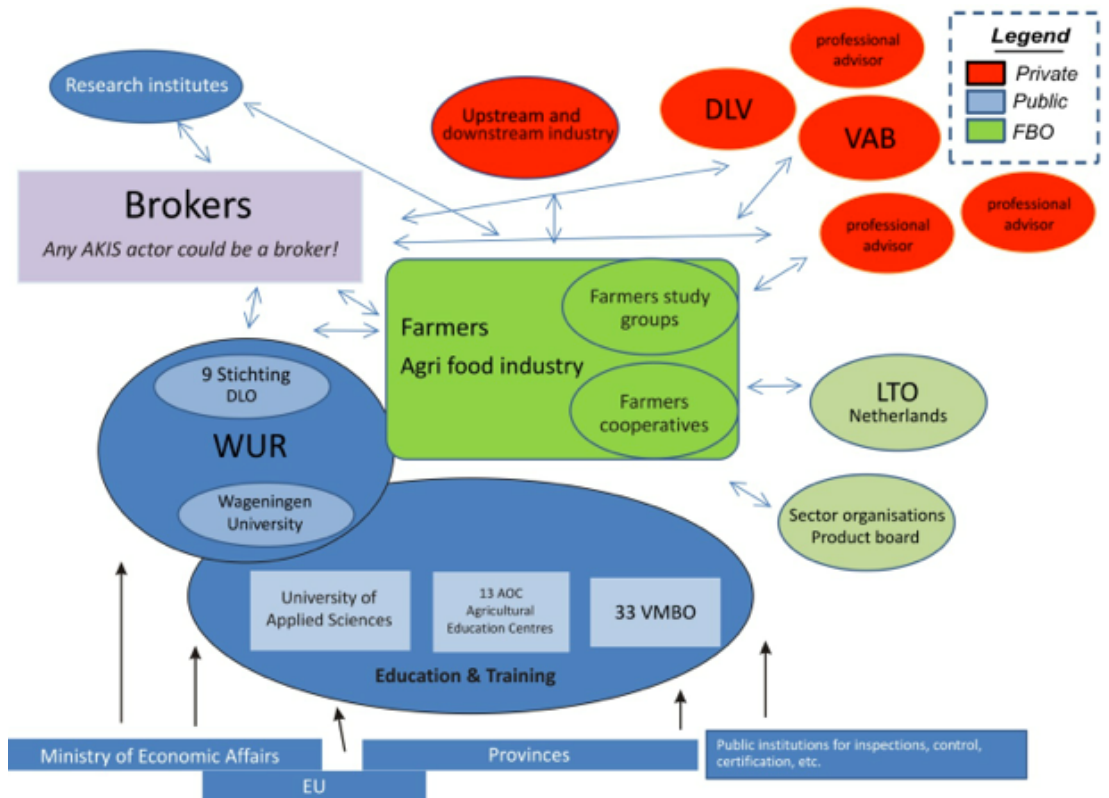


Figure 4: AKIS in Netherlands
(Source: M. Caggiano)

European AKIS are complex and very diverse. Each country has developed a system that corresponds to its particular situation, needs and actors. In countries with a strong regional structure (federal or devolved countries) such as Germany, the UK, Italy and Belgium, 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 for the agricultural sector and assures coordinating activities. Research and education actors (both private and public) create knowledge and innovation, provide education and – in some 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. in Finland or Sweden).

Characterisation of AKIS

The national AKIS are not directly comparable because of their embeddedness in national institutions, laws and cultures. However, they can be characterised along a continuum from weak to strong ('strength'), and fragmented to integrated ('level of integration'). In a strong AKIS, there are influential actors or organisations at national level that support (parts of) the knowledge system. 'Strong' also indicates that dedicated resources are allocated to the AKIS, for example public investment is available to enhance advisory services, knowledge production and exchange. Finally, in a strong AKIS there would be evidence that farmers are being reached by and benefit from advisory services. A weak AKIS would be lacking of these features.

The 'level of integration' refers to the formal links between AKIS actors. A fragmented AKIS is characterised by several independent knowledge networks that operate in parallel. They are typically not well coordinated, rarely cooperate and even might compete. An integrated AKIS features a coordinating structure, often a public body, and the system is supported by national policies on AKIS and advisory services that frame the (inter)actions of AKIS actors. In addition, in an integrated AKIS there is evidence of linkages between various actors.

