4.2 Identifying AKIS actors for network organisation

Rationale

The CAP Strategy identifies the modernisation of the agri-food sectors as a horizontal objective, through the promotion of knowledge creation and sharing, as well as innovation and digitalisation in agricultural and rural areas. Since 2023, EU Member States are setting up the CAP Networks to promote the CAP Strategic Plans implementation, foster innovation and digitalisation in agriculture and rural development and ensure adequate knowledge flow between different actors.

In Hungary, the CAP Network is linked to the whole of the AKIS, and it aims at bridging the gap between farmers, advisors and researchers, through facilitating the interaction between these different AKIS actors and knowledge flows, along with creating synergies between the actors and the between knowledge transfer, innovation and digitalisation interventions.

In fact, the AKIS strategy of Hungary relies on a farmer at the centre approach that calls for organizing the AKIS in such a way that the different elements of the system work in synergy, with a particular focus on reducing the gap between farmers and researchers, and on integrating technological advances in innovation and digitisation into farmers' practices.

The CAP network will run specific innovation-oriented networking activities that involve and facilitate interaction between all stakeholders to increase knowledge flow within AKIS and to stimulate the creation of EIP operational groups and participation in international knowledge flows such as Horizon Europe (projects, missions and partnerships) and international EIP-AGRI activities.

Keywords
CAP Network, stakeholders mapping

Potential users
Managing Authority, CAP Networks

Country
Hungary

Funded by the European Union

Solution

As well, the CAP Network will create synergies between the CAP and Horizon Europe through the definition of a formal agreement with Horizon Europe, the National Contact Point for Partnerships and the Soil Mission, the National Agency for Research, Development and Innovation and the Express Innovation Agency. This cooperation will be the basis for developing synergies.

The CAP network is set up around three units that support the implementation of the CAP SP on three complex and priority areas (box 1).

The CAP Network's was set up in 2022 under the responsibility of the managing authority of the CAP Strategic Plan. It is funded by the Technical Assistance of CAP SP for a total amount of EUR 224.657.534 EUR and over a seven-year plan which is applied by annual work plans.

The setting up of an effective CAP network implies the clear and comprehensive identification of the plurality of AKIS actors to engage in networking activities.

Box 1: Organization of the CAP Network

The CAP Network is organized around three support units:

Innovation and Digitalisation Support Unit.
The main tasks regard the support the EIP and digital switchover interventions of the CAP Strategic Plan, the implementation of the Digital Agricultural Strategy (DAS) and the Digital Food Industry Strategiy and to facilitate the networking of actors involved in research, innovation and digitalisation, and to maintain the database of the green monitoring network to support the implementation of the DAS.

Rural and Regional Development Support Unit
The main tasks regard the support for the implementation of the LEADER and other rural development interventions of the CAP Strategic Plan, the Smart Village and Generation Renewal programmes, and to facilitate the networking of rural actors. This unit is run by the Hungarian National Rural Network already in place for the CAP programming period 2014-2022.

Green support unit
The main tasks regard the support for the implementation of the green interventions of Pillars I and II of the CAP Strategic Plan and the related national programmes, and to facilitate the networking of green actors. The support addresses the fragmentation of the institutional structure of its domestic climate change monitoring system, including the creation of a good database, for example to consolidate environmental knowledge bases.

Source: CAP Strategic plan 2023-2027

In Hungary, a preliminary stage for identifying relevant stakeholders to engage in CAP network's activities 2023-2027 was the mapping and assessing the current state of play of the Hungarian agricultural innovation and digitalisation ecosystem. This included the following information: i) identification of the organisations of the AKIS and of their activities; ii) identifying the intersections between AKIS sub-networks (advisory, education, research, other); defining the nodes of the national AKIS. The whole activity relied on the collection and analysis of secondary data. Particularly, a national survey was conducted by AKI (box 2) that had been delegated to set up the national CAP network 2023-2027.

In practice …

The step-wise methodology was applied as it follows:

1) Definition of selection criteria for the stakeholders' groups (service providers, educational, research and consultancy organisations) identification in the domestic agricultural innovation and digitalisation ecosystem. This activity was based on literature (reference).

2) Identification of the actual stakeholders' groups. The data were obtained from public sources, policy and legislative resources and online sources (table 1). These sources include the list of the organisations of the different typologies of stakeholders and the respective most important traits characterisation. The actual stakeholders were then grouped in subsystems and categorized by typology. The research found that AKIS basically operates at the level of different subsystems, with 94% of the organisations being involved in only one type of activity.

Box 2: AKI - Agrárközgazdasági Intézet Nonprofit Kft

AKI is a Research Institute founded in 1954 and owned by the Ministry of Agriculture based on a state act.

The Institute has been Hungary's most significant agribusiness database and policy experience for many decades, performing public and state tasks. One of the most important tasks of the Institute is to develop proposals for the decision-makers of Hungarian agricultural and rural policy, to base the proposals with research based on modern methods, with particular regard to the application and implementation of the Common Agricultural Policy of the European Union in Hungary.
As a flagship of domestic agriculturaligitalization, our institute operates and develops major EU and national information systems such as the test business information network, the market price information system and the agricultural information system. With our extensive data collection, data processing and information organization work, as well as our policy analysis and decision support activities, we help the success of Hungarian agriculture and rural areas.
Our aim is to continue to create a sufficient harmony between professional knowledge, domestic and international scientific research and policy decision support. Continuous contact with professional organizations and active professional involvement are integrated into our daily operations. In order to maintain a close relationship with the agricultural society, information and research results are published in a clear form and time.

Source: CAP Strategic plan 2023-2027

Particularly, within AKIS there are different sub-systems depending on the activities they contribute to the expansion of knowledge transfer and innovation processes in the agricultural economy. the national. Over 1300 organisations which are key players in the national AKIS were identified due to their core activities, linked to an AKIS sub-network. Of these 1300 organisations, 10% are nodes in several AKIS sub-networks.

3) Analysis of the key features of the different subsystems with the view to define adequate activities for supporting their better functioning within the AKIS and to carry out by the Innovation and Digitalisation Support Unit of the CAP Network. This study is the basis for defining thematic events to allow different actors to get to know each other along certain themes, with a view to cooperation and knowledge exchange at a distance that will are conducted under the CAP network, by the innovation and digitalisation support unit, in cooperation with the National Chamber of Agriculture (NAK).

Table 1: Stakeholder groups, features and sources of their identification

Stakeholder groups	Features	Sources
Research Institutions and Universities	Universities are present in the national AKIS system mainly through their educational activities. They also have a significant research activity. Advisory services are limited to four research and educational institutions and to the Research Institute for Organic Agriculture being registered.	Felvi.hu, NKFIH, Opten, GINOP, Horizon Dashboard, other sources,
Agricultural research related companies		Opten,
Vocational Education Organisations	Vocational schools are the pillars of the education subsystem, providing students with the knowledge, competences and skills for agricultural and food professions. Some schools participate in Horizon 2020 or Erasmus+ projects to develop new learning and teaching methods and knowledge.	SZIR, Erasmus+
Agriculture and forestry, food enterprises participating in dual training	Three-quarters of the agricultural enterprises are narrowly defined as small and medium-sized enterprises (SMEs) that have benefited from an innovation call for proposals (e.g. EIP calls). Only 2 percent of enterprises in agriculture, forestry and food processing were involved in dual training as a training provider. For years, the trend has been that involvement in dual training is more widespread among food businesses than in agriculture.	NAV database, other sources
Advisory Organisations	A national Register of Advisers is managed by the Chamber of Agriculture, that plays also activities relating to training and IT, networking and coordination of advisory services. The thematic specialisation of the advisers is adapted to the importance of each activity within the sector; while the higher proportion of organic advisers reflects the segment's increased need for practical knowledge transfer. Precision farming and digitalisation are reflected both in the thematic areas and in the training of advisors. Some advisory organisations are working on the development and deployment of digital solutions.	Advisory register
Farmers Food-industry enterprises	The 75 EIP-Agri OGs set up in the 2014-2020 period mobilised farmers, producer associations, food processors on the practical side, consultants in the role of knowledge brokers, and researchers. The OGs are mostly composed of 5-7 people, 88% of the partnerships have a research actor and one third have an expert advisor. Their leaders are equally divided between farmers and research organisations. Few organisations pull up the average number of individual and group-level contacts. The projects are located throughout the country and typically cover one or two counties, but in quite a few cases these are cross-regional or cross-country links. The OGs have essentially created a large national network, highlighting a few nodes. The knowledge-sharing of the practical results of the projects through the network should certainly be exploited in the next budget period.	GINOP, EIP
Digital service providers	The digital service providers and support organisations were collected from the register of the Digital Agricultural Academy, from the lists of companies linked to the digital solutions proposed by the Association of Information Technology Enterprises and the Regional Innovation Platforms, from Economic Development and Innovation Operational Programme tenders and other online sources.	DAA, GINOP, NKFIH, other sources
Supporting organisations		
Financial organisations		

Source: prepared at the Sustainability Research Directorate of the AKI

Practical implications for replicability

In order to replicate the system adopted in Hungary:

- identify first the actors in the innovation ecosystem and national agricultural digitalization;
- identify specific groups of actors (service providers, training organisations, research and advice) on the basis of predetermined criteria and thus the actual actors;
- identify all available information sources (public data sources, political and legislative resources and online sources), capable of returning either a list of organisations that are part of a given group of actors, than the most important information that characterizes the groups of actors.
- once the available databases have been identified, the data found should be collected and put into a single information database;
- based on the information processed, it is possible to verify the correspondence and identify in a certain way the stakeholder groups actually operating in relation to the different types of activities carried out.

Benefits

- The context analysis carried out has made it possible to identify the different subsystems operating within the AKIS and to have an up-to-date picture of the innovation actors operating at national level and of the relations currently existing between them.
- The work carried out has made it possible to identify all available information sources (public data sources, political and legislative resources and online sources), and to identify 11 administrative databases, the data of which have been merged into a single database.
- The information found in the analysis should allow us to better understand how to make the networking of all actors in the AKIS system more effective and efficient.

Watch this AKIS-in-Practice!

Further information

- Hungary CAP Strategic Plan 2023-2027, Ministry of Agriculture. https://kormany.hu/dokumentumtar/magyarorszag-kap-strategiai-terve-2023-2027

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