



modern **AKIS**

Together for
Systems' Innovation



Funded by
the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the European Commission can be held responsible for them.



Modernisation of Agriculture through more efficient and effective Agricultural Knowledge and Innovation

Systems

Grant agreement number: 101060527

HORIZON Coordination and Support Actions

Deliverable 1.4

Compendium of insightful new know-how and ready-for-practice solutions

Due date of deliverable: M26 – October 2024

Actual submission date: M26 – October 2024

Call: HORIZON-CL6-2021-GOVERNANCE-01

Topic: HORIZON-CL6-2021-GOVERNANCE-01-25

Start date of the project: September 1st, 2022

Duration: 84 months

End date of the project: August 31st, 2029

ProjectID: 101000250

TYPE		DISSEMINATION LEVEL	
R	Document, report	<input type="checkbox"/> PU	Public <input checked="" type="checkbox"/>
DEM	Demonstrator, pilot, prototype	<input type="checkbox"/> CO	Confidential, only for members of the consortium (including the Commission Services) <input type="checkbox"/>
DEC	Websites, patent fillings, videos, etc.	<input type="checkbox"/> CI	Classified, as referred to Commission Decision 2001/844/EC <input type="checkbox"/>
OTHER			

Project management	Institution
Person in charge	Valentina Carta CREA
Work package	WP1 Impactful framework for transformative AKIS journeys
Work package leader	Simona Cristiano CREA
Author(s)	Simona Cristiano CREA Valentina Carta CREA Milena Verrascina CREA Patrizia Proietti CREA Filomena Izzi CREA Davide Longhitano CREA Concetta Menna CREA Juan Pedro Romero Trueba MAPA
Additional Authors	Gintarė Kučinskienė LSMU Krisztina Magócs AKI Jennie Cederholm Björklund Swedish CAP Network Els Lapage Flemish Government Noora Pehkonen Finnish Food Authority, Paying Agency Rui Almeida Consulai
Version	V0



Table of contents

1. EXECUTIVE SUMMARY	7
2. INTRODUCTION	10
3. THE COMPENDIUM ... IN PRACTICE	10
4. HOW IS THE COMPENDIUM ORGANIZED?.....	11
5. THE COMPENDIUM 2023 (D1.3) IN NUMBERS	12
6. THE COMPENDIUM 2024 (D1.4) IN NUMBERS	13
THE COLLECTION OF AKIS-IN-PRACTICE! & GET-INSPIRED4AKIS! FOR YEAR 2024	19
ANNEX: METHODOLOGICAL NOTE.....	272



List of abbreviations

AKIS	Agricultural Knowledge and Innovation System
AKIS CB	AKIS Coordination Body
CAP	Common Agriculture Policy
CAP SP	Common Agriculture Policy-Strategic Plan
CCO	Cross Cutting Objective
CNA	Capacity needs' assessments
DIC	Digital Innovation Centre
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EIP-AGRI	European Innovation Partnership for Agricultural productivity and Sustainability
EIP-OG	EIP-Operational groups
ERDF	European Regional Development Fund
ESF+	European Social Fund Plus
EU	European Union
EUR	Euros
F2F	Farm to Fork Strategy
FBO	Farmer based organisations
ISS	Innovation Support Services
MA	Managing Authorities of CAP Strategic Plans
MS	Member State
NGO	Non-Government Organisation
RDCPs	Rural Development Complementary Programmes
R&I	Research and Innovation
SCAR	Standing Committee of Agricultural Research
SOs	Specific Objectives of CAP SP
SME	Small and medium-sized enterprise
UTPs	Unfair trading practices
WP	Work Package
YF	Young farmer



List of Figures and Tables

Figure 1: Structure of the Compendium.....	11
Figure 2: Number of Practices per Country (D1.3 and D1.4).....	16
Figure 3: Number of Practices per Theme (D1.3 and D1.4)	17
Table 1: Contents of the practices.....	11
Table 2: Statistics about the use of the AKIS-in-practices! during relevant events (D1.3).....	12
Table 3: Statistics about the dissemination of the AKIS-in-practices! (D1.3)*	12
Table 4: List of themes/topics and AKIS-in-practice!/Get-Inspired4AKIS included in this Compendium	13



1. Executive Summary

This is the second "Compendium of Insightful New Know-How and Ready-for-Practice Solutions" (D1.4) in a series to be delivered annually from 2023 to 2029. It is prepared under task 1.2, focusing on collecting and sharing practice-based knowledge that is accessible to policymakers and AKIS actors, enabling them to improve knowledge flows and develop effective AKIS in their countries.

The Compendium serves as a collaborative platform for sharing and co-developing ready-to-use knowledge and inspirational solutions for the delivery of the AKIS strategies and their successful implementation. The aim is to support the redesign and implementation of strategies that strengthen AKIS in member states, contributing to the modernization of the agricultural sector by fostering knowledge, innovation, and digitalization. This goal was successfully achieved by the first Compendium, a large number of which practices have been widely disseminated via different communication channels (§Tab.3), used as subject of various networking and capacity building workshops (§Tab.2).

The Compendium is organized around a quadruple format:

- **A Report** that is delivered on annual basis as a collection of AKIS-in-practices! and insights on topical matters of interest for the key AKIS actors of change.
- **On-line Tool of AKIS-in-practices!** that is delivered in collaboration with WP2, starting from M18. This online tool will make the AKIS actors easily discovering the AKIS-in-practice! by key words/tags.
- **Videos and podcasts:** these are impactful methods to enable potential users listening the story of the certain AKIS-in-practice! from the implementers.

The methodology for the collection, developing, sharing and discussing the contents of the Compendium is based on MA principles highlighted in D1.1 in view to address specific needs and expectations of key AKIS actors of change, through providing insightful meanings for the overall capacity development path applied by the TAJs.

Since certain boundaries still affected the full engagement of a wide range of project partners due to varying capacities to actively contribute to the development of practices, it was decided to differentiate the roles and functions to achieve meaningful co-development of practices. This is demonstrated by the following:

- Setting up of a **core development group**, which members are primarily the WP contributors and other partners.
- Setting up of the **steering group of the practices**, which members are about 10 AKIS coordination bodies to be identified every year.

These two groups will start working for the purpose of the Compendium 2025.

In practice, this Compendium covers 10 themes and includes 38 relating AKIS-in-Practices! with a widened geographical coverage of n. 13 member states.

The list of these themes is in line with the results of capacity needs assessment validated in November 2023 during the general assembly of the AKIS coordination bodies.

In brief, key points emerging from the themes are:

Theme 1 - Roles and functions of the AKIS coordination bodies

The n. of practices raised to 10. In 2024, nearly all AKIS coordination bodies were established in the member states, enabling ongoing analysis of their models, roles, and functions. The analysis reveals the substantial adoption of two governance models. The managerial model of AKIS coordination bodies is characterized by the retention of responsibilities, roles, and functions at the institutional level, managed by the Member Authority. The networking/collaborative model features shared roles and functions among newly established collective bodies, such as the CAP network, steering committees, and working groups.

Theme 2 - Delivery mechanisms for the AKIS strategies

This D1.4 encounters N. 3 practices on “Simplified cost options (SCOs) for CAP interventions” which let emerge the multitude of methodologies applied to simplify the implementation of AKIS strategies.

Furthermore, we collected n. 1 practice on “Transnational Operational Groups”. This is a highly relevant topic for AKIS coordination bodies. This demonstrates that it is possible to adopt, with some adaptations, delivery models whose implementation methods are already widely practiced and consolidated within the LEADER approach and are familiar to the managing authorities of CAP programs.

These practices let emerge the importance of streamlined processes, effective coordination, and strategic facilitation by CAP networks in enhancing the delivery mechanisms of AKIS strategies.

Theme 3 - Training, knowledge exchange and information

This D1.4 showcases five practices. These include two practices related to Demonstration Projects and Actions. Two practices involve the organization of International Study Visits. The first focuses on the organization of the AKIS and was part of a multi-country debate aimed at defining a national AKIS model. The second study visit examined the successful integration of research and advisory services and was organized as part of a broader training program. The case of the Mötesplats AKIS Meeting involves the establishment of a multistakeholder platform for systematic knowledge sharing. Finally, one practice pertains to the design of a training format by the national CAP network, emphasizing the integration of agronomic knowledge with earth observation and georeferencing data to promote sustainable farming practices.

Theme 4 - CAP networks

This Compendium include n.2 practices on digital knowledge platforms that highlight the roles that CAP networks can play in member states, emphasizing the value of centralized, user-friendly platforms in enhancing collaboration, data accessibility, and informed decision-making in the agricultural sector.

Theme 5 - Back-office

No practices have been collected for D1.4.

Theme 6 - Integration of advisory services

Under this theme, D1.4 includes four practices that showcase the critical role of data and digital tools in enhancing the effectiveness of advisory services, fostering collaboration, and supporting sustainable agricultural practices.

One practice focuses on the establishment of a national data warehouse used by advisors to facilitate timely knowledge transfer and information sharing.

Additionally, two practices provide insights on how to establish registers of advisory service providers.

The final case illustrates how to organize knowledge hubs to bridge the gap between research and practice.

Theme 7 - Integration of innovation support services

This D1.4 includes n. 2 practices include the implementation of a meaningful method of innovation support services provision, while the second case showcases the promotion of innovation hubs that consist of local multi-actor partnerships aiming at identifying grassroot innovative ideas, providing training, information and knowledge sharing and dissemination.

Theme 8 - Climate change mitigation & Environmental care

There are n. 3 practices showcase a variety of interesting and replicable approaches that effectively leverage the potential of AKIS interventions to enhance climate change actions and environmental care. They particularly emphasize the need for well-structured training and advisory programs that align the transition toward more sustainable farming practices with business and territorial development.



Theme 9 - Support to generational renewal

There are n. 4 practices showcase different and interesting approaches that leverage effectively the potential of AKIS interventions to support generational renewal in agriculture. Particularly:

- EIP-OGs for Young Farmers: This initiative fosters collaborative innovation to address challenges like succession, skills development, and access to land and capital.
- Intergenerational Knowledge Transfer: This program facilitates knowledge transfer and apprenticeships between generations to support young farmers.
- Comprehensive Training Program: This program offers a blend of study visits, seminars, workshops, and mentorship to build the capacity of young farmers effectively.

Theme 10 - Improve the position of farmers in the food chain

This D1.4 includes n. 3 practices showcase how to leverage AKIS interventions to enhance farmers' positions in value chains:

- Integrated Strategies, that combine various CAP interventions with AKIS efforts in integrated supply chain projects, promoting organization and efficiency.
- Collaborative Processes that strengthen farmers' roles in the supply chain through EIP-Agri Operational Groups.
- Focused Intervention case that addresses power imbalances in value chains, specifically tackling issues of asymmetric price transmission to support farmers more effectively.

All in all, for all the proposed themes, some food for thinking and insights offer some reflections for follow-ups of the reported AKIS-in-Practices! and on the opportunities for capacity building and networking activities that can be certainly considered for further activities and the co-construction of the TAs by the different WP leaders and contributors and the AKIS actors that will join the network of modernAKIS.

During the forthcoming months, certainly, networking, communication and capacity building activities of modernAKIS project will focus on the proposed practices to help the key AKIS actors deepening into the experiences, reflecting on possible replication and co-creating new/adapted solutions for the implementation of the AKIS strategies in MSs.



2. Introduction

The “Compendium of insightful new know-how and ready-for-practice solutions” (this D1.4) is prepared under task 1.2, which entails collecting and delivering practice-based/oriented knowledge (new know-how, insights and practical solutions) that is widely available, shared and accessible and that enables policy makers and other AKIS actors improving knowledge flows and developing well-functioning AKIS in their countries.

The aim is to co-develop with partners and other key AKIS actors ready-to-be-put-in-use knowledge and practical insights (e.g. administrative procedures) that, over the years 2023-2029 will hopefully support the (re)design and implementation of the strategies strengthening the AKIS in MSs.

This will ensure a valuable contribution to the cross-cutting objective of modernizing the sector by fostering and sharing knowledge, innovation and digitalisation and, also, to the other specific objectives of the CAP, along with those that are linked to Cluster 6 of Horizon Europe Programme, such as the European Green Deal, the Farm to Fork Strategy.

3. The Compendium ... in practice

The Compendium is delivered on annual basis and its themes and topics are defined throughout modernAKIS project, by following up the yearly capacity needs' assessments (CNA in T1.1.).

The Compendium has a quadruple format:

- **AKIS-in-practices!** and **Get-Inspired4AKIS!**, that are ready-to-be-put-in-practice solutions for delivering the AKIS strategies that are produced on an iterative basis during a year and by following up the needs of the key AKIS actors (CNA in T1.2) and of the other activities of modernAKIS (e.g. networking and/or capacity building workshops of WP2 and WP3/WP4). During the year 2024, it was decided to include some potential practices (**Get-Inspired4AKIS!**) that are results delivered under other Horizon projects (e.g. i2connect project), ERAMUS+ (e.g. RAMONES) and other types of projects. They are considered as inspirational and ready-to-be-put-in-practice solutions, even if not yet used as CAP interventions. **AKIS-in-practices!** and **Get-Inspired4AKIS!** are used as contents for workshops which over each year are run in collaboration with the other WPs, by focusing on the specific topics, through helping the key AKIS actors deepening into the experiences, reflecting on possible replication and co-create new/adapted solutions.
- **Report** (e.g. D1.3; D1.4), that is delivered on annual basis as a collection of **AKIS-in-practices!** and **Get-Inspired4AKIS!**
- **On-line Tool of AKIS-in-practices! and of the Get-Inspired4AKIS!**, as part of the akisconnect.eu platform, that was launched since March 2024 (M18) after a co-conceptualization process held in collaboration with T2.4 and T5.1 and with the other WP/tasks leaders. This online tool supports the AKIS actors' exploration, (e.g. by themes, topics, countries, key words/tags) of those practices that might be relevant for their specific purposes of use.
- **Videos and podcasts:** these are put in use as more impactful media tools that enable potential users by listening the story of some of the practices from the implementers.

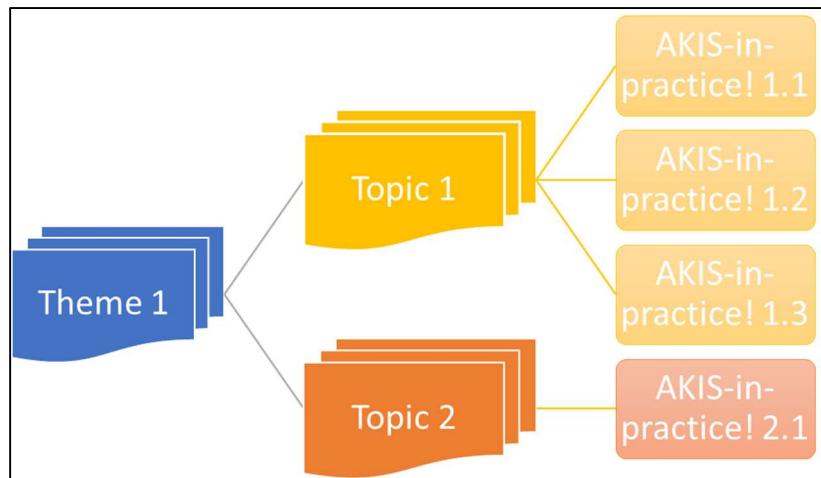
It is worth noting that, the Compendium is meant to provide contents based on practical solutions and examples already applicable/applied and insights that well fit specific topics of actual interest to feed on an on-going basis networking (WP2), capacity building (WP3 and WP4), communication and exploitation (WP5). Therefore, these practices are not subject to any formal assessment or evaluation process to determine whether they qualify as “good” or “best” practices. Instead, each one is presented simply as a practice, valued for its potential contribution to AKIS strategies. Without an established selection or evaluation framework, these practices remain diverse resources that stakeholders can consider for inspiration, adaptation, and further development within AKIS contexts.

4. How is the Compendium organized?

The Compendium is organized by the themes established for the purpose of the CNA, under which a further categorization is based on specific topics (Figure 1).

Therefore, one theme (e.g. Delivery of the AKIS strategies) may incorporate one or more topics (e.g. simplified cost options; implementation of the strategic approach) and each topic may include one or more AKIS-in-practice! (e.g. standard unit costs for advisors; rewards/priority for OGs including training of farmers into respective actions plans).

Figure 1: Structure of the Compendium



Each practice has a structure that helps possible use by potential users, and it includes the following paragraphs:

Table 1 – Contents of the practices

Rationale	Grounding motivations/problem/opportunity for the specific practice
Solution	Brief description of the practice applied to follow-up the rationale
...in practice	Practical information on how the practice has been/can be applied on the ground
Practical implications for replicability	Insights and tips to consider in case of replication/adaptation
Benefits	The benefits that the practice bring to end-users
Further sources of information	Sources of practical information for further knowledge about the practice
Potential users of this practice	Target groups that can implement the practice
Country/Region	Where the practice comes from
Contacts	Who to ask about the practice

5. The Compendium 2023 (D1.3) in numbers

The Compendium 2023 (D1.3) reported 22 **AKIS-in-practices!** that have been widely disseminated through different activities/communication channels as it is showed in Table1 and Table 2.

Table 2: Statistics about the use of the AKIS-in-practices! during relevant events (D1.3)

Theme/Topic	Title of the AKIS-in-practices!	n. – event
Simplified cost options (SCOs) for CAP interventions	SCOs to incentivize the interactive participation of farmers/foresters to cooperation for innovation (IT); SCOs for researchers and academics participating in Ogs (IT); Unit cost of the supported training actions for farmers (HU); SCOs to incentivize the interactive participation of farmers/foresters to cooperation for innovation (IT); SCOs for advisory services (IT); SCOs for vocational training (IT); SCOs for staff costs of operational groups (ES)	3 – SCAR AKIS meeting (October 2024); General Assembly of the AKIS coordination bodies (April 2024); AKIS in action: Application of Simplified Cost Options for AKIS-related measures (June 2024) Training farmers on Environmental, climate and other management commitments (AT)
Training and knowledge exchange	Training farmers on Environmental, climate and other management commitments (AT)	AKIS in action: AKIS in support of the environmental and climate ambition of the CAP (March 2024)
CAP Networks/ Integration of advisory services	Innovarurale (IT) Advisory database (ES)	1 – AKIS in Action: Digital Repositories – Bridging Research and Practice (September 2024)
AKIS Coordination bodies	AKIS Coordination Body of Estonia (ES)	6 – General Assembly of the AKIS coordination bodies (November 2023, April 2024)

*Table 3: Statistics about the dissemination of the AKIS-in-practices! (D1.3)**

Platform/Social Media	Metrics
AKISconnect	<ul style="list-style-type: none"> • Views: 1,206 • Active users: 388
Youtube	<ul style="list-style-type: none"> • Views: 682 • Impressions: 6,801 • Impressions: 7,098
Linkedin – (modernAKIS and AKISconnect)	<ul style="list-style-type: none"> • Engagement: 641 • Likes: 1,857 • Shares: 59 • Clicks: 1,232 • Impressions: 10,962
Facebook - Twitter (modernAKIS and AKISconnect)	<ul style="list-style-type: none"> • Reach/Engagement: 5,435 • Reactions: 128 • Likes/Favourites: 179 • Shares/Retweet: 63 • Clicks: 126

* Data update on 15/10/2024.



Funded by
the European Union

6. The Compendium 2024 (D1.4) in numbers

The topics around which the practices have been collected are aligned with the CNA 2024, as defined in November 2023, during the GA of the AKIS coordination bodies.

Moreover, other topics that were already covered in D1.3 have been revisited in view to provide a more comprehensive overview of actual EU AKIS-in-Practice! and Get-Inspired4AKIS! practices.

The AKIS-in-Practice! and Get-Inspired4AKIS practices collected in D1.4 are immediately replicable, with necessary adaptations for the specific contexts of different countries, and include the option to contact the responsible representatives for further clarification. In this perspective, some practices also derive from T1.4 to provide more detailed information and replicability guidelines for AKIS Coordination Bodies and other Managing Authorities, fostering synergies across the various tasks of the project.

Numbers about themes and Countries applying the practices collected are shown in Figure 2, and Figure 3.

The AKIS-in-Practice! in the following list are progressively numbered to follow the ones reported by the Compendium 2023 (D1.3) under the same Theme/Topic.

So far, the total number of practices reported by the Compendia (D1.3 and D1.4) is 60.

Table 4: List of themes/topics and AKIS-in-practice!/Get-Inspired4AKIS included in this Compendium

Themes	Topics	AKIS-in-practice! / Get-inspired4AKIS!
1. Roles and functions of the AKIS coordination bodies	<i>Functional organization of the AKIS coordination bodies</i>	AKIS-in-practice! 1.6 – AKIS CB in Sweden AKIS-in-practice! 1.7 – AKIS CB in Apulia Region (IT) AKIS-in-practice! 1.8 – AKIS CB in Veneto Region (IT) AKIS-in-practice! 1.9 – AKIS CB in Abruzzo Region (IT) AKIS-in-practice! 1.10 – AKIS CB in Calabria Region (IT) AKIS-in-practice! 1.11 – AKIS CB in Aosta Valley Region (IT) AKIS-in-practice! 1.12 – AKIS CB in Umbria Region (IT) AKIS-in-practice! 1.13 – AKIS CB in Italy AKIS-in-practice! 1.14 – AKIS CB in Lithuania AKIS-in-practice! 1.15 – AKIS CB in Portugal

2. Delivery mechanisms for the AKIS strategies	Simplified cost options (SCOs) for CAP interventions	<i>AKIS-in-practice! 2.9 – Application of flat rate for indirect costs of Operational Groups and demonstration projects in Flanders</i>
		<i>AKIS-in-practice! 2.10 – Application of standard scale of unit cost: hourly staff rate for EIP and demonstration projects in Flanders</i>
		<i>AKIS-in-practice! 2.11 – Application of flat rates for EIP in Finland</i>
	Transnational/Transregional projects	<i>AKIS-in-practice! 2.12 – Enhancing Transnational Cooperation in EIP-Agri Projects</i>
3. Training, knowledge exchange and information	Demofarms	<i>AKIS-in-practice! 3.6 – Fostering Sustainable Farming: Tailored Demonstration Projects for Climate Change Mitigation</i>
		<i>AKIS-in-practice! 3.7 – Farm Demonstration Program in Latvia</i>
	Cross-visits	<i>AKIS-in-practice! 3.8 – International study visits to Denmark and Finland: increasing capacities for Swedish AKIS actors</i>
		<i>AKIS-in-practice! 3.9 – Enhancing Agricultural Advisory through Cross Visits: the case of Veneto</i>
4. CAP networks	Knowledge Flows	<i>AKIS-in-practice! 3.10 – Mötesplats AKIS, a yearly meeting of the AKIS actors in Sweden: the key role of the CAP networks on knowledge flows</i>
		<i>AKIS-in-practice! 3.11 – Copernicus Academy: the open school of the NRN for advisors</i>
5. Back-office	Organization of back-office services	<i>AKIS-in-practice! 4.3 – Portuguese AKIS Platform: Driving Innovation and Collaboration in Agriculture</i>
		<i>AKIS-in-practice! 4.4 – The Italian Database of OGs</i>

6. Integration of advisory services	<i>Methods&tools for advisory services</i>	<i>AKIS-in-practice! 6.1 – SIEX – the Agrarian Holding Information System</i>
	<i>Registration and Impartiality of advisors</i>	<i>AKIS-in-practice! 6.2 – Lithuania's Registry and Evaluation System for Impartial Agricultural Advisors</i>
		<i>Get-Inspired4AKIS! 6.3 – The only national registry of advisors in Spain: ROPO</i>
		<i>AKIS-in-practice! 6.4 – Swedish knowledge hubs to bridge the gap between research and practice</i>
7. Integration of innovation support services		<i>AKIS-in-practice! 7.1 – Innovation Hubs: Catalyzing Collaboration in Veneto's Agricultural Landscape</i>
		<i>AKIS-in-practice! 7.2 – Enhancing Collaboration and Innovation: The Bus trip approach</i>
8. Climate change mitigation & Environmental care		<i>AKIS-in-practice! 8.1 – United we stand for the environment! Context-sensitive training of advisors to boost ecological transitions.</i>
		<i>AKIS-in-practice! 8.2 – Signpost advisory programme to support climate and sustainability actions on farms</i>
		<i>AKIS-in-practice! 8.3 – Addressing knowledge gaps in environmental and climate protection: Training integration in Poland's CAP SP</i>
9. Support to generational renewal		<i>Get-Inspired4AKIS! 9.1 – The CULTIVA program. Empowering Young Farmers through Practical Training and Sustainable Innovation</i>
		<i>AKIS-in-practice! 9.2 – Inspiring the Next Generation: Engaging Youth through the Rural4Learning Project</i>
		<i>AKIS-in-practice! 9.3 – Bridging Generations for Sustainable Farming: Slovenia's Intergenerational Knowledge Transfer Initiative</i>
		<i>AKIS-in-practice! 9.4 – Fostering Generational Renewal in Farming through EIP-AGRI Operational Groups</i>

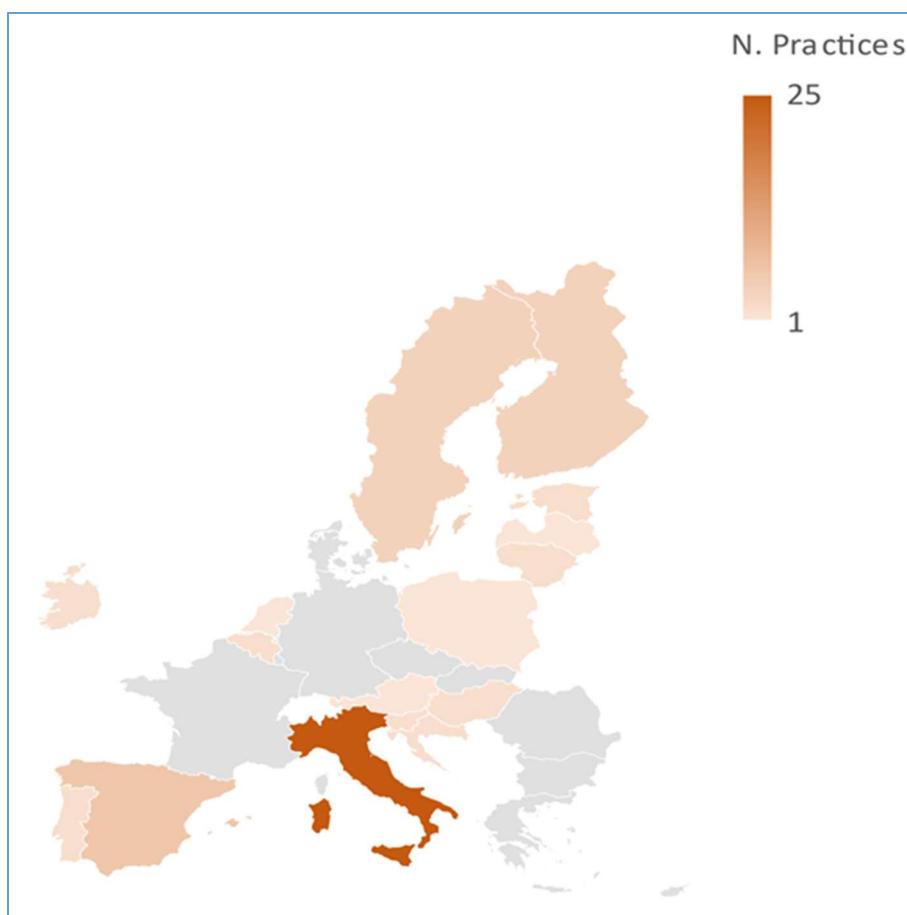
**10. Improve the position
of farmers in the food
chain**

AKIS-in-practice! 10.1 – The integrated supply chain model as a booster of local AKIS actors and innovations.

AKIS-in-practice! 10.2 – Boosting cooperation for innovation along the supply chains: the Role of EIP-Agri Operational Groups in Emilia-Romagna

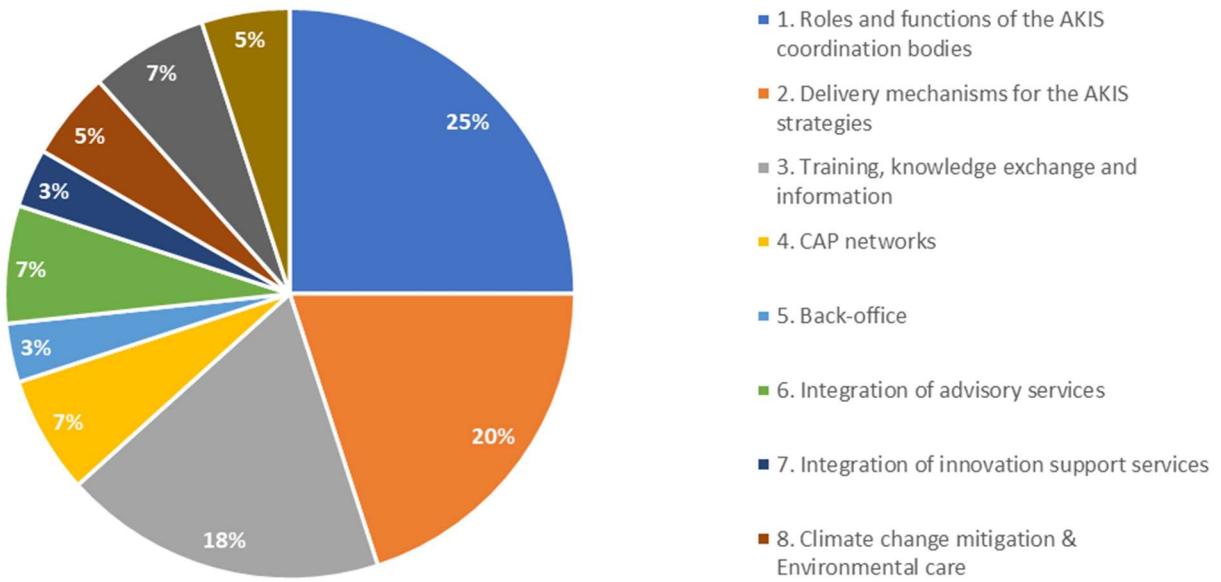
AKIS-in-Practice! 10.3 – Knowledge sharing and monitoring (un)fair food supply chain relationships. The case of the Ombudsman in Slovenia.

Figure 2: Number of Practices per Country (D1.3 and D1.4)



Funded by
the European Union

Figure 3: Number of Practices per Theme (D1.3 and D1.4)





Share your
AKIS-in-practice! or
Get-Inspired4AKIS!



How can we improve
the Compendium?



Funded by
the European Union

The collection of AKIS-in-Practice! & Get-Inspired4AKIS! for year 2024



Funded by
the European Union

272

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Commission. Neither the European Union nor the European Commission can be held responsible for them.

Theme 1

Roles and functions of the AKIS coordination bodies

Keywords/Tags



Governance



AKIS coordination body



RATIONALE



What are the AKIS coordination bodies?

The institute of the AKIS Coordination Bodies (AKIS CBs) represent the first attempt, within the European policies, to identify an institutional structure in charge of creating an enabling environment for innovation.

Indeed, the introduction of this institute comes along with the acquisition of policy dignity of the AKIS and their strategies, which main goal is to strengthen the agricultural systems in rural areas and contribute to more competitive and sustainable primary sector in Europe (Cristiano et al., 2023; D1.1).

So that, AKIS CB are new governing actors of the CAP Strategic Plans (CAP SPs) 2023-2027, which responsible are identified under chapters 8 of the CAP SPs and which overall goal is to enable the environment for well-functioning AKISs, through fostering cooperation, effectively combining the interventions of the CAP SPs and satisfying the need for a quicker, more qualitative and more inclusive AKIS.

Approaches and roles of AKIS coordination bodies in CAP-SPs

Indeed, as it emerges from the study on the comparative analysis of the AKIS in EU (Fanos et al. 2023; D1.10), “the managing authorities play a pivotal role in strategizing the AKIS coordination and serving as the umbrella organization”. While the strategic coordination tasks are taken up by the managing authorities, multiple approaches/models are observed across the CAP SPs for the operational coordination tasks.

Firstly, the different institutional configuration of MSs, with some having the competence for the primary sector at national and some at regional levels makes some difference, by shaping more centralized or decentralized approaches to AKIS coordination.

For example, “in MSs with a decentralized AKIS organization, particularly Germany, Italy and Spain, role of AKIS CBs at the national level is dedicated to bringing regional or provincial AKIS coordination bodies together by setting up a working group or an advisory board in which the group proposes an overall strategy and facilitate knowledge exchange between the regions” (Birke et al. 2023; D1.10).

Box 1: AKIS governance levels across EU

The organisation of national AKISs and the degree of public sector engagement in the AKIS governance entail differences in how AKIS CBs may implement their coordination tasks:

§ AKIS CBs in centralized AKIS governance with strong engagement of managing authorities may have a more focused mandate at the national level with a well-defined hierarchical structure that also influence the coordination efforts.

§ AKIS CBs in a centralized AKIS governance with medium or low engagement of managing authorities need to navigate their coordination by aligning between the state and non-state structures, which may be diverse and flexible.

§ AKIS CBs in a decentralized AKIS governance will need to facilitate coordination among diverse regional actors while aligning with the strategies at the national level.

§ AKIS

CBs in a hybrid AKIS governance (centralized with a tendency for decentralization), similar to those in a decentralized AKIS need to facilitate coordination among regional actors while aligning to the strategies at the national level.



WHICH FUNCTIONS TO ENSURE AN OVERALL AKIS COORDINATION



As a matter of fact, the only reference to the responsibilities and tasks of AKIS CBs is provided by a tool of the Tool 8.1 Tool for the CAP Cross-Cutting Objective (EC, 2021) that proposes the followings:

- Acting as the contact point for the Commission as regards the governance and coordination of the AKIS strategic approach.
- Organising the advice and advisors and all other related AKIS interventions.
- Keeping close and regular contact with the main AKIS (regional) coordinators and actors in the country by giving suggestions for encouragement of more effective knowledge exchange activities (advice, training, ...), including also the generation and co-creation of innovation (EIP OGs) and the broad sharing of it.

However, beyond the institute and the identification of some tasks, the coordination of the AKIS is a strategic process of systems functioning and transformation and, consequently, governance models in MSs should be appropriately defined by including clear a definition of role, responsibilities, and approaches, along with capacity development strategies that would enable these bodies playing an overall process of coordination of the AKIS and their actors towards the good implementation of the respective strengthening strategies.

“The challenge lies in strategically aligning knowledge exchange and collaboration between diverse actors at various levels” (Birke et al. 2023; D1.10).

All in all, the configuration of appropriate models of AKIS coordination bodies should consider that some key processes should be organized under their responsibility in view of enabling the environment for effective knowledge flows and innovation towards well-functioning AKISs (Cristiano et al., 2023; D1.1, Annex 2). Among them, the AKIS-CB should balance, according to the contextual situation of the AKIS, the roles of “player” with the one of “enabler” as it showed in figure 2: (Table 1)

FIRST INSIGHTS FROM PRACTICES



“In the course of 2024, almost all AKIS coordination bodies were established in the member states. This has allowed for continued analysis of their models, roles, and functions. This D1.4 includes 10 AKIS coordination bodies, bringing the total number of practices related to this topic to 15.

Given their recent establishment, the review of practices related to AKIS coordination bodies is expected to be completed by the first half of 2025.

The analysis of the models represented by the new practices reveals a substantial alignment with the previous findings in Compendium (D1.3).

In fact, two governance models are being applied (Figure 1: AKIS coordination bodies’ models in EU):

- A **managerial model** characterizes those AKIS coordination bodies which responsibility, role and the functions are fully maintained at institutional level, under the responsibility of the MA of the SP. The coordination functions are all run by an already existing unit (e.g., research and innovation) or a new established unit, but still by public servants of the Ministry of Agriculture. Tasks applied under this model concern the simple translation, at the level of AKIS strategies, of typical functions of the MAs, such as the planning, management, monitoring and evaluation of AKIS interventions. Possibly, the functions of the AKIS coordination bodies are supported by technical assistance.

In practice, the managerial model implies that the AKIS-CB collaborates with other institutional governance bodies of the SP (such as the responsible for communication, the monitoring and evaluation unit, paying agency, etc. in ch.7 of the CAP SPs) that are internal to the MA of the CAP SP or external (e.g. ministry of research).

In these cases, the planned operational activities are varied and include networking, that is delegated to the CAP Network and to other bodies that remain external to the AKIS-CB, M&E, information for enable the access to the CAP SP, strategy formulation and implementation.

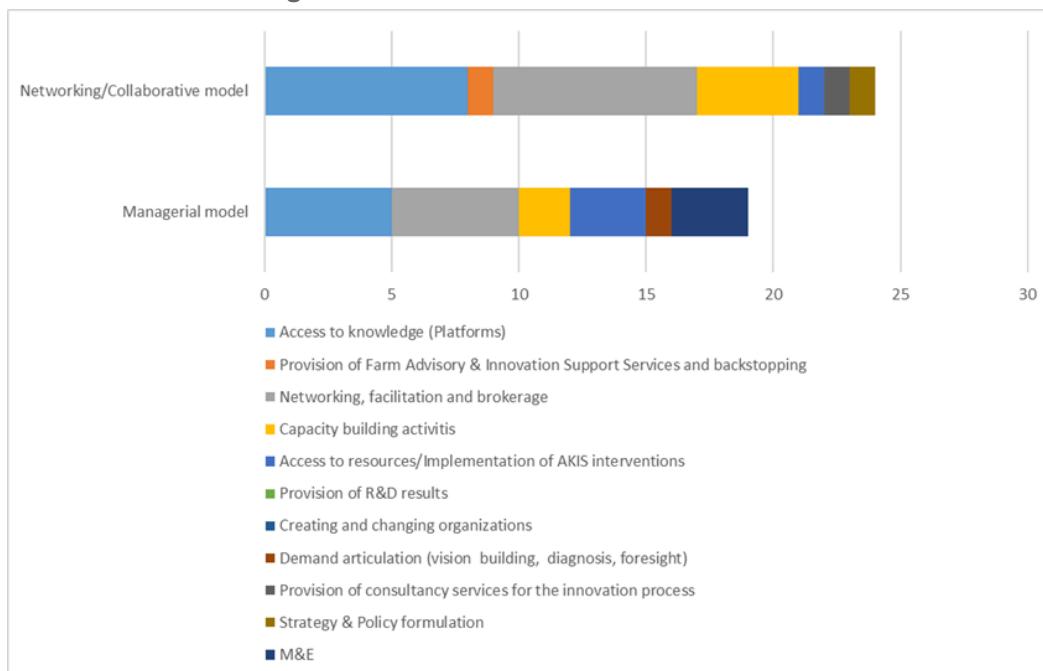
- A **networking/collaborative model**, that characterizes those AKIS coordination bodies which role and functions are almost or fully shared within, mostly new established, collective bodies, such as the CAP network, steering committees, working groups, ect.

In these cases, in general, typical functions of strategy management and implementation are assigned to the institutional body, while other entities are assigned more operational functions that better suit their nature: research, territorial networking, advisory services, etc.

In these cases, the operational activities, are evidently focused on networking and capacity building activities (newsletters, conferences and discussion forums) and enabling access to knowledge particularly by the establishment of web platforms and innovation databases.

This model is applied, for example, by the Region of Sardinia, whose AKIS coordinating body is a collegial body including institutional entities (i.e., the Minister and the Managing Authority) and non-institutional entities (Agencies) with a clear separation of their respective tasks: planning, programming and management, implementation, monitoring, payment and monitoring of interventions.

Figure 1: AKIS coordination bodies' models in EU



Source: own elaboration from CAP Strategic Plans



The results of the observation on the first modelling and approaching the AKIS CBs, brings some reflections on the needs for capacity building and networking activities that can be certainly considered in modernAKIS:

- How to configure best fitting models in each MS? Managerial versus Networking.
- How to organize procedures for monitoring of the AKIS strategies and connections with the paying agencies?
- Which curricula/competences are needed for the AKIS CBs?
- How to better take advantage of interconnections with projects and cross-border collaboration? (e.g. modernAKIS)
- How to organize procedures for fruitful collaboration within collective AKIS CB? Which separation of tasks and how to coordinate knowledge flows and common goals between the different members of the AKIS CB?
- Which organization in regionalized systems? Which coordination between the AKIS CBs of different levels?
- Which support by the CAP Network?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- AKIS CB identity cards. Short description of the key features of the AKIS coordination bodies in view to share information for knowledge and further interaction.
- Practice workshops, aimed at sharing practices, reflecting on experiences and views on the models applied, early functioning and further organization of coordination tasks.
- Peer-to-peer review, within the CoPs in view to allow comparison and mutual learning.
- Tailored capacity building to address both strategic aspects like planning and priority setting, as well as operational tasks such as collaboration facilitation and communication (Birke et al., 2023).
- Capacity building on exploitation of modernAKIS
- Capacity building on functional skills to “to engage and align diverse actors to create a coordinated approach” (Birke et al., 2023).
- Training on fundamentals on AKIS concepts and principles, system thinking structure, infrastructures, processes, governance and coordination.
- Training on AKIS actor diagnosis, assessing interactions and benchmarking performance (Birke et al., 2023).

FURTHER SOURCES OF INFORMATION



- Cristiano et al., 2023 (D1.1 modernAKIS)
- EU SCAR AKIS (2019), Preparing for Future AKIS in Europe. Brussels, European Commission
- Fanos et al., 2023 (D1.10 modernAKIS)
- Fanos et al., 2022 (i2connect)
- Knierim A., Gerster-Bentaya M., Birke F., Bae S., Kelly T., 2020. Innovation advisors for interactive innovation process: Conceptual grounds and common understandings. Deliverable 1.1 i2Connect project



Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies
	  CAP Network



The Swedish Agricultural Knowledge and Innovation Systems (AKIS) encompasses a wide range of actors, expertise, and collaborative efforts (figure 1). However, the current structure has room for improvement and enhancement to better align with the needs of businesses and expand their ability to engage in competitive and commercial activities. Both the CAP and national initiatives can play a key role in fostering stronger cooperation between fundamental research, applied research, industry, and advisory services, facilitating greater knowledge exchange, innovation, and digitalisation.

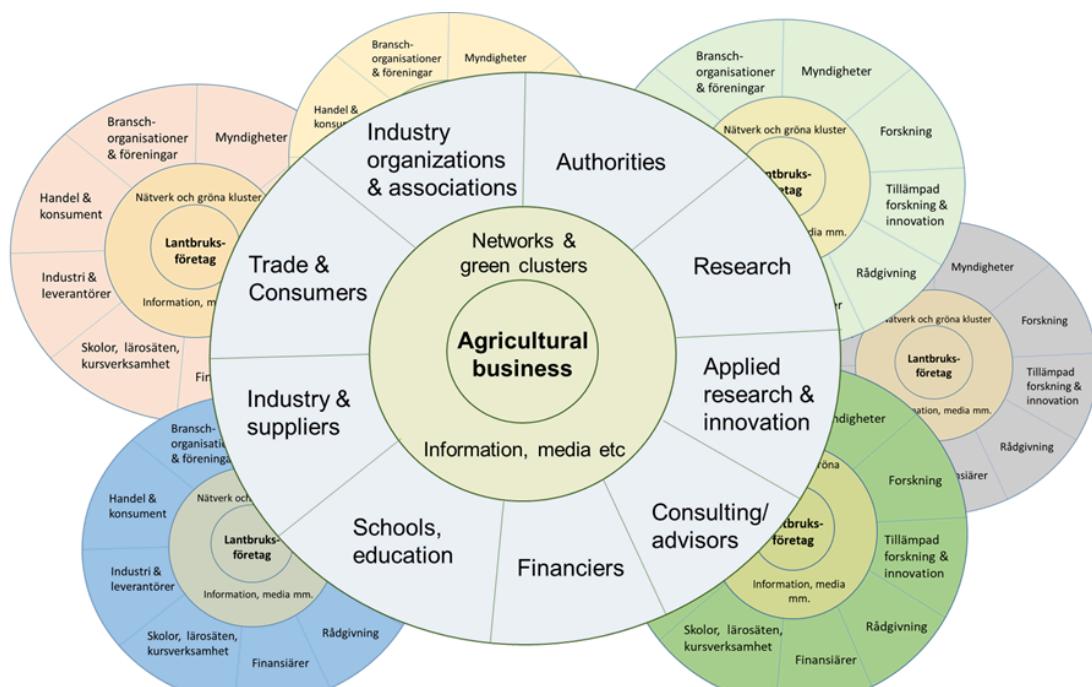
Similarly, the Forestry Knowledge and Innovation Systems involves numerous actors, including major public entities like the Swedish University of Agricultural Sciences (SLU), the Swedish Forest Agency, and the research institute Skogforsk. Skogforsk, which is co-funded by forestry companies, works to develop and disseminate knowledge, services, and products that support sustainable forestry practices for the benefit of society.

Alongside the ongoing investments in research and innovation, there is a strong focus on better integrating the food sector into broader national and regional innovation ecosystems, fostering synergies and creating new networks. Moreover, the European Innovation Partnership (EIP) and collaborative initiatives are being reinforced to further drive innovation in environmental sustainability and agricultural production.

To improve collaboration and knowledge sharing four knowledge hubs were set up about i) livestock production, ii) business management and entrepreneurship, iii) environment and climate, iv) digitalisation. They act as impartial knowledge centers aimed at bridging research and practice. They serve as hubs for the compilation and dissemination of valuable insights, facilitating knowledge exchange among stakeholders. Particularly, the key objectives of the hubs are:

- **Compilation and dissemination of knowledge:** Gathering insights and disseminating them widely to ensure accessibility.
- **Strengthening collaboration:** Fostering synergies and enhancing collective learning among stakeholders.
- **Initiating systemic inventories:** Assessing industry needs to identify challenges and opportunities.
- **Initiating tests and evaluations:** Assessing the effectiveness of innovative approaches.
- **Improving integration of advisors within AKIS:** Aligning advisory services with the needs of practitioners and researchers.

Figure 1: Swedish AKIS diagram



Source: Swedish board of Agriculture (2024)



RATIONALE



The political relevance given to AKIS strategies in the context of the CAP Strategic Plans (SPs) 2023-2027 has certainly highlighted the opportunity of defining governance bodies aimed at coordinating the AKIS-relating interventions and actors in view of their better implementation and contribution to the cross-cutting and specific objectives of the CAP SPs.

Particularly, the AKIS coordination body is indicated by the CAP SP 2023-2027 as a point of contact of the European Commission and of the European CAP Network.

For the constitution of the Swedish AKIS CB, it has been given great importance to the needs gathered from the sector, the analyses carried out and the conclusions drawn from these. Swedish AKIS coordination is therefore largely needs-oriented, with the aim of coordinating activities, efforts and knowledge development to facilitate the actors involved in the Swedish knowledge and innovation systems for agriculture.

IN PRACTICE

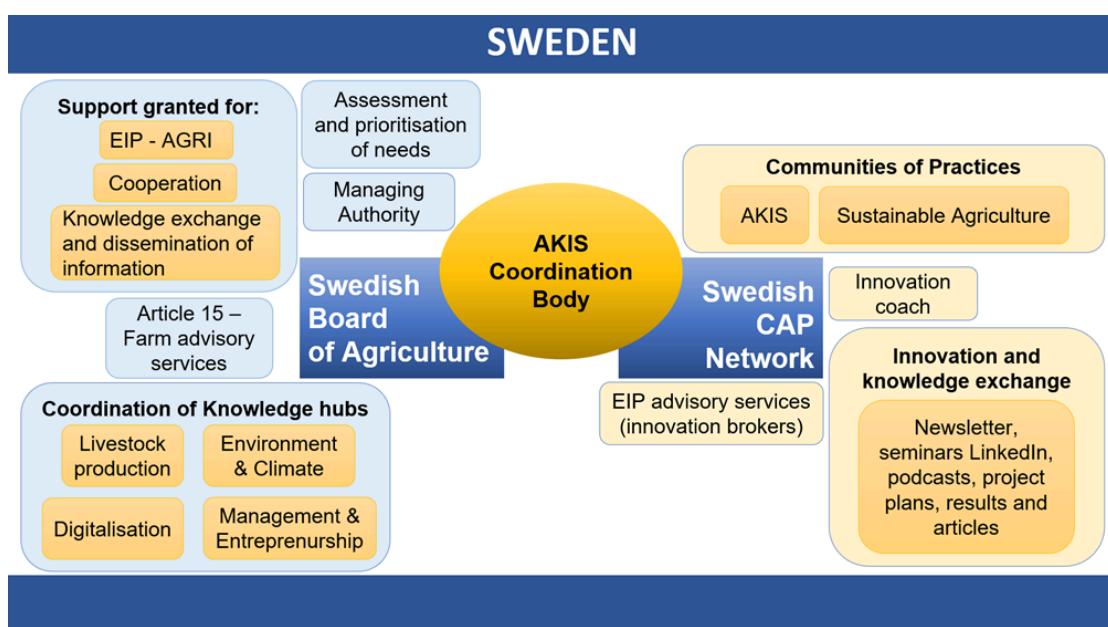


1. Who is the AKIS CB

The coordination of AKIS is carried out in cooperation between the Swedish Board of Agriculture (box 1) and the Swedish CAP Network (box 2). The basis of the function consists of different responsibilities and roles that the Board of Agriculture and the network currently have.

2. Composition of the AKIS CB

Figure 2: Swedish AKIS Coordination Body



Source: Swedish Board of Agriculture (2024)

Box 1: Swedish Board of Agriculture

The Swedish CAP Network brings together organisations from civil society, business, consultancy, research and education as well as authorities to learn from each other and collaborate. In this way, they contribute to the goals of agriculture, fishing and aquaculture as well as rural development while creating added value for them and their own organisations. The Network is part of the European CAP Network and can therefore also learn from and collaborate with colleagues around Europe.

The steering group consists of 15 members and a chairman, who all represent different key players and members in the Network. They prioritise themes and resources based on the wishes of the member organisations. The steering group is also responsible for following up to ensure that the network delivers the expected results.

One of the Network's member organisations is the Swedish Association of Local Authorities and Regions. There has been regional representation in several of the operating groups.

Source: Swedish Board of Agriculture website

Box 2: Swedish CAP Network

The Swedish CAP Network brings together organisations from civil society, business, consultancy, research and education as well as authorities to learn from each other and collaborate. In this way, they contribute to the goals of agriculture, fishing and aquaculture as well as rural development while creating added value for them and their own organisations. The Network is part of the European CAP Network and can therefore also learn from and collaborate with colleagues around Europe.

The steering group consists of 15 members and a chairman, who all represent different key players and members in the Network. They prioritise themes and resources based on the wishes of the member organisations. The steering group is also responsible for following up to ensure that the network delivers the expected results.

One of the Network's member organisations is the Swedish Association of Local Authorities and Regions. There has been regional representation in several of the operating groups.

Source: Swedish Board of Agriculture website



3. Functions attributed to the AKIS CB

The functions assigned to AKIS CB are:

- AKIS Strategy Coordination.
- Coordination with the EC.
- Coordination with other EU projects/other policies.
- Bringing out new and unexpressed needs.
- Strengthening Actions on the Level of Integration of Actors.

The purpose of the AKIS coordination body is largely to coordinate activities, efforts and knowledge development to facilitate actors involved in the Swedish knowledge and innovation systems for agriculture. For this reason, the Swedish AKIS coordination body performs several functions (Table 1).

Particularly, the Swedish Board of Agriculture has so-called policy officers who are responsible, among other things, for liaising with the European Commission and driving changes in the strategic plan with regard to the subsidies. Several units are allocated budgets within the support programmes and are then responsible for calls for proposals and procurements within that budget.

For units with responsibility for policy and budget for the support, this includes, for example, following and supporting the county administrative boards' work with this support.

The Swedish Board of Agriculture also has an important role in providing adviser training and conducting development work of relevance to the supply of knowledge, primarily in agricultural environmental issues, this is part of the work to create conditions for which the advisory units at the Swedish Board of Agriculture are responsible. Moreover, the Swedish Board of Agriculture is responsible for ensuring that all points of Article 15 of EU Regulation on agricultural advisory services are fulfilled in Sweden.

On the other hand, the CAP Network performs functions of innovation coach (especially in the knowledge and innovation promotion in green industries) and innovation support for anyone interested in applying for EIP-Agri innovation interventions.

Table 1: Tasks of the AKIS coordination

Task	Task Responsible	Objectives
Contact person in the strategic plan and responsible for the coordination and development of the AKIS coordination function	Business Development Unit	Formal contact for the AKIS coordination function
Policy, calls for tenders and procurement	Business Development Unit, Environmental Analysis Unit, Swedish Board of Agriculture	Utilising funds in support of skills development, cooperation and innovation in an efficient way
Responsibility for liaising with county administrative boards on prioritisation within the different supports. Partly NEW	Business Development Unit, Environmental Analysis Unit and the counselling units of the Swedish Board of Agriculture	Utilising funds in support of skills development, cooperation and innovation in an efficient way
Responsibility for Article 15 on agricultural advice	Nutrition Development Unit, Swedish Board of Agriculture	Ensure that all points are met in Sweden
Update money prioritisation plan if necessary	Business Development Unit, Swedish Board of Agriculture	Utilising funds in support of skills development, cooperation and innovation in an efficient way

Task	Task Responsible	Objectives
Participate in modernAKIS	Business Development Unit and the Network's secretariat	Expanding contact point at EU level and get input to development of the AKIS role coordination. Involve relevant member organisations from the network in modernAKIS for mutual learning between actors in the EU
Develop existing working groups within the network, especially the AKIS working group and the competence council	the Network's secretariat together with the Swedish Board of Agriculture, County administrative boards and Knowledge Hubs	Develop ways of working that ensure that knowledge hubs, support authorities and network members benefit from the working groups Benefit other participants in the working groups from dialogue with knowledge hubs and support authorities Strengthen the interaction between support authorities and network on AKIS issues
Participate or lead steering/cooperation groups for all Knowledge Hubs	Swedish Board of Agriculture	Influence work in line with identified needs. Ensure that the work of the given hubs is in line with instructions in the contracts and project decisions governing the work of the knowledge hub
Coordinate dialogue between the different Knowledge Hubs	Nutrition Development Unit, Board of Agriculture	Ensure that the hubs have dialogue and interact with each other
Monitor and evaluate the work of designated organisations Knowledge Hubs	Business Development Unit	Creating a basis for dialogue on the continuation of the Knowledge Hub
Contribute to the staffing of working groups initiated by the European Network for the CAP and EIP-Agri	Network Secretariat	Increase the knowledge and learning of member organisations through exchanges with different actors within the EU

Source: Swedish Board of Agriculture (2023)

In addition to developing collaboration between the Swedish Board of Agriculture and the Swedish CAP Network within the AKIS coordination function the Swedish AKIS CB has defined a development plan intended to be continuously updated, evaluated and developed according to the needs of the industry, and in collaboration with Swedish AKIS actors - where other support authorities are also included.

Particularly the AKIS Coordination Body works on:

- Communication platform for stakeholders.
- Improved communication and dialogue-building efforts.
- Coordination of international engagement linked to AKIS.
- Forum to raise awareness of counsellors' skills development needs.
- Regular needs analyses and evaluation.



4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The Swedish CAP network's main mission is to provide value for its members. For example, the two AKIS CoPs coordinated by the Swedish CAP Network as well as many other networking, innovation building and coaching activities (as described in the picture above) are provided by the network and part of the network's mission. These activities, combined with the mandate of the Swedish Board of Agriculture, make AKIS coordination of actions within Strategic Plan more effective. Moreover, Sweden's active participation in the EU project modernAKIS provides support for the development of national AKIS coordination and a continuous development of the capacities.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The composition of the AKIS CB is grounded on national entities that already perform important functions related to the coordination of AKIS actors and networking.

The functions of the AKIS coordination body are based on a specific mandate by the managing authority of the CAP Strategic plan.

Moreover, the drafting of a development plan, continuously updated, gave the opportunity to periodically monitor and evaluate the AKIS CB's activities and improve it, to better respond to the AKIS actors' needs.

BENEFITS



- This configuration of a collegial AKIS CB brings together the actors that are already playing some institutional and operational key functions/activities within the local AKISs.
- Well defined functions and roles defined in a specific document dedicated to AKIS CB give a stronger impulse to the AKIS CB mandate.
- The development of a digital platform improved the knowledge flows and the sharing of information about the AKIS-related interventions.



FURTHER SOURCES OF INFORMATION



- Swedish CAP Strategic Plan 2023-2027 (SE).
- Annex 1. The coordination function AKIS A description of the starting points, responsibilities and the plan of development (SE).

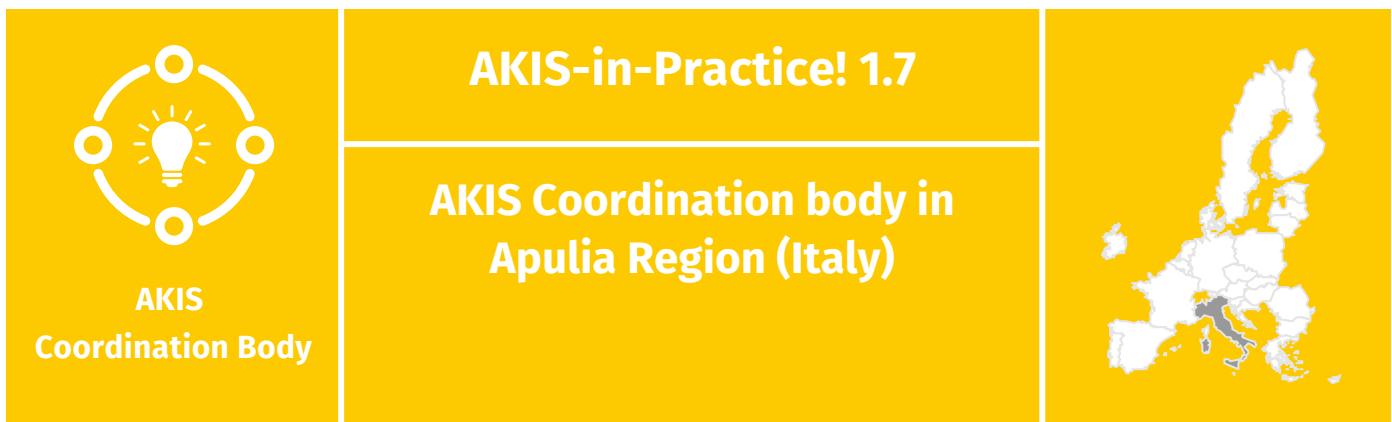


Sweden

 **Jennie Cederholm Björklund:**
Jennie.cederholmbjorklund@jordbruksverket.se

Watch this AKIS-in-Practice!





Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies



In Apulia region's Agricultural Knowledge and Innovation System (AKIS), despite having strong research and training organizations, suffers from fragmentation, weak coordination, and low farm association. Many farms operate with outdated structures, and current measures lack a cohesive framework, leading to isolated projects without integration into a broader innovation network. These issues, along with poor integration of production chains, require targeted political action to address the economic crisis's impact on food consumption, prevent depopulation, and enhance collaboration among agricultural actors.



Source: www.regione.puglia.it

This is the third-largest region in Italy in terms of agricultural technical institutes, hosting 14 institutions, which account for 9% of the national total.

In recent years, more graduates from agricultural institutes have continued their studies in agriculture at universities and these latter very often incorporate courses focused on the primary sector and sustainability. So, in general, the educational offerings have expanded to include new disciplines related to agriculture and agri-food. Advisory services are provided by various regional agencies, including the Regional Agency for Irrigation and Forestry Activities (A.R.I.F.), the main public agency supporting agriculture and forest resource protection. Other key actors include professional organizations, producer associations, and freelance professionals. Despite the region's strong academic presence, weaknesses in the agri-food system include limited digital knowledge, low digital tool adoption, and poor network coverage.

RATIONALE



The political relevance given to the AKIS strategies in the context of the Strategic Plans (SP) 2023-2027 of the CAP has certainly highlighted the opportunity to define governance bodies aimed at coordinating AKIS-related interventions and actors in order to better implement them and contribute to achieving the cross-cutting and specific objectives of the CAP SPs.

In particular, the AKIS coordination body is identified by the 2023-2027 SP as the contact point for the European Commission and the European CAP Network.

The lack of a clear and common definition of the role and functions of the AKIS coordination bodies by the EU regulation has certainly encouraged the managing authorities of the CAP SPs to identify the set-ups that best suit their governance needs and the expectations of the respective actors.

In Italy, as a result of the new delivery model, and differently from previous programming periods, the CAP SP 2023-2027 is established at the national level only. However, since the Regions/Autonomous Provinces have, by Constitution, the competence in agricultural matters, they have set up Complementary Rural Development Programmes (RDCP), which, within the framework of the National CAP SP, have their own governance and implement interventions that are relevant to their specific territories.

The general model of AKIS coordination bodies for Italy is indicated by the CAP SP that mentions a mix of "institutions that have the responsibility/capacity to provide training, advisory services, research, information". Lately, in mid-2024, the Ministry of Agriculture established a national AKIS coordination model which calls for a collective body, composed by representatives of the variety of key AKIS actors.

Under this national framework, the Apulia Region has established a Regional AKIS Coordination Body for the RDCP for Apulia 2023-2027.

IN PRACTICE



The AKIS Regional Coordination Body for the Apulia CSR 2023/27 was established by a decree of the regional government (Giunta regionale) according to Regulation (EU) No. 2021/2115 and consistently with the national model set by the referring Italian ministerial decree (see AKIS-in-Practice! 1.13).

1. Who is the AKIS CB

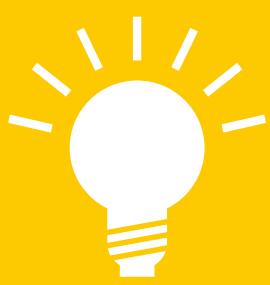
The AKIS Coordination Body of the Apulia Region, is a collegial body include those actors who are involved in various ways in the process of creating, managing and disseminating knowledge and innovation in agriculture. These are universities, research centres, professional organisations, technological institutes and other players in the advisory and training provision. It is chaired by a representative of the Apulia Region. The body consists of 20 members who are key actors of the territorial agricultural systems and experts in the domains of AKIS and digitization (Fig. 1).

2. Composition of the AKIS CB

Figure 1: Composition of the Regional AKIS Coordination Body of Apulia Region



Source: Authors' elaborations based on Regione Apulia (2024)



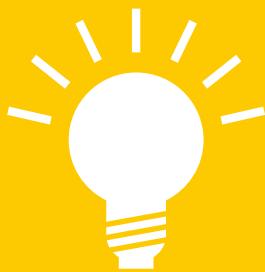
3. Functions attributed to the AKIS CB

The Regional AKIS Coordination Body has the task of coordinating the design and implementation of policies for knowledge and innovation for the agrifood and forestry sector in the Apulia region, and in particular:

- To promote the necessary functional relations between AKIS' actors.
- To support the design and implementation of policies for knowledge and innovation for the agricultural food and forestry sector in the territory.
- To foster exchange and connections between the various AKIS actors at territorial level.
- To facilitate the dissemination of available innovations and the information flow between the different regional organizational levels.
- To identify needs, demands and problems in the implementation of AKIS interventions and the digitization strategy.
- To discuss proposals coming from the National AKIS Coordination Body and facilitate their implementation at territorial level.
- To carry out continuous farms' needs assessment.
- To promote the sharing of approaches, experiences and results of regional AKIS initiatives at all territorial levels, including the European one (Horizon Europe, European CAP network, etc.).
- To coordinate and review the digitisation strategy its implementation.
- To liaise with the EC.
- To collect monitoring data on interventions.
- To communicate on the implementation of the AKIS strategy.
- To participate in the AKIS evaluation of the CAP SP and CSR.
- To strengthen actions concerning the integration of AKIS actors.
- To review of the AKIS strategy and its interventions.
- To propose actions following urgent and emergency events.
- To propose the review of the AKIS strategy post 2027.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

For the purposes indicated in art. 8 of the CAP SP 2023-2027, the regional AKIS coordination body will interface with the Managing Authority of the EAFRD, ERDF, ESF, FSC, with the national coordination, with the National CAP Network, with the Interregional Network of Agricultural Research Forestry Aquaculture and Fisheries.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



The set-up of an AKIS coordination body like this requires:

- A formal act of constitution.
- The definition of a general legal framework that is recognised by all members of the AKIS coordination body.
- A separation of competences, a clear definition of responsibilities and mutual recognition of respective functions (e.g., provision of technical assistance/advisory services, research, innovation support services, administrative controls, monitoring and evaluation, ...) by the members of the AKIS coordination body.

the establishment of internal procedures for coordination meetings and co-decision on action plans to implement the AKIS strategy (internal regulations).

BENEFITS



- Wide representativeness of local key AKS actors.

FURTHER SOURCES OF INFORMATION



DELIBERATION OF THE REGIONAL COUNCIL March 28, 2024, No. 381 Establishment of the AKIS Regional Coordinating Body (IT).



Italy, Apulia Region



Department of Agriculture, Rural and Environmental Development - Apulia Region:
Luigi Trotta
l.trotta@regione.puglia.it





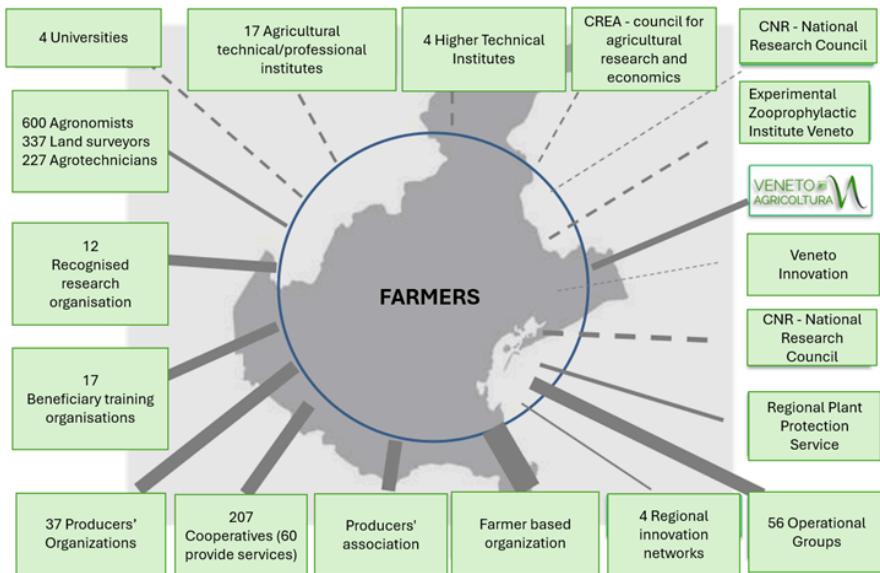
Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies



The AKIS in Veneto Region consists of a plurality of actors, many of which are both producers and users of knowledge, although the majority of enterprises appear to be users of the knowledge produced by the research and disseminated by providers of training, information and advisory services. The regional agricultural, agrifood and forestry sector benefits from the presence of universities, public research centres, technical and professional high schools with agrifood courses, regional agencies, recognised advisory and training organisations, innovative research networks for the smart specialisation strategy and individual and associated producers (Fig. 1). The interventions implemented during the RDP 2014-2022 allowed to start a path of progressive rapprochement and dialogue among all the regional AKIS actors, but the organisational and knowledge exchange flows have not yet reached a systemic arrangement. In this respect, the Regional Government plays an important role as 'facilitator'.



Figure 1: AKIS actors in the Veneto Region



Source: Agenzia Veneto Agricoltura

Farms are certainly the target of the knowledge sharing flows provided by training organisations and advisory organisations, but they still play a marginal role in the generation and dissemination of knowledge and need to be stimulated to invest time in their own training, to join new projects, and to use new ICT tools.

RATIONALE



The political relevance given to the AKIS strategies in the context of the CAP Strategic Plans (SP) 2023-2027 has certainly highlighted the opportunity to define governance bodies aimed at coordinating AKIS-related interventions and actors in order to better implement them and contribute to achieving the cross-cutting and specific objectives of the CAP SPs. In particular, the AKIS coordination body is identified by the CAP SP 2023-2027 as the contact point for the European Commission and the European CAP Network.

In Italy, as a result of the new delivery model, and differently from previous programming periods, the CAP SP 2023-2027 is established at the national level only. However, since the Regions/Autonomous Provinces have, by Constitution, the competence in agricultural matters, they have set up Complementary Rural Development Programmes (RDCP), which, within the framework of the CAP SP, have their own governance and implement interventions that are relevant to their specific territories.

This programming scenario implies that in Italy there is one AKIS strategy and one AKIS coordination body at the CAP SP level and AKIS strategies and respective AKIS coordinating bodies at the level of Regions and Autonomous Provinces.

In the Veneto Region, a Regional AKIS Coordination body was set up, which is chaired by the Regional Government and includes the regional representatives of each category of actors. It is responsible for defining the organisational architecture of the Veneto AKIS and the minimum information flows between actors. In addition, the Coordination Body identifies the 'Knowledge Priorities' to be proposed for the interventions and takes care of their periodical updating.



1. Who is the AKIS CB

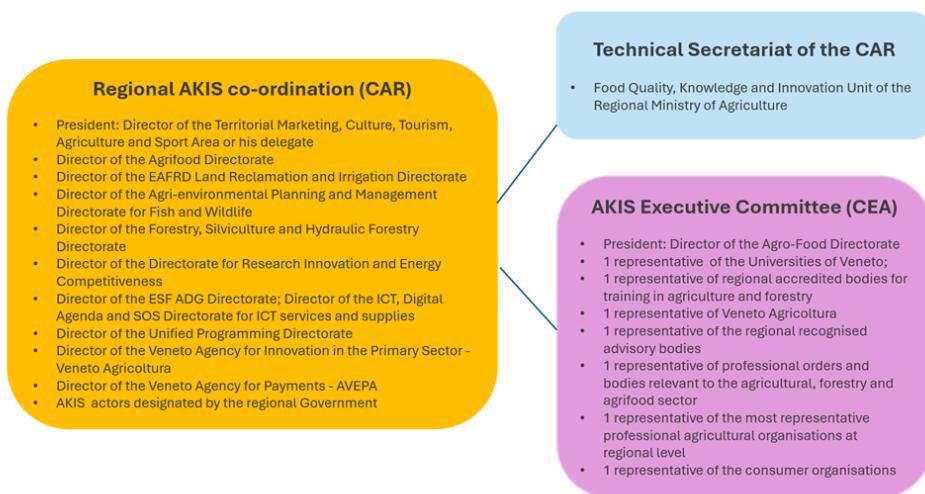
The AKIS coordination Body of Veneto Region, called Regional AKIS Committee (CAR), is organised on the basis of the following principles:

- **Pluralism:** different AKIS actors from the public and private sector, the organisations and associations of agricultural, forestry and agri-food enterprises.
- **Relevance:** participation of regional structures and institutions, organisations and groups that can influence the implementation of AKIS-related interventions.
- **Representativeness:** each component is representative of a plurality of actors.
- **Functionality:** the number of actors is broad but not wasteful and redundant.
- **Historicity:** recognised on the basis of involvement in partnerships, tables, forums, committees, already established or operating at regional level.

2. Composition of the AKIS CB

The composition of the AKIS Coordination Body of the Veneto Region (Fig. 2) takes into account the AKIS strategy developed at the regional level, and the contribution that all the regional structures and organisations can provide to improve information flows and the dissemination of innovation.

Figure 2: Composition of the AKIS Coordination Body in the Veneto Region



Source: our elaborations on Resolution G.R. no. 946 of 13/08/2024

At the organisational level, the AKIS Coordination Body relies on an AKIS Executive Committee (CEA), which has an operational role, supported by a technical secretariat (CAR Technical Secretariat).

3. Composition of the AKIS CB

The functions of the Veneto Region AKIS Coordination Body are:

- To coordinate the definition and implementation of knowledge and innovation policies for the agrifood and forestry sector.
- To foster the exchange and connections between the different institutions at territorial level.
- To promote the necessary functional relations between the AKIS actors.
- Facilitate the flow of information between the different territorial organisational levels (sub-regional and supra-regional).
- Discuss proposals coming from the Italian AKIS National Coordination Body (privileged interlocutor) and facilitate their implementation.
- Liaise with other possible regional Tables for common and cross-cutting issues.
- Identify needs, requirements and problems in the implementation of AKIS interventions and the digitisation strategy to be communicated to the Italian AKIS National Coordination Body.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The CAR cooperates and coordinates with the Regional Monitoring Committee of the Veneto Region RDCP 2023-2027, guaranteeing the constant link between the main actors of the AKIS.

It has regular relations and exchanges with the interregional network of agricultural, forestry, aquaculture and fishery research and the Italian CAP network. Moreover, it dialogues with the referents of the programmes financed by the ESF+ and the ERDF.

According to specific needs, additional staff members of the Regional Government, and/or representatives of other regional structures/bodies, as well as experts with specific skills/experiences that can be consistent with and functional to the AKIS areas of activity, can be invited to the meetings of the AKIS CB.

The members of the regional AKIS CB share and assume a participatory role, committing themselves to formally adhere to it, to actively participate in the information and discussion initiatives organised by the Veneto Region, and to contribute to the creation of a stable system of supervision, animation and amplification of information, in particular towards actors directly represented.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



The set-up of an AKIS coordination body like this requires:

- A formal act of constitution.
- The definition of a general legal framework that is recognised by all members of the AKIS coordination body.
- A separation of competences, a clear definition of responsibilities and mutual recognition of respective functions (e.g., provision of technical assistance/advisory services, research, innovation support services, administrative controls, monitoring and evaluation, ...) by the members of the AKIS CB.
- The establishment of internal procedures for coordination meetings and co-decision on action plans to implement the AKIS strategy (internal regulations).

BENEFITS



- This configuration of the AKIS CB brings together actors that are already playing some institutional and operational key functions/activities within the regional AKIS.
- Wide representation of the regional AKIS actors.
- Operation guaranteed by support structures.



FURTHER SOURCES OF INFORMATION



- Veneto Region Official Bulletin no. 116 of 23/08/2024. Regional Council Resolution no. 946 of 13 August 2024 (IT).
- CAP RDCPs 2023-2027 – Veneto Region (IT).

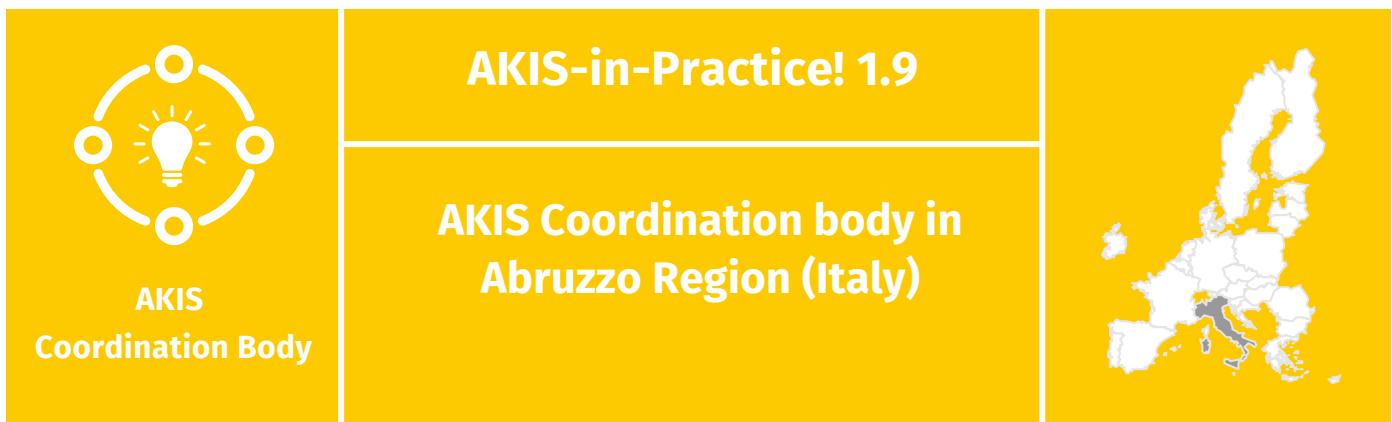


Italy, Veneto Region



**Head of the Quality, Knowledge and Agri-Food
Innovations Operational Unit. Agrifood
Directorate - Veneto Region:
Giorgio Trentin
giorgio.trentin@regione.veneto.it**





Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies



Abruzzo is among the few regions that do not have any regional bodies, agencies, foundations or experimental centres to support the agri-food sector, although significant steps have been taken in the recent period in establishing (and recognising) quality agri-food districts that, among the others, have the function to strengthen innovation services and knowledge exchange and invest in human capital. In addition, two Organic Districts have been formally recognized. Among the strengths of the Abruzzo context are the great wealth of knowledge and know-how of agricultural enterprises linked to the diversified characteristics of Italian agriculture, the presence of new professional figures to cover areas of advice (e.g. landscape architects, engineers, animators, etc.), and the greater attention devoted to AKIS since the 2014-2020 CAP programming, which has allowed a path of progressive rapprochement and dialogue between the AKIS actors to be started, although the organisational and knowledge flows have not yet reached a good systemic arrangement. The critical elements include the weak political (national/regional) systemic strategy and the scarce availability of specific dedicated resources, as well as the lack of infrastructure (including digital) in the most peripheral and marginal areas. The regional strategy within the Rural Development Complementary Programmes (RDCP) 2023-2027 aims at enhancing the contribution that the various AKIS actors can make to achieving the objectives of the CAP, with a systemic approach to services and greater coordination in order to reduce the fragmentation of the regional AKIS actions and providing adequate support for the up-taking of innovation in favour of farms, forests and regional rural areas.





The political relevance given to the AKIS strategies in the context of the CAP Strategic Plans (CAP SP) 2023-2027 has certainly highlighted the opportunity to define governance bodies aimed at coordinating AKIS-related interventions and actors in order to better implement them and contribute to achieving the cross-cutting and specific objectives of the CAP SPs.

In particular, the AKIS coordination body is identified by the 2023-2027 SP as the contact point for the European Commission and the European CAP Network.

In Italy, as a result of the new delivery model, and differently from previous programming periods, the CAP SP 2023-2027 is established at the national level only. However, since the Regions/Autonomous Provinces have, by Constitution, the competence in agricultural matters, they have set up RDCP, which, within the framework of the CAP SP, have their own governance and implement interventions that are relevant to their specific territories.

This programming scenario implies that in Italy there is one AKIS strategy and one AKIS coordinating body at the CAP SP level (Chap. 8 of the CAP SP; General Directorate for Rural Development of the Ministry of Agriculture, Food and Forestry) and AKIS strategies and respective AKIS coordinating bodies at the level of Regions and Autonomous Provinces.

To supervise the AKIS' activities, the Abruzzo region has established a regional AKIS Coordination Body, in line with the provisions of the Italian CAP SP 2023-2027, in order to properly implement the interventions for the knowledge system, innovation and digitalisation in agriculture included in the Abruzzo RDCP 2023-2027.



The AKIS Coordination Body of the Abruzzo Region is a collective body, the 'Regional AKIS Table', which is composed of the regional representatives of each category of actors, who in different ways are involved in the knowledge and innovation system. It is coordinated by the Regional Government and its task is to define the organisational architecture of the regional AKIS, and to coordinate the policy design and implementation (Fig. 1).

1. Who is the AKIS CB

The Director of the Agriculture Department, acting as the Regional Managing Authority of the RDCP 2023/2027 of Abruzzo Region has provided for the establishment of a 'Regional AKIS Table' by requesting the regional organisations, institutions and representations body of each actor category, to formally identify their representatives and their deputies. As a result of this process, the 'Regional Table AKIS' was formalised, representing the AKIS Regional Coordination Body of the Abruzzo RDCP 2023/27.

The AKIS Regional Table may also be convened by the regional administration in a reduced composition, depending on the issues to be discussed and the urgency of taking decisions at administrative and management level.

2. Composition of the AKIS CB

Figure 1: Composition of the Regional AKIS Coordination Body of the Abruzzo Region 2023/27

	Regional Government	<ul style="list-style-type: none">• Regional Council Member in charge of Agricultural Policies• Managing Authority of RDCP 2023-2027 – Abruzzo Region• Regional Program Managers for RDP 2014-2020 and RDCP 2023-2027 – Abruzzo Region• Labour - Social Department – Abruzzo Regional Government• Presidency Department of the Abruzzo Region• Regional Agency for Environmental Protection of the Abruzzo Region - ARTA
	University and Research Institute	<ul style="list-style-type: none">• 3 Universities• Council for agricultural research and economics (CREA)• Experimental Zooprophylactic Institute of Abruzzo and Molise
	Higher technical and vocational colleges	<ul style="list-style-type: none">• 7 Higher technical and vocational agricultural colleges• Higher technical institute with focus on the agri-food sector
	Training and advisory organisations	<ul style="list-style-type: none">• Accredited training organisations• Recognised advisory bodies
	Producers organisations	<ul style="list-style-type: none">• Producers organisations• Confederation of Cooperatives Abruzzo Region• Regional protection consortia
	Professional Orders	<ul style="list-style-type: none">• Regional Federation of Agronomy and Forestry Associations of Abruzzo Region• Veterinary Medical Order• Association of Agricultural Surveyors and Graduate Agricultural Surveyors• Association of Agro-Technicians and Graduate Agro-Technicians
	Operational Groups	<ul style="list-style-type: none">• EIP-AGRI Operational Groups
	LAGs	<ul style="list-style-type: none">• LAGs of Abruzzo Region
	Rural and Quality Districts	<ul style="list-style-type: none">• Representatives of recognized Rural Districts and Quality Food Districts (DAQ Abruzzo Region)
	Parks, protected areas	<ul style="list-style-type: none">• National parks, regional park, protected areas in Abruzzo
	Innovation clusters	<ul style="list-style-type: none">• Agro-food innovation hub for the Abruzzo region (AGIRE)• Research Consortium 'Technological Innovation, Food Quality and Safety'

Source: authors' elaborations based on data from D.G. Regione Abruzzo n. 706 of 25/10/2023

3. Functions attributed to the AKIS CB

The Abruzzo Region AKIS Coordination Body has the task of coordinating the design and implementation of policies for knowledge and innovation for the agrifood and forestry sector in the Abruzzo region, and in particular:

- To promote the necessary functional relations between its actors.
- To support the design and implementation of policies for knowledge and innovation for the agricultural food and forestry sector in the territory under its competence.
- To foster exchange and connections between the various AKIS actors at local/regional level.
- To facilitate the dissemination of available innovations and the information flow between the different regional organizational levels.
- To identify needs, demands and problems in the implementation of AKIS interventions and the digitization strategy.
- To discuss proposals coming from the Italian National AKIS Coordination Body and facilitate their implementation.
- To carry out continuous farms' needs assessment.
- To promote the sharing of approaches, experiences and results of regional AKIS initiatives at all territorial levels, including the European one (Horizon Europe, European CAP network, etc.).

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The Abruzzo Region AKIS coordination body is in charge of defining the regional AKIS strategy, coordinating the implementation of knowledge and innovation policies for the agricultural, agrifood and forestry sector for the Abruzzo Region. Moreover, it will interface with the Managing Authority of the EAFRD, ESF, and others on specific topics.

The Abruzzo Region AKIS Coordination Body has the task of defining the organisational architecture of the regional AKIS and the minimum information flows between the actors, as well as of coordinating the design and implementation of knowledge and innovation policies for the agri-food and forestry sector in the territory of the Abruzzo Region, identifying their priorities and taking care of their periodical updating.

Moreover, it links up with the Italian CAP Network, as well as with the Interregional Network of Agricultural, Forestry, Aquaculture and Fisheries Research, also to participate in specific initiatives (Technological Platforms, etc.) and to address specific needs related to research and service activities for farms and territories.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The set-up of an AKIS coordination body like this requires:

- A formal act of constitution.
- The definition of a general legal framework that is recognised by all members of the AKIS coordination body.
- A separation of competences, a clear definition of responsibilities and mutual recognition of respective functions (e.g., provision of technical assistance/advisory services, research, innovation support services, administrative controls, monitoring and evaluation, ...) by the members of the AKIS coordination body.
- The establishment of internal procedures for coordination meetings and co-decision on action plans to implement the AKIS strategy (internal regulations).

BENEFITS



- This configuration of the AKIS CB brings together actors that are already playing some institutional and operational key functions/activities within the regional AKIS.
- Wide representation of the regional AKIS actors.





- Regional government resolution n. 706 of 25/10/2023 'Establishment of Regional Akis Table'.
- Regional Law 5/2011 'Promotion and recognition of quality agri-food districts DAQ'.



Italy, Abruzzo Region



Director of the Agriculture Department of the Abruzzo Regional Ministry:

Dr. Elena Sico

Elena.sico@regione.abruzzo.it

Office of the Director:

Dr. Francesco Di Filippo

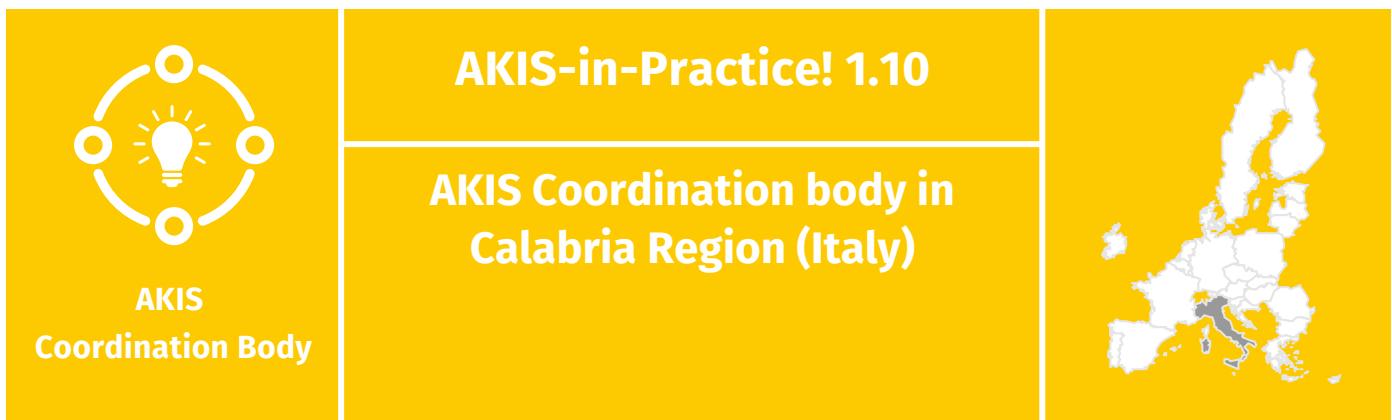
francesco.difilippo@regione.abruzzo.it

Responsabile dell'Ufficio Partenariati Europei per l'Innovazione:

Dott. Luigi D'Intino

luigi.dintino@regione.abruzzo.it



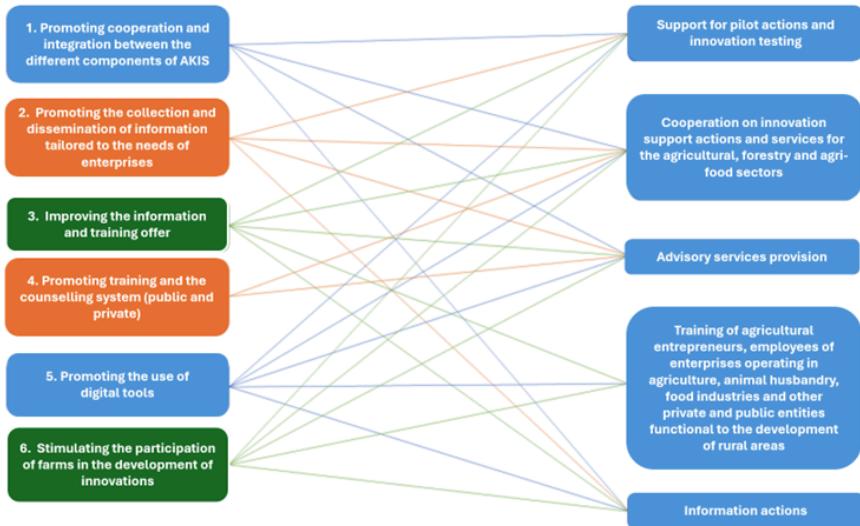


Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies



<p>The AKIS (Agricultural Knowledge and Innovation System) strategy of Rural Development Complementary Programme (RDCP) of Calabria Region aims to enhance the competitiveness and sustainability of the agricultural sector in Calabria. Its primary objectives include fostering collaboration among various stakeholders, such as farmers, researchers, and extension services, to promote innovation and knowledge transfer. The strategy seeks to address local agricultural challenges by improving access to information and technology and facilitating training and education. Additionally, Calabria Region seeks to stimulate and strengthen farms participation in technological innovation processes, fostering greater competitiveness and sustainability and improving quality of life in rural areas, including the provision of digital services to counteract depopulation.</p> <p>The AKIS-related interventions outlined in the Calabria Region 2023-2027 RDCP build upon the successful outcomes of the 2014-2022 programming, incorporating enhancements based on previous experiences to enhance their effectiveness further:</p> <ul style="list-style-type: none"> • Provision of advisory services. • Training actions aimed at agricultural, forestry, and rural sector workers. • Information actions. • Cooperation - Support for pilot actions and innovation testing. • Cooperation for actions supporting innovation and services for the agricultural, forestry, and agri-food sectors. 	
---	---

Figure 1: Cross-sectional AKIS Objective: Needs and Interventions



Source: Calabria RDS 2023-2027

RATIONALE



The significant policy importance of AKIS strategies within the context of the CAP 2023-2027 Strategic Plans has underscored the need to establish governance bodies to coordinate AKIS-related interventions and actors, improving implementation and contributing to the overarching and specific CAP objectives.

The AKIS coordinating body is designated by the Strategic Plan as the European Commission and EU CAP Network's contact point.

In Italy, due to the new distribution model, unlike previous programming periods, the CAP SP In Italy, as a result of the new delivery model and unlike previous programming periods, the 2023-2027 CAP SP is established solely at the national level. However, as Regions/Autonomous Provinces hold agricultural competency under the Constitution, they have set up Complementary Rural Development Programs (RDCPs), which, under the CAP SP framework, have their own governance structures and implement rural interventions relevant to their specific territories at the local level.

This programming approach means that Italy includes one AKIS strategy and a CAP SP-level AKIS coordination body (Chapter 8 of the CAP SP; General Directorate of Rural Development of the Ministry of Agricultural Policies, Food Sovereignty, and Forestry) along with regional AKIS strategies and corresponding AKIS coordination bodies for each Region and Autonomous Province.

The general model of AKIS coordination bodies for Italy is indicated by the CAP SP that mentions a mix of "institutions that have the responsibility/capacity to provide training, advisory services, research, information". Lately, in mid-2024, the Ministry of Agriculture established a national AKIS coordination model which calls for a collective body, composed by representatives of the variety of key AKIS actors.

Under this national framework, Calabria Region established a Regional AKIS Coordination Body, chaired by the Regional Ministry of Agriculture and Agri-Food Resources and Forestry, with the dual purpose of fostering discussion and connections between different institutions and promoting necessary functional relations among AKIS stakeholders.

This body will also facilitate information flow across regional, national, and European levels.



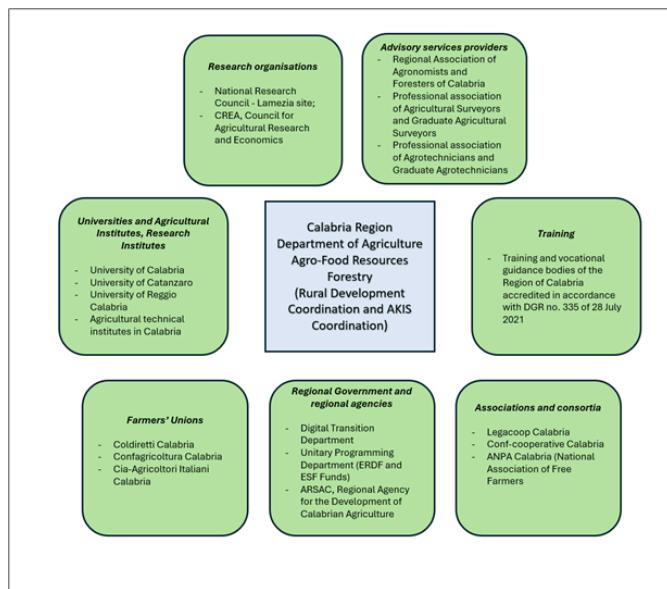
1. Who is the AKIS CB

The Regional AKIS Coordination Body for Calabria Region 2023-2027 RDCP is a collegiate body established under Regulation (EU) No. 2021/2115, with representation from all entities that offer and provide training, advisory, research, information, and digital services.

2. Composition of the AKIS CB

Chaired by the Regional Ministry of Agriculture and Agri-Food Resources and Forestry, the Regional AKIS CB includes representatives from each regional AKIS actor category, ensuring the proper implementation of interventions for agricultural knowledge, innovation, and digitalization (Fig. 2).

Figure 2: Composition of the Calabria Region AKIS CB



Source: our elaborations on Regional Council Resolution No. 371 of July 25, 2024

3. Functions attributed to the AKIS CB

The Regional AKIS CB's functions include:

- Coordinating policy definition and implementation for innovation and knowledge in the agro-food and forestry sector within the Calabria Region.
- Promoting discussion and connection among different institutions at the regional and extraregional levels to help spread information and knowledge flows among beneficiaries.
- Monitoring farms' needs.
- Facilitating the sharing of available innovations and information flow across various regional organizational levels.
- Bringing forth requirements, needs, and implementation issues for AKIS interventions and digitalization strategies.
- Discussing proposals from the National AKIS Coordination and supporting their application.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The AKIS coordination body will convene periodically to ensure effective oversight and monitoring of the AKIS Strategy progress, fostering a collaborative environment for ongoing evaluation and strategic alignment. Moreover, the Regional CB will engage with the ESF and ERDF MAs on appropriate themes and will be responsible for coordinating policy definition and implementation for innovation and knowledge within the agro-food and forestry sectors in the region.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- A formal act to establish the Regional AKIS Coordination.
- A general regulatory framework recognized by all AKIS coordinating body members.
- A clear separation of responsibilities, clear definition of duties, and mutual recognition of respective roles (such as technical assistance, research, innovation support services, administrative controls, monitoring and evaluation) by AKIS coordination members.
- Defined internal procedures for coordination meetings and joint decision-making on action plans for AKIS strategy implementation (internal regulations).

BENEFITS



- This configuration of the AKIS CB brings together actors that are already playing some institutional and operational key functions/activities within the regional AKIS.
- Wide representation of the regional AKIS actors.



FURTHER SOURCES OF INFORMATION



- 2023-2027 RDP Calabria Region.



Italy, Calabria Region



**Regional Ministry of Agriculture and Agri-Food
Resources and Forestry:**
Ruth Militano
ruth.militano@regione.calabria.it





Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination bodies



<p>The AKIS of Aosta Valley Region faces several challenges: a) improving coordination among stakeholders; b) enhancing the dissemination of innovations and support services for farms and rural areas; c) effectively identifying the advisory services, training, and innovation needs of agricultural, agri-food, and forestry enterprises, with particular focus on small and micro-enterprises.</p> <p>The range of actors involved in training activities at the regional level is broad and highly qualified. In this context, there is a need to coordinate the planning of actions in training, advisory, information, and outreach (including through data and experience sharing and the use of technological and digital innovations).</p> <p>The AKIS-related interventions activated in Aosta Valley Region within the Rural Development Complementary Programme (RDCP) 2023-2027 include:</p> <ul style="list-style-type: none"> • Provision of advisory services. • Training of advisors. • Training actions aimed at workers in the agricultural, forestry, and rural sectors. • Back-office services for AKIS. • Support for pilot actions and innovation testing. • Cooperation for actions supporting innovation and services for the agricultural, forestry, and agri-food sectors. 	
---	---

RATIONALE



The political significance attributed to AKIS strategies within the framework of the 2023-2027 Strategic Plans (SP) of the CAP has highlighted the need to establish governance bodies aimed at coordinating AKIS-related interventions and stakeholders to improve implementation and contribute to the CAP SP's cross-cutting and specific objectives.

Specifically, the AKIS coordination body is identified by the 2023-2027 SP as the contact point for the European Commission and the European CAP Network.

In Italy, as a result of the new delivery model and unlike previous programming periods, the 2023-2027 CAP SP is established solely at the national level. However, as Regions/Autonomous Provinces hold agricultural competency under the Constitution, they have set up Complementary Rural Development Programs (RDCPs), which, under the CAP SP framework, have their own governance structures and implement rural interventions relevant to their specific territories at the local level.

This programming approach means that Italy includes one AKIS strategy and a CAP SP-level AKIS coordination body (Chapter 8 of the CAP SP; General Directorate of Rural Development of the Ministry of Agricultural Policies, Food Sovereignty, and Forestry) along with regional AKIS strategies and corresponding AKIS coordination bodies for each Region and Autonomous Province.

The general model of AKIS coordination bodies for Italy is indicated by the CAP SP that mentions a mix of "institutions that have the responsibility/capacity to provide training, advisory services, research, information". Lately, in mid-2024, the Ministry of Agriculture established a national AKIS coordination model which calls for a collective body, composed by representatives of the variety of key AKIS actors.

Under this national framework, the Aosta Valley Region established an AKIS Regional Coordination Committee to oversee various AKIS activities. This committee is composed of representatives from all AKIS sectors at the territorial level and is chaired by the "Regional Rural Development Policies" structure of the Agriculture Department, acting as the regional Managing Authority (MA) of the Aosta Valley 2023-2027 RDCP.

IN PRACTICE



1. Who is the AKIS CB

The Regional AKIS Coordination Committee for the 2023-2027 RDCP of the Aosta Valley is a collective body, set up in 2023. The tasks of coordination and technical secretariat will be handled by the MA of the Aosta Valley RDCP 2023-2027.



2. Composition of the AKIS CB

The regional coordination committee is composed of representatives from institutions and stakeholders who, at the regional level, provide and deliver training, advisory services providers, research, information, digital services, and other activities related to AKIS, tailored to local specificities.

Particularly, it includes (Fig. 1):

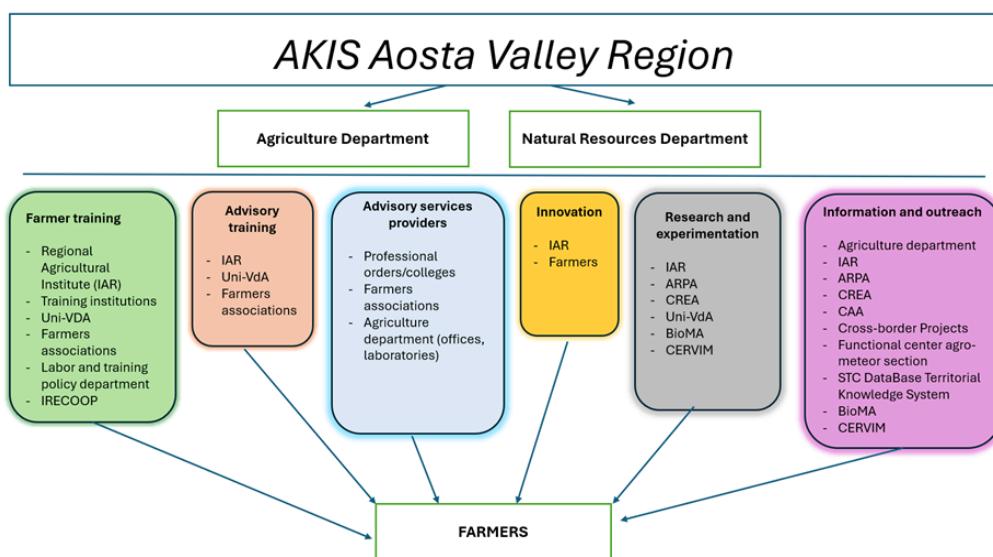
1) Representatives of the competent regional authorities and public or publicly significant entities:

- The regional Managing Authority of the RDP 14/22 and RDCP 2023-2027.
- Representatives from the regional Structures of the Agriculture Department and the Natural Resources Department responsible for implementing the interventions provided by the RDCP 2023-2027.
- A representative from the Department of Labor Policies and Training.
- A representative from the Department of Territorial Planning.
- A representative from the Department of Innovation and Digital Agenda.
- A representative from the Regional Functional Center.
- A representative from the Regional Agency for Environmental Protection.
- A representative from the Regional Agency for Agricultural Payments of Aosta Valley (AREA VdA).
- A representative from the Chamber of Commerce and Liberal Professions of Aosta Valley.
- A representative from the Regional Agricultural Institute (IAR).
- A representative from the Intermediate Body for the management and implementation of local development interventions (LAG).

2) Representatives of economic and social parties:

- Representatives of agricultural associations by category.
- Representatives of sector-specific agricultural associations.
- Representatives from professional orders and registers most involved in rural development interventions.
- Representatives from organizations providing education, training, and advisory services.
- Representatives from private research centers operating in areas related to rural development within the region.

Figure 1: AKIS Coordination Body of Aosta Valley RDCP 2023-2027



Source: Our elaborations based on presentation of the AKIS Coordination Committee Aosta Valley - September 25, 2023

3. Functions attributed to the AKIS CB

The committee's mandate is to coordinate the formulation and implementation of policies for innovation and knowledge within the agricultural, agri-food, and forestry sectors in the region. Additionally, it serves as a liaison on relevant topics with officials of other European funds active in the Aosta Valley, facilitates information flow across regional, national, and European levels, and is represented within the National AKIS Coordination Committee. All stakeholders were actively involved in the establishment of this Regional AKIS Coordination Committee.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The AKIS coordination body will convene periodically to ensure effective oversight and monitoring of the AKIS Strategy progress, fostering a collaborative environment for ongoing evaluation and strategic alignment.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The set-up of a collective AKIS coordination body requires:

- A formal act of constitution.
- Separation of competences, a clear definition of responsibilities and mutual recognition of respective functions (e.g., provision of technical assistance/advisory services, research, innovation support services, administrative controls, monitoring and evaluation, ...) by the members of the AKIS coordination body.
- The establishment of internal procedures for coordination meetings and co-decision on action plans to implement the AKIS strategy (internal regulations).

BENEFITS



- Improvement of governance and participation among various stakeholders.
- Wide representation of the regional AKIS actors.



FURTHER SOURCES OF INFORMATION



- Aosta Valley 2023-2027 RDCP (IT).
- Presentation of the AKIS Coordination Body at the RDCP Monitoring Committee – 25/09/2023 (IT).



Italy, Aosta Valley Region



Regional Ministry of agriculture and natural resources - Head of the Communications Office of the RDCP MA:

Alessandro Rota

a.rota@regione.vda.it

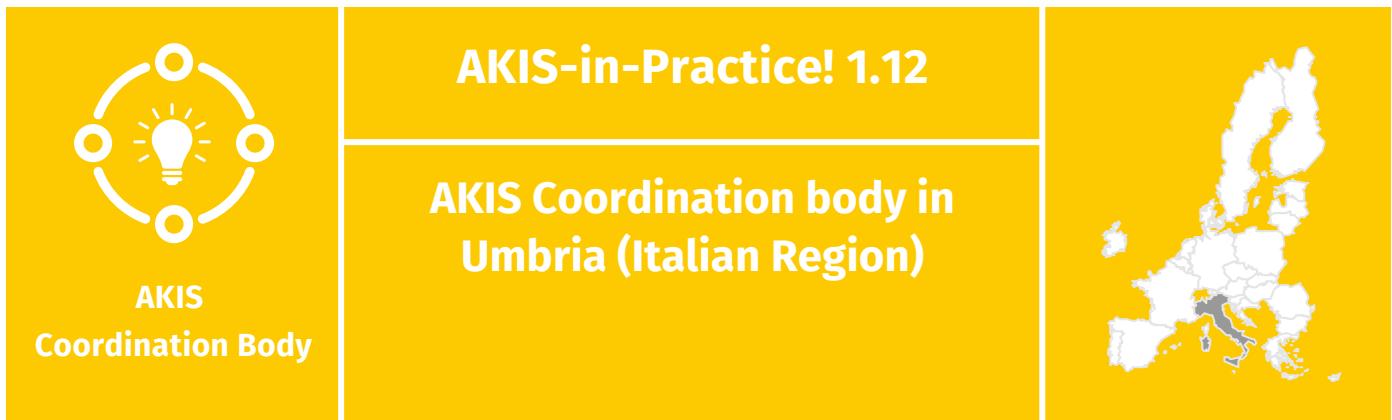
Regional Ministry of agriculture and natural resources:

Cristina Galliani

c.galliani@regione.vda.it

Watch this AKIS-in-Practice!





Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination Bodies



In the 2014-2022 programming period, the Umbria Region gained considerable experience in managing measures aimed at adopting innovations, training, and advisory services. Through the Innovation Support service provided by the in-house 3A - Technological Agro-food Park of Umbria, the regional Innovation portal (www.piumbria.com) was created a tool for the regional agricultural innovation system, serving farms, research centers, and advisory services providers. Furthermore, a productive animation activity was carried out in close collaboration with the Italian National Rural Network and EIP-AGRI, which included thematic focus groups and annual seminars aimed at disseminating the results of projects and adopted innovations, as well as promoting cooperation among the various components of the Agricultural Knowledge and Innovation System (AKIS) to provide the agricultural system with more coherent tools. Nevertheless, one of the weaknesses of the AKIS system in Umbria Region remains the difficulty in coordination and exchange among the aforementioned AKIS regional actors, as well as a lack in identifying the needs for advisory services, training, and innovation among agricultural, agro-food, and forestry enterprises, particularly concerning the small and micro ones.

The AKIS interventions implemented under the 2023-2027 Rural Development Complementary Programme (RDCP) of Umbria include:

- Support for EIP-AGRI Operational Groups (Ogs).
- Support for pilot actions and innovation testing.
- Cooperation for actions supporting innovation and services aimed at the agricultural, forestry, and agro-food sectors.
- Provision of advisory services.
- Training of advisors.
- Training of farmers and agricultural workers.
- Demonstrative actions for the agricultural/forestry sector and rural areas.
- Back-office services for AKIS.

RATIONALE



The political relevance given to AKIS strategies in the context of the CAP Strategic Plans (SPs) 2023-2027 has certainly highlighted the opportunity of defining governance bodies aimed at coordinating the AKIS-relating interventions and actors in view of their better implementation and contribution to the cross-cutting and specific objectives of the CAP SPs.

Particularly, the AKIS coordination body is indicated by the CAP SP 2023-2027 as a point of contact of the European Commission and of the European CAP Network.

In Italy, as a result of the new delivery model and unlike previous programming periods, the 2023-2027 CAP SP is established solely at the national level. However, as Regions/Autonomous Provinces hold agricultural competency under the Constitution, they have set up Complementary Rural Development Programs (RDCPs), which, under the CAP SP framework, have their own governance structures and implement rural interventions relevant to their specific territories at the local level.

This programming approach means that Italy includes one AKIS strategy and a CAP SP-level AKIS coordination body (Chapter 8 of the CAP SP; General Directorate of Rural Development of the Ministry of Agricultural Policies, Food Sovereignty, and Forestry) along with regional AKIS strategies and corresponding AKIS coordination bodies for each Region and Autonomous Province.

The general model of AKIS coordination bodies for Italy is indicated by the CAP SP that mentions a mix of "institutions that have the responsibility/capacity to provide training, advisory services, research, information". Lately, in mid-2024, the Ministry of Agriculture established a national AKIS coordination model which calls for a collective body, composed by representatives of the variety of key AKIS actors.

Under this national framework, the Umbria region has established a Regional AKIS Coordination Committee, in line with the provisions of the Italian CAP Strategic Plan 2023-2027, to ensure proper implementation of interventions for knowledge, innovation, and digitalization systems in agriculture of the 2023-2027 RDCP of Umbria Region.



1. Who is the AKIS CB

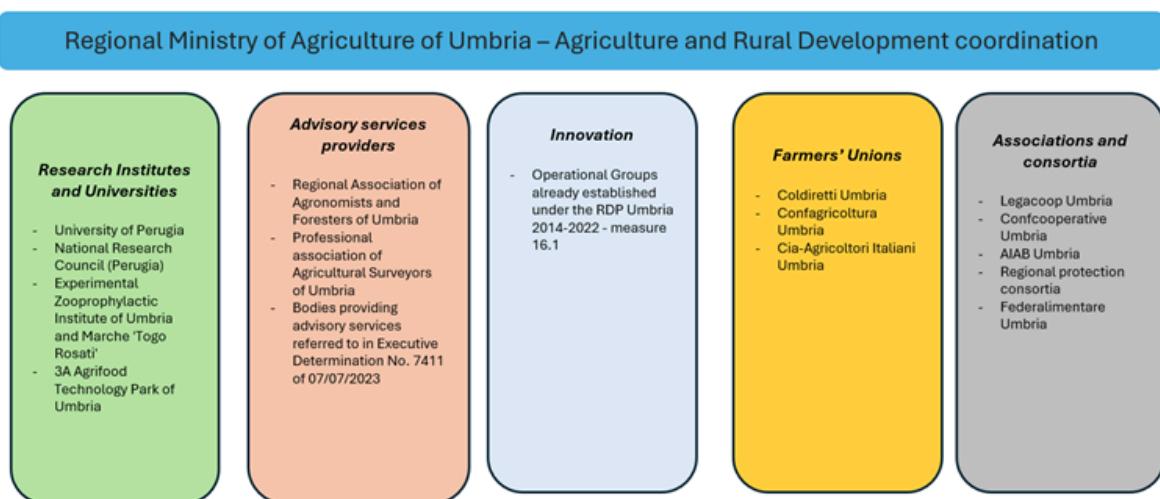
The Regional AKIS Coordination Body (CB) of the 2023-2027 RDCP of Umbria Region is a collegiate body established under Regulation (EU) No. 2021/2115.

The first meeting of the AKIS CB took place in January 2024, gathering brought together key AKIS actors and stakeholders.

2. Composition of the AKIS CB

The regional AKIS CB consists of public institutions, accredited private entities, and organizations that, at the regional level, provide and deliver training, advisory service, research, information, digital services, and other AKIS-related services related according to local specifics (Fig. 1).

Figure 1: Composition of the AKIS CB of the 2023-2927 RCDP of Umbria



Source: Our elaborations based on Resolution of the Regional Council of Umbria No. 1342 -20/12/2023.

3. Functions attributed to the AKIS CB

The functions of the Regional AKIS CB are:

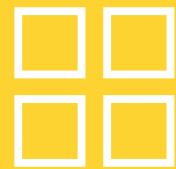
- To coordinate the definition and implementation of policies for innovation and knowledge in the agricultural and forestry sectors within the regional territory.
- To facilitate dialogue and connections among various institutions at the territorial level.
- To conduct continuous monitoring of the needs of farms and other AKIS actors.
- To facilitate the sharing of available innovations and the flow of information among the different regional organizational levels.
- To identify needs, requirements, and implementation issues of AKIS interventions and the digitalization strategy.
- To discuss proposals from the National AKIS Coordination and facilitate their implementation.

The regional AKIS Coordination Body will define any changes in the regional AKIS strategy, coordinate the implementation of policies for innovation and knowledge in the agricultural, agro-food, and forestry sectors for the Umbria Region.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The AKIS CB will interface with the Managing Authority of the EAFRD (European Agricultural Fund for Rural Development), ERDF (European Regional Development Fund), ESF (European Social Fund), FSC (Cohesion Fund), with the AKIS National Coordination, the Interregional Network for Agricultural, Forestry, Aquaculture and Fishing Research, and the National CAP Network.

The AKIS coordination body will convene periodically to ensure effective oversight and monitoring of the AKIS Strategy progress, fostering a collaborative environment for ongoing evaluation and strategic alignment.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



The establishment of an AKIS coordination body requires:

- A formal act of establishment of the regional AKIS coordination.
- The definition of a general regulatory framework recognized by all members of the AKIS coordination body.
- A clear separation of competences, a clear definition of responsibilities, and mutual recognition of respective functions (e.g., technical assistance, research, innovation support services, administrative controls, monitoring and evaluation, etc.) by the members of the AKIS coordination body.
- The definition of internal procedures for coordination meetings and co-decision on action plans for the implementation of the AKIS strategy (internal regulations).



BENEFITS



- Wide representation of the regional AKIS actors.
- Capacity to identify the needs of various AKIS stakeholders

FURTHER SOURCES OF INFORMATION



Italy, Umbria Region



Mauro Bacinelli
Head of the "Services to Agricultural
Enterprises and Digital Services
for the Rural Population" section of the
"Knowledge and Innovation System,
services for the population and rural territory"
service:
mbacinelli@regione.umbria.it.





Keywords/Tags



Governance



AKIS Coordination body



Potential users



Managing authorities of the CAP Strategic Plan



AKIS Coordination bodies



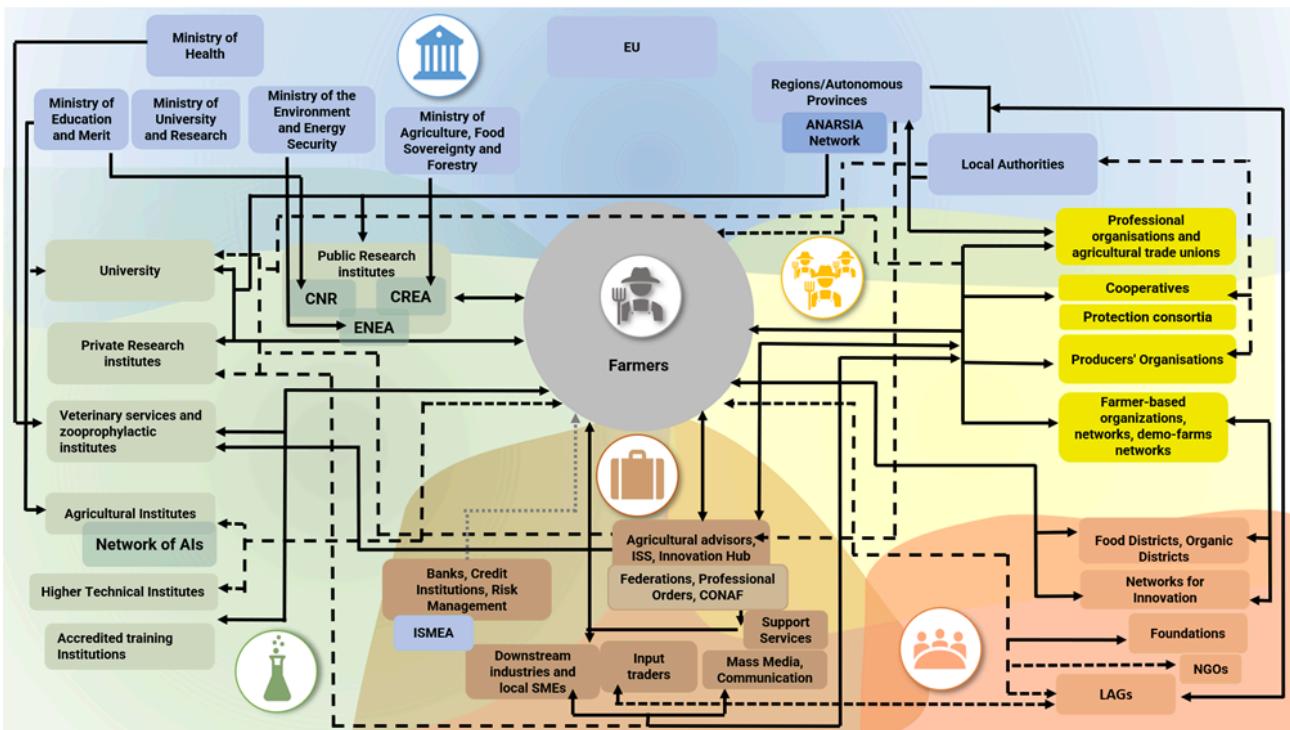
AKIS context



The Italian AKIS (Agricultural Knowledge and Innovation System) is a complex, multi-actor, and multilayered network encompassing numerous entities and governance levels. This structure involves a diverse range of stakeholders who, despite working in overlapping areas, bring specialized expertise to specific fields. The extent of cooperation and integration varies significantly, influenced by the types of actors involved, their regional affiliations, and the policy frameworks guiding them. Generally, local innovation initiatives—supported by past and current CAP funds, as well as local learning and innovation networks—have fostered and strengthened relationships among these varied actors, particularly enhancing collaboration between farmers, advisors, and the research community. At the national level, the Italian AKIS is closely interconnected with regional systems, facilitated by a network of actors and knowledge exchanges that often transcend national or regional boundaries. Typically, numerous organizations—both from the research sector (e.g., CREA, CNR) and the productive sector (such as farmers' unions)—are actively involved across both the national and regional AKIS networks, participating fluidly across these layers.



Figure 1: Italian AKIS Diagram



Source: i2connect AKIS country report (2024)

RATIONALE



The political relevance given to AKIS strategies in the context of the CAP Strategic Plans (CAP SPs) 2023-2023 has certainly highlighted the opportunity of defining governance bodies aimed at coordinating the AKIS-relating interventions and actors in view of their better implementation and contribution to the cross-cutting and specific objectives of the CAP SPs.

Particularly, the AKIS coordination body is indicated by the CAP SP 2023-2027 as a point of contact of the European Commission and of the European CAP Network.

In Italy, as a result of the new delivery model and unlike previous programming periods, the 2023-2027 CAP SP is established solely at the national level. However, as Regions/Autonomous Provinces hold agricultural competency under the Constitution, they have set up Complementary Rural Development Programs (RDCPs), which, under the CAP SP framework, have their own governance structures and implement rural interventions relevant to their specific territories at the local level.

This programming approach means that Italy includes one AKIS strategy and a CAP SP-level AKIS coordination body (Chapter 8 of the CAP SP; General Directorate of Rural Development of the Ministry of Agricultural Policies, Food Sovereignty, and Forestry) along with regional AKIS strategies and corresponding AKIS coordination bodies for each Region and Autonomous Province.

The general model for AKIS coordination bodies in Italy was outlined in the document titled "AKIS Coordination in Italy: Some Operational Proposals," developed by the Ministry of Agriculture, Food Sovereignty and Forestry (MASAF) in collaboration with the Italian CAP Network. This document aims to propose a framework for the structure, functions, and organization of both the National AKIS Coordination Body and the Regional AKIS Coordination Bodies. This document was developed in a participatory way with the Regional RDCP Managing Authorities to achieve a common vision on the definition of the Coordination Bodies for AKIS.

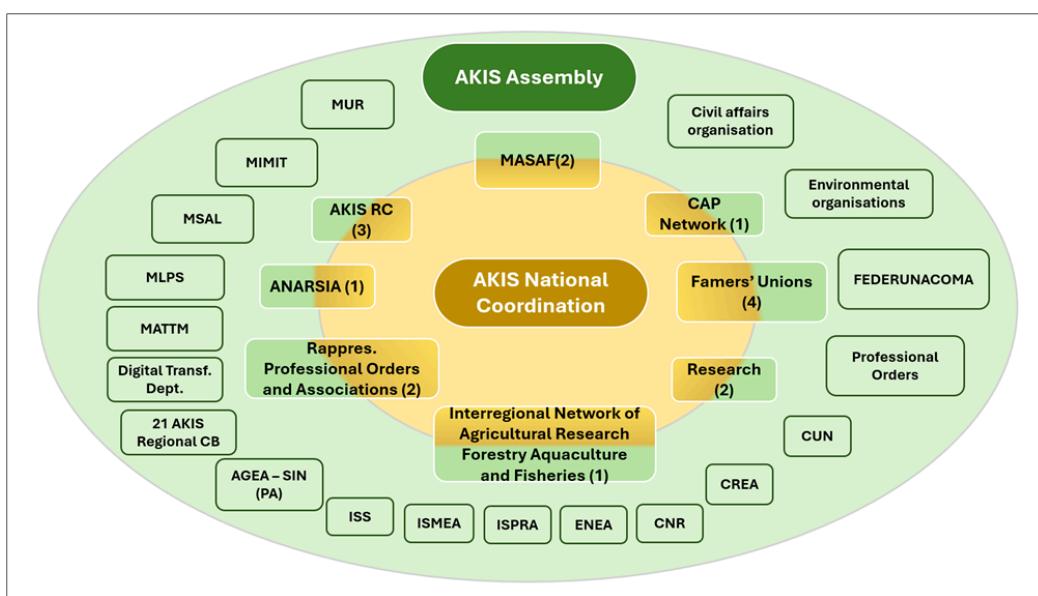


1. Who is the AKIS CB

The Italian AKIS Coordination Body for the 2023-2027 CAP SP, set up in 2024, consists of a collective body, namely AKIS National Coordination, chaired by the Director General of Rural Development of MASAF and consists of 18 members with expertise in AKIS and digitization. In carrying out its functions and pursuing its objectives, the AKIS National Coordination is supported by the AKIS Assembly.

The **AKIS Assembly**, chaired by the Director General for Rural Development of MASAF, comprises all the members of the AKIS National Coordination and representatives from institutions whose respective competencies contribute to the Italian AKIS. The Secretariat activities of the AKIS Assembly are provided by the National CAP Network.

Figure 2: Italian National AKIS CB



Source: CAP Network, MASAF (2023), *AKIS Coordination in Italy: some operational proposals*



2. Composition of the AKIS CB

The AKIS National Coordination consists of 18 members who are experts in AKIS and digitalization, including:

- Two members of MASAF.
- Three members of the AKIS Regional Coordination Bodies.
- One member representing the Interregional Network of Agricultural Research Forestry Aquaculture and Fisheries.
- One member representing the Network of Regional Development Agencies (ANARSIA).
- Two representatives from research institutions/university.
- Four representatives from farmers' unions
- Two members representing professional orders.
- One member representing Council for agricultural research and economics (CREA-PB).
- One member representing Agricultural Food Market Services Institute (ISMEA).
- One member representing the Paying Agency AGEA.

The AKIS Assembly is composed of the following representatives:

- Ministry of University and Research (MUR).
- Ministry of Enterprises and Made in Italy (MIMIT).
- Ministry of Labour and Social Policies (MLPS).
- Ministry of Environment and Energy Security (MATTM).
- Ministry of Health (MSAL).
- Department for Digital Transformation.
- 21 AKIS Regional Coordinations Bodies.
- Interregional Network of Agricultural, Forestry, Aquaculture and Fisheries Research.
- ANARSIA.
- AGEA – Paying Agency.
- CUN (National University Council).
- CREA.
- CNR.
- ENEA.
- ISPRA (Institute for Environmental Protection and Research).
- Superior Institute of Health.
- ISMEA.
- Professional orders and colleges.
- FEDERUNACOMA (National Federation of Agricultural Machinery Manufacturers).
- Professional organizations.
- Environmental organizations.
- Organizations dealing with social issues.
- National CAP Network.

3. Functions attributed to the AKIS CB

The National AKIS Coordination performs the following functions:

- Identify new needs or existing needs that have not been sufficiently addressed.
- Assess the level of integration of AKIS stakeholders based on information provided by members, with particular focus on advisory services.
- Propose actions aimed at improving the implementation of AKIS initiatives and the digitalization strategy, to be carried out also through the National CAP Network and/or technical assistance to the CAP SP, and/or with support from the Interregional Network for Agricultural, Forestry, Aquaculture, and Fisheries Research.
- Propose changes and adjustments to the national AKIS and digitalization strategy.

- Promote support and development actions, particularly aimed at integrating AKIS stakeholders, through the National CAP Network and/or CAP SP technical assistance.
- Propose actions to be implemented in response to urgent and emergency situations.
- Identify activities needed to coordinate the AKIS actions within the PSP and the national digitalization strategy with similar activities promoted by other European, national, and regional funding instruments.
- Maintain ongoing relationships with the Regional/Autonomous Province AKIS Coordination Bodies.
- Establish methods of collaboration and coordination with the EC.

The AKIS Assembly's role is to facilitate discussions among the national AKIS stakeholders, promote the identification of any issues and challenges, and propose solutions.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The composition of the AKIS National Coordination and the AKIS Assembly facilitates relationships among the key actors of the Italian AKIS. The Coordination communicates directly with EU bodies, particularly with the Directorate General for Agriculture and Rural Development of the European Commission. The information flow is bilateral and pertains to the current status of the national AKIS system and strategies for its improvement, with a particular focus on integrating advisory services. Additionally, through MASAF, the AKIS Coordination maintains direct communication with the Monitoring Committee of the CAP SP.

The Coordination meets at least once a year with the AKIS Assembly, which serves as a privileged interlocutor, ensuring regular dialogue and collaboration. Also, AKIS Assembly meets at least once a year.

A specific Operating Regulation will define in detail the operating procedures of the AKIS Coordination.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



To replicate this practice, the following needs to be followed objectives:

- A formal act to establish the Regional AKIS Coordination.
- A general regulatory framework recognized by all AKIS coordinating body members.
- A clear separation of responsibilities, clear definition of duties, and mutual recognition of respective roles (such as technical assistance, research, innovation support services, administrative controls, monitoring and evaluation) by AKIS coordination members.
- Defined internal procedures for coordination meetings and joint decision-making on action plans for AKIS strategy implementation (internal regulations).



BENEFITS



- Improvement of governance and participation among various stakeholders.
- Wide representation of the national AKIS actors.
- Integration of regional AKIS strategies ensuring that local needs and conditions are addressed within the national one.

FURTHER SOURCES OF INFORMATION



- Italian CAP Strategic Plan 2023-2027.
- i2connect AKIS Country Report 2020 – Italy.
- i2connect AKIS Country Reports.



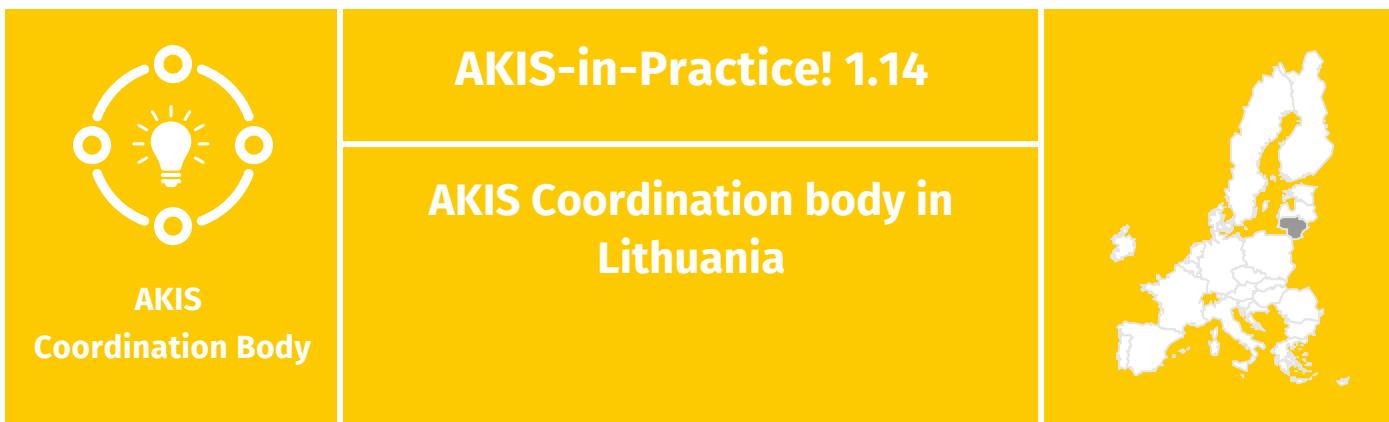
Italy



Italian Ministry of Agriculture, Food Sovereignty and Forestry:
disr.direttore@masaf.gov.it
Italian CAP Network – Innovation:
innovazione.rn@crea.gov.it

Watch this AKIS-in-Practice!





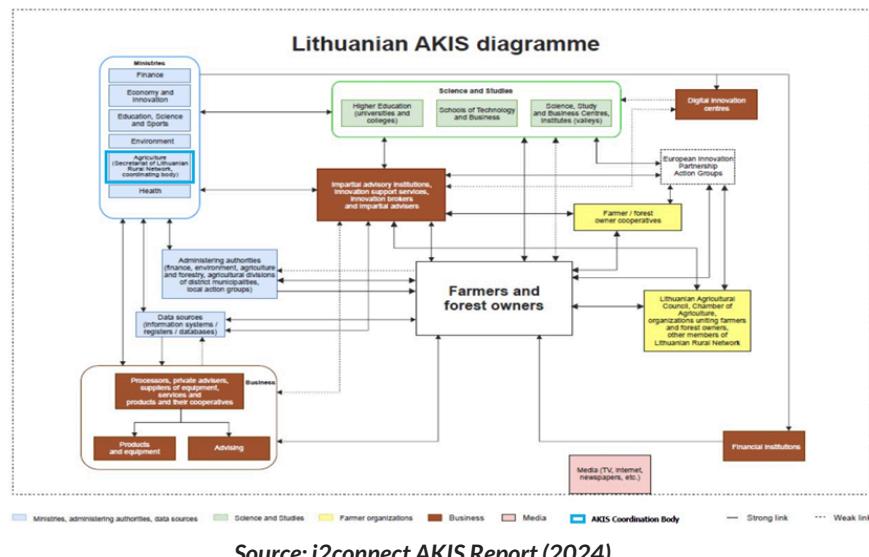
Keywords/Tags	Potential users
 Governance	 Managing authorities of the CAP Strategic Plan
 AKIS Coordination body	 AKIS Coordination
 CAP implementation	 CAP Network
 Knowledge transfer	 AKIS key-actors



Nearly a decade ago, the Lithuanian Agricultural Advisory Service (LAAS) became one of the pioneers in exploring AKIS in the country. Under the leadership of an innovator promoter in Lithuania's agricultural sector, the LAAS team was encouraged to delve into AKIS topics. This proactive approach allowed the LAAS team to develop specialized expertise in AKIS, positioning them well for successful participation in the EIP-AGRI instrument and enabling them to launch some of the first Operational Groups (OGs) projects under the Rural Development Programme 2014-2020. The launch of the OGs in Lithuania also encouraged researchers at Vytautas Magnus University (VMU) to start to take an interest in AKIS issues. The interest of these two institutions, VMU (one of the largest research institutions in the agribusiness sector) and LAAS (the largest national organisation of independent advisors), which are both important for the agribusiness sector, in the topic of AKIS, allowed for the organisation of the first SCAR AKIS meeting in Lithuania on 19-20 November 2019. This 2019 inter-agency working group event in Lithuania is considered exceptional as it captured the involvement of the public sector in the international AKIS theme. It was the good start to encourage other AKIS themed events in Lithuania. Today compared to the previous programming period, the Lithuanian AKIS has significantly improved. The knowledge sharing and dissemination process in the country now involves public authorities, research and academic institutions, business organisations and farmers' organisations, advisors, Operational Groups and Digital Innovation Centres (DICs).

The AKIS knowledge flows cover a very wide range of topics related to agriculture and rural activities. The main topic areas are: sustainable production; agri-environment; agricultural production technologies; organic and sustainable farming; farm economics and management decisions; cooperation; forestry activities. Recently, there has been a strong focus on environment and climate, innovation on the implementation and digitisation of agriculture.

Figure 1: Lithuanian AKIS diagram



Source: i2connect AKIS Report (2024)

Following a competitive call for proposals issued by the Ministry of Agriculture in 2022 for the vision and implementation of the national AKIS operation and coordination, a group of active AKIS participants - researchers from VMU, Lithuanian University of Health Sciences, LAAS and Lithuanian Research Centre for Agriculture and Forestry - won the tender with the proposal "Study on the development of a functional model of the agricultural knowledge and innovation system in Lithuania". The study highlighted that Lithuanian AKIS is an integrated and complex system, bringing together different areas of activity and bringing together actors at different levels and functions. The mentioned project not only further expanded the knowledge of national AKIS participants about possible AKIS management scenarios, but also created conditions for intensive discussions on these issues with the Ministry of Agriculture.

With reference to the digitalization strategy, the Recovery and Resilience Facility (RRF) and the Lithuanian national budget are funding the development of a national digital AKIS platform. This project aims to modernize AKIS by reducing fragmentation among its participants. This will create a clear, coherent, integrated national digital platform where AKIS participants can easily find all the information and providing features to promote cooperation, exchange of ideas and collaboration. The AKIS platform will integrate the upgraded and modernised Applied Innovation Research and Results Information System (TITRIS) and will have an interface with the Agricultural Training and Advisory Information System (IKMIS). The AKIS platform is planned to be launched in May 2026.

For the period 2023-2027, the Strategic Plan allocates €20 million from the CAP for the following key AKIS interventions:

1. €5 million for advisory services.
2. €4 million for training and skills training.
3. €3 million for Demonstration projects.
4. €8 million for EIP – AGRI OG.

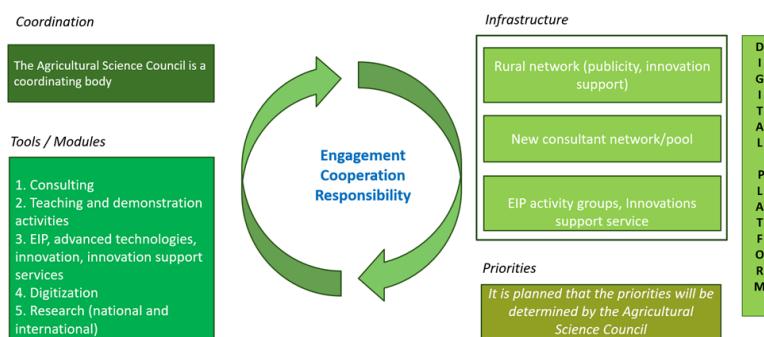
The bulk of the funds will be dedicated to the development of OGs and demonstration projects. 70 projects are foreseen to be implemented, involving more than 9,000 people. The advisory intervention will provide access to around 21,000 advisory sessions of almost 87,000 hours. Vocational training activities are expected to attract 36,000 people in Lithuania. In addition to the CAP funds, national measures from the national budget also contribute to the operation of the AKIS (EUR 837,000 annually for advisory services provision; EUR 750,000 for R&D; EUR 200,000 for international studies).



The Ministry of Agriculture of the Republic of Lithuania aims to implement the overarching objective of the CAP as set out in the Strategic Plan for Agriculture and Rural Development of Lithuania 2023-2027 - to modernise the sector through knowledge generation and exchange, innovation and digitisation in agriculture and rural areas, and the promotion of their practical application. This is done through the use of AKIS - shared organisational and knowledge flows between individuals, organisations and institutions that use and create knowledge for agriculture and related fields (Art. 3 of the CPR).

The aim of the AKIS CB in the development of the Lithuanian AKIS is to create an efficient knowledge and innovation system that reduces fragmentation among the actors in the system and directly addresses the needs of farmers and foresters.

Figure 2: AKIS participants' interaction scheme



Source: <https://zum.lrv.lt/>

IN PRACTICE



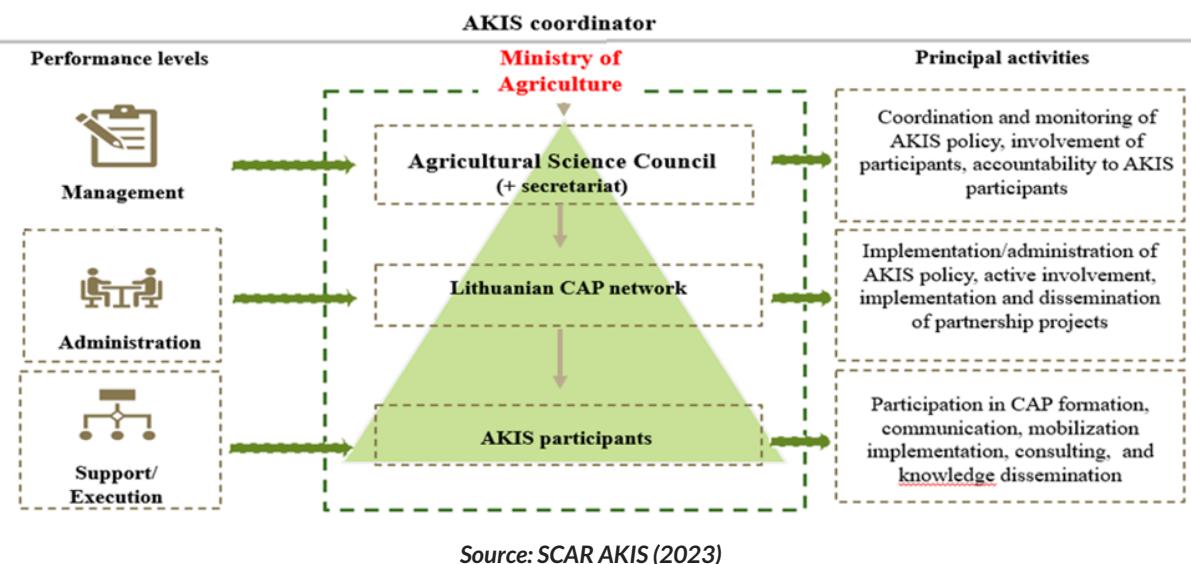
1. Who is the AKIS CB

In line with the EC recommendations and national commitment, the Strategic Plan establishes a coordination mechanism on a systemic basis. The Lithuanian AKIS CB is a collegiate coordinating body. The Ministry of Agriculture coordinates the whole process and the management functions are carried out by the Lithuanian Agricultural Science Council (further - AKIS Council).

2. Composition of the AKIS CB

AKIS Council is composed of representatives of the main and most important actors involved in the Lithuanian AKIS, i.e. higher education institutions as well as institutions providing advisory services, research centres, farmers' associations, and governmental institutions (Fig. 3).

Figure 3: Lithuanian AKIS CB



The coordination of the AKIS operates on three levels:

• **Management**

1. The Ministry of Agriculture of Lithuania leads AKIS through a dedicated structure - Agricultural Science Council. It brings together universities, advisory institutions, research centers, farmers' associations, and training farms.

• **Administration:**

1. The Lithuanian CAP Network plays a crucial role in mobilizing AKIS participants and disseminating knowledge and innovation.

• **Support/Execution:**

1. Other AKIS participants contribute within their expertise, providing necessary information on food, agriculture, and forestry. Open-access data sharing supports the efficient functioning of AKIS.

3. Functions attributed to the AKIS CB

The AKIS Council participates in AKIS policy planning, monitors the implementation of AKIS activities, and makes recommendations to the Managing Authority on the implementation of the related Strategic Plan interventions (funding, selection of priority themes, etc.).

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The AKIS Coordination body will organize meeting on regular basis.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



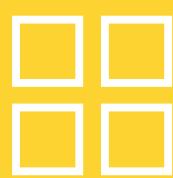
- Balanced representation of AKIS actor in the nation (in terms of number of people for each member).
- Nomination through official request (member of the AKIS CB and replacement person) from the Ministry agriculture to the chambers / agencies/ institutions.
- Clear definition of role and functions of the members involved, to avoid overlapping or delays in implementing actions.

BENEFITS



The Lithuanian model of governance and coordination of AKIS is simple and understandable for several reasons:

1. Structured governance and hierarchy: the chosen operational scheme for AKIS clearly shows the integration of three different levels (management, administration and support/implementation), which allows for an efficient organisation of knowledge and innovation dissemination. At each level, the actors have defined roles, from strategic decision-making to practical implementation.
2. The role of the Ministry, at the top of the diagram, indicates the central coordinating function, providing policy direction and overall coordination of AKIS policy. This is important as it guarantees a unified policy and strategy for action.
3. Involvement of the Council and the network: the Agricultural Science Council and the Lithuanian CAP network are directly involved in the AKIS and are responsible for the involvement of participants and the implementation of cooperation projects. They are not only responsible for the administration but also for the continuous monitoring and evaluation of the activities.
4. Clearly linking activities to levels: this allows participants to have a clear understanding of their roles and enhances ownership of performance.
5. Dynamic information dissemination: clear integration of information flows and activities, from the policy level to practical implementation. This allows the system to work organically and ensures that innovations are put into practice.



FURTHER SOURCES OF INFORMATION



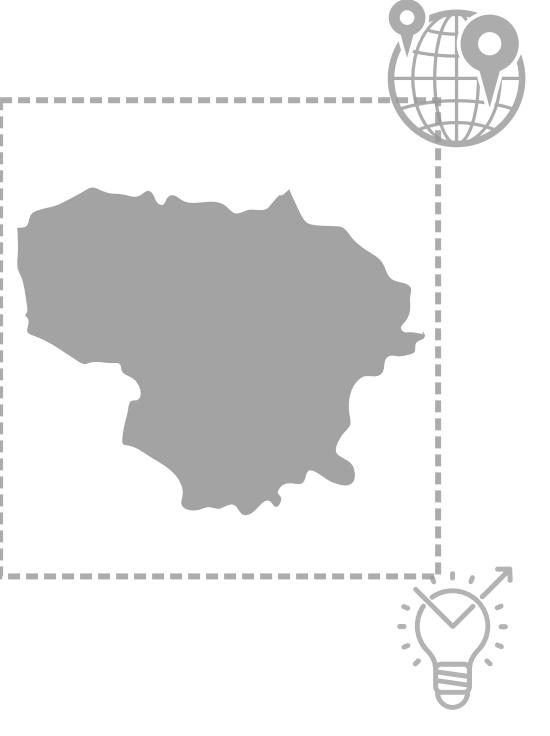
- The statutes of the AKIS Council: Dėl Žemės ūkio mokslo tarybos sudėties ir nuostatų patvirtinimo.
- The members of AKIS Council: Internetui 23-05-16 Jšakymas ŽŪ MT.pdf



Lithuania



Ministry of Agriculture of the Republic of Lithuania, Senior Adviser, Strategic Planning Department:
Goda Vainienė
goda.vainiene@zum.lt





Portugal's Agricultural Knowledge and Innovation System (AKIS) is marked by a wide array of participants, each with varying degrees of interaction, a fragmented structure, and limited national-level coordination. These participants can be grouped into four primary sectors, where farmers and forestry professionals form the central pillar.

The advisory services are mainly performed by farmer-based organizations, while information and knowledge dissemination are largely managed by smaller, private entities. Additional key AKIS actors include those focused on research, education, and both national and regional directorates of the Ministries, all of which operate under the coordination of the National Government.

The strongest connections are observed between the farming and forestry groups and their affiliated associations, as well as the knowledge and innovation service providers. In contrast, the research and education entities maintain only loose connections with farmer-based organizations. Additionally, connections between the farms, national and regional directorates, and research institutions remain underdeveloped.

In general, the Portuguese Research and Education has limited dialogue to the other AKIS actors.

Knowledge in the agricultural sector and associated innovation has increased in recent years, mainly due to a greater link between the different actors in the value chain, and the existence of many innovation projects at national and international levels.

Further support for the AKIS structure is anticipated under the CAP Strategic Plan, which plans to leverage other financial resources, including the Cohesion Policy Funds, Horizon Europe, and the Recovery and Resilience Plan (RRP). These instruments are intended to bolster the research, development, and training sectors aligned with national regulatory frameworks, thereby enhancing Portugal's capacity for agricultural innovation and education.

Figure 1: Portuguese AKIS diagram



Source: i2connect (2020)

RATIONALE



The political relevance given to AKIS strategies in the context of the CAP Strategic Plans (SPs) 2023-2027 has certainly highlighted the opportunity of defining governance bodies aimed at coordinating the AKIS-relating interventions and actors in view of their better implementation and contribution to the cross-cutting and specific objectives of the CAP SPs.

Particularly, the AKIS coordination body is indicated by the CAP SP 2023-2027 as a point of contact of the European Commission and of the European CAP Network.

In the case of Portugal, a national decree (Decree-Law no. 5/2023) established that the AKIS Technical Coordination Body is the DGADR - General Directorate for Agriculture and Rural Development.



1. Who is the AKIS CB

The technical AKIS coordination body in Portugal is the Directorate-General for Agriculture and Rural Development (DGADR) of the Ministry of Agriculture and Food, that functions through the support of the Portuguese CAP Network. This body facilitates collaboration between various stakeholders, including those responsible for knowledge transfer, research, advisory services, and innovation partnerships, as well as the Agricultural and Forestry Advisory Service (SAAF), the Strategic Plan for the Common Agricultural Policy (PEPAC), and the Portuguese CAP Network (RN PAC), all of which are under the auspices of DGADR.

2. Composition of the AKIS CB

The technical coordination body represented by the DGADR of the Ministry of Agriculture and Food will establish an AKIS Follow-up and will be assisted by a Monitoring Group (GA AKIS) to approve AKIS action plans, monitor implementation, and address capacity building needs. The GA AKIS will integrate all key actors of the AKIS, with a particular focus on the SAAF and technical support.

The AKIS Follow-up and Monitoring Group, overseen by DGADR, brings together representatives from:

- The Portuguese National Institute for Agricultural and Veterinary Research (INIAV, I.P.).
- The Office for Planning, Policy, and General Administration (PPG).
- Madeira's Regional Secretariat for the Environment and Natural Resources.
- The Azores Regional Directorate of Agriculture.
- The Foundation for Science and Technology (FCT).
- The National Innovation Agency (ANI), as a key Horizon Europe representative.

In addition to this core team, other members may be called in as necessary, including representatives from Portugal's main Farmers' Confederations (CONFAGRI, CAP, CNA, AJAP), advisory bodies, the PEPAC central and regional management teams, the Institute for Nature Conservation and Forests (ICNF), the Directorate-General for Employment and Labor Relations (DGERT), the Authority for Working Conditions (ACT), and the Managing Authorities for EAFRD and other related funds.

An Advisory Council will also be formed, drawing from leaders in the farmers' federations (CONFAGRI, CAP, CNA, AJAP), forestry organizations, Federação Minha Terra (the Portuguese GAL-LEADER Federation), environmental NGOs, the CCISP (Coordinating Council of Higher Polytechnic Institutes), the CRUP (Council of Rectors of Portuguese Universities), and designated Competence Centers.

The primary tasks of the Follow-up and Monitoring Group include reviewing and endorsing the AKIS Action Plan and its evaluation framework, ensuring a thorough review at least biennially. This Action Plan, designed collaboratively through a bottom-up process with input from the Advisory Council, aims to enhance alignment across resources and policies while setting out key initiatives in areas such as:

- Developing complementarities between funding mechanisms and programs that support innovation and knowledge creation aligned with sectoral needs.
- Facilitating partnerships for national and international innovation projects.
- Strengthening cooperation networks among project teams across sectors and at the European level.
- Boosting participation in cross-border initiatives, especially Operational Groups within Horizon Europe.
- Enhancing training and skills of trainers, advisors, and producers on economic, environmental, and social aspects of innovation.
- Building interconnections across stakeholders to foster shared learning, co-creation, and the application of innovations across agricultural and rural sectors.

Box 1: Portuguese CAP Network

Portugal's National CAP Network was launched on 28 November 2023, marking the end of the former National Rural Network (2014-2022). To ensure the functioning of the National Rural Network, there is a central animation structure (Technical Animation Structure) with regional centres in the Regional Agriculture and Fisheries Directorates and in the Regional Secretariats of the Autonomous Regions.

The main objectives of the Portuguese CAP Network are

- Promoting participation and joint work among rural development agents.
- Transferring good practices and new knowledge to qualify the intervention of rural development agents.
- Improving the design and implementation of rural development policy measures.
- Promoting the image and potential of rural territories.

The CAP Network's activities fall within specific Intervention Areas designed to ensure the Network's effectiveness in meeting its mandated objectives (per Article 113):

1. Network Technical Team Operations: Encompassing the essential functions for running the Network's core administrative and operational tasks.

2. Collaboration and Peer Exchange: Supporting activities that foster cooperation and mutual learning across network participants.

3. CAP Observatory: This area focuses on efforts to track and assess progress in agriculture and rural sectors, aligning with specific objectives. It involves initiatives to enhance the monitoring process and develop tools that improve PEPAC's implementation quality.

Moreover, the CAP Network aims to strengthen Portugal's AKIS by promoting knowledge sharing, innovation across borders, improved advisory services, and digital transformation in agriculture. Through its Innovation Group, which gathers main AKIS actors, the Network's activities align with the AKIS Action Plan and are overseen by DGADR to support effective interactions and involvement of all stakeholders. In this area, an important responsibility of the national CAP network is coordinating and dynamizing the **AKIS Platform**, a digital platform that integrates and centralizes knowledge and innovation in place within the agricultural sector, through facilitating a better coordination among various AKIS actors, such as farmers, researchers, advisors, and policymakers (for more information read AKIS-in-practice! 4.3 – Portuguese AKIS Platform: Driving Innovation and Collaboration in Agriculture).

The Portuguese CAP Network includes a wide array of stakeholders from Portugal's agricultural, environmental, and rural sectors. The members are more than 3,000 (*source: <https://www.rederural.gov.pt/membros-da-rede>*) including:

- Farmers / Agricultural Entrepreneurs.
- Cooperatives.
- Associations.
- Local Action Groups (LAGs).
- Federations / Confederations.
- Non-Business Entities of the R&D&I System (ENESII).
- SMEs (Small and Medium Enterprises).
- Sole Proprietors.
- Central Administration Bodies and Services.
- Regional Administration Bodies and Services.
- Local Administration Bodies and Services.
- Foundations.
- Operational Groups members.

It is possible to become a member of the Portuguese CAP Network by completing an online registration form. A full list of current members is available on the network's official website.

3. Functions attributed to the AKIS CB

The AKIS Coordination Body in Portugal has the following key functions:

- AKIS strategy coordination: Ensuring the alignment and coordination of the AKIS strategy with national goals and priorities.
- Coordination with other EU projects/policies: Facilitating collaboration and synergy between AKIS and other European Union projects and policies.
- State-of-the-art strategy discussion: Engaging in ongoing discussions to refine and update the AKIS strategy based on the latest advancements and insights.
- Monitoring data collection: Overseeing the collection of data to monitor the progress and effectiveness of the AKIS strategy.
- Communication of the AKIS strategy implementation: Ensuring clear communication about the implementation progress and outcomes of the AKIS strategy to stakeholders.
- Participation in the AKIS evaluation: Contributing to the evaluation processes to assess the impact and success of AKIS activities.
- Bringing out new and unexpressed needs: Identifying and addressing emerging or previously unexpressed needs within the agricultural innovation system.
- Strengthening actions on the level of integration of actors: Promoting stronger collaboration and integration among the various actors involved in AKIS to enhance overall system performance.

These functions are essential for the effective coordination and continuous improvement of the Agricultural Knowledge and Innovation System in Portugal.

4. Procedures for interplaying with other AKIS actors and with the MA of the CAP SP

The procedures for engaging with other AKIS actors and with the Managing Authority of the CAP Strategic Plan have not yet been clearly defined.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



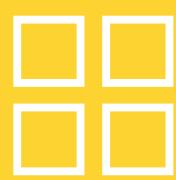
To ensure the replicability of this practice, several key conditions should be in place:

1. **Formal Appointment Decree:** An official decree designating a central coordinating body for AKIS governance, such as a Directorate-General, is essential.
2. **Pre-established CAP Network Team:** A dedicated and functioning CAP Network team to support and implement AKIS strategies effectively.
3. **Experienced Leadership:** A director with significant experience in coordinating multi-stakeholder networks and managing agricultural or rural development projects.
4. **Cross-institutional Support:** Strong partnerships with national research institutes, advisory bodies, and private innovation stakeholders to facilitate knowledge flow and technical support.
5. **Dedicated Monitoring and Evaluation Framework:** A clear framework for assessing AKIS-related actions, involving a Monitoring Group or similar entity to ensure alignment with strategic objectives.
6. **Regional and Local Coordination Units:** Local support structures, such as regional directorates or local advisory groups, to ensure effective on-the-ground interaction and support for actors across sectors.

BENEFITS



- This configuration of a collegial AKIS CB brings together the actors that are already playing some institutional and operational key functions/activities within the local AKISs.
- Well defined functions and roles defined in a specific document dedicated to AKIS CB give a stronger impulse to the AKIS CB mandate.
- The development of a digital platform improved the knowledge flows and the sharing of information about the AKIS-related interventions.



FURTHER SOURCES OF INFORMATION



Portuguese CAP Strategic Plan 2023-2027.

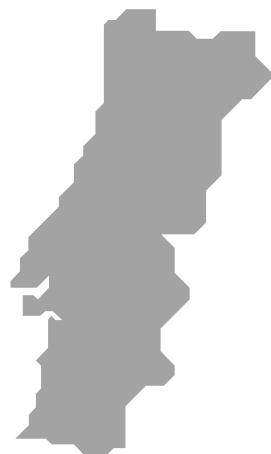


Portugal



Directorate-General for Agriculture and Rural Development - Portugal:
Maria Custódia Correia
mccorreia@dgadr.pt

Watch this AKIS-in-Practice!



Theme 2

Delivery mechanisms for the AKIS strategies

Keywords/Tags



Delivery model



Simplified cost options



Call for application



Selection criteria



RATIONALE



The delivery model of the Common Agricultural Policy (CAP) 2023-2027 is designed to be more flexible and strategic, focusing on the results and performance of national strategic plans. By shifting away from detailed steering of agricultural and rural policy toward a more enabling approach, the new delivery model aims to enhance the impact and accountability of regional rural revitalization efforts.

In practice, there is no one-size-fits-all approach to the delivery of CAP strategic plans. Consequently, significant flexibility and autonomy are granted to member states regarding the general approaches and practical modalities for implementing AKIS strategies and related interventions.

Key components of this new delivery model that contribute to creating conditions for greater discretion in the programming and implementation choices of CAP Strategic Plans are:

1. Decentralization: that emphasizes the role of member states in designing and implementing their own national CAP strategic plans leading to tailored approaches that reflect local needs and priorities.

- 2. Performance-based model:** where funding and support are linked to measurable outcomes and objectives. Member states must set specific targets and indicators to evaluate progress and effectiveness.
- 3. Enhanced Flexibility:** in how funds are allocated and used, allowing member states to adapt their strategies based on evolving agricultural practices and market conditions.
- 4. Targeted support for specific needs:** that regards the provision of specific measures to support young farmers, small farms, and rural development initiatives, ensuring that assistance is directed where it is most needed.
- 5. Digitalization and innovation:** The CAP promotes the use of digital tools and innovative practices to improve efficiency, enhance productivity, and support data-driven decision-making in agriculture.
- 6. Cooperation and Partnerships:** Encouraging collaboration among farmers, agricultural organizations, and other stakeholders is a key aspect, fostering knowledge exchange and collective action for rural development.

But what do we mean by delivery mechanisms of public strategies and interventions? These refer to the governing models and methods by which policies are translated into tangible benefits for target groups. They encompass the processes, structures, and systems through which policies, programs, and services are implemented and made accessible to these groups.

The flexibility to design and implement delivery mechanisms for AKIS strategies can greatly enhance adaptability, ultimately benefiting the execution of such complex, multilevel and multistakeholder initiatives.

So that, according to the literature, key aspects of delivery mechanisms include:

Table 1: Components and mechanisms of delivery models

Components of delivery models		Delivery mechanisms' for AKIS strategies*
Implementation structures	Organizational frameworks and institutions responsible for executing public strategies. They can include government agencies, local authorities, non-governmental organizations, and private sector partners	<ul style="list-style-type: none"> ▪ Governance models of AKIS strategies, through the roles, organization, and functioning of AKIS coordination bodies
Service delivery methods	Approaches used to provide services to beneficiaries, which can vary from direct service provision to indirect methods such as funding or grants.	<ul style="list-style-type: none"> ▪ Global amounts ▪ Prefixed pre-payment + intermediate payments. ▪ Advancements ▪ Reimbursement based on live costs. ▪ Use of vouchers ▪ Rate (%) of support; maximum/minimum rate/amount. ▪ Forfait
Coordination and collaboration	Effective delivery often requires coordination among multiple stakeholders, including different levels of government, community organizations, and private entities.	<ul style="list-style-type: none"> ▪ Frameworks/procedures for coordination among different administrations ▪ Common methodologies/tools for coordination, networking and interaction within the OGs ▪ Common procedures for Trans-regional/national and Cross-regional/national OGs
Resource allocation	This involves determining how financial, human, and physical resources are distributed and utilized to support the implementation of strategies.	<ul style="list-style-type: none"> ▪ Based on a % of the CAP SP amount ▪ Amount determined by a robust calculation based on historical data series. ▪ Amount determined by calculation based on action plan and costs
Monitoring and Evaluation	Delivery mechanisms include systems for tracking progress and assessing the impact of interventions.	<ul style="list-style-type: none"> ▪ Templates for applications including request, methods and sources for quantifying performance data of innovative farms ▪ Questionnaires to survey on quality and performances of advisory services, training programs ▪ Questionnaires to survey the agency dynamics of actors within OGs ▪ Modalities for conducting the evaluation of the AKS strategy
Communication and Outreach	Effective delivery requires clear communication strategies to inform stakeholders and beneficiaries about available services, eligibility criteria, and application processes	<ul style="list-style-type: none"> ▪ Communication strategy and plan on the AKIS strategy and its interventions ▪ Guidance for OGs to run dissemination and communication activities ▪ Quality criteria for selection of projects/Beneficiaries
Flexibility and Adaptability	Delivery mechanisms should be adaptable to changing circumstances, allowing for adjustments in response to emerging needs or challenges in	<ul style="list-style-type: none"> ▪ Arrangements for systematic needs' assessment of farmers in terms of training/advisory topics, application procedures, ... ▪ Questionnaires to survey on satisfaction about the delivery of the interventions.

Examples; not exhaustive list



The practices presented in this 'Compendium' focus on the use of simplified costs in the delivery of training and cooperation interventions for innovation, as well as the methods by which some member states have ensured the setting up of transnational Operational Groups.

Regarding the use of simplified costs, the regulatory framework was explained in Compendium D1.3 (Tab. 2).

Table 2: Methodologies for calculation of simplified cost options

Some simplified cost options can be directly used without having to carry out any calculation: in this case they say «ready to use». This is the case with the following flat rates, indicated directly by the Regulations:

- Calculation of indirect costs: flat rate up to 15% of direct eligible personnel costs.
- Calculation of personnel costs: flat rate up to 20% of direct costs other than personnel costs.
- Calculation of remaining eligible costs: flat rate up to 40% of eligible direct staff costs.
- Calculation of indirect costs: flat rate up to 7% of eligible direct costs (news of 2021-2027 programming).
- Staff cost calculation (hourly rate): last documented gross annual labour cost/ 1720 hours.

The following types of SCOs require well-prepared methodologies:

- Flat rate for calculation of indirect costs (up to 25% of eligible direct costs).
- Standard scales of unit costs.
- Lump sums.

Methodologies may be developed on the basis of:

- Statistical data, other objective information or expert assessments.
- Verified historical data of individual beneficiaries.
- Draft budgets drawn up on a case-by-case basis and approved *ex ante* by the body selecting the operation (where the total cost does not exceed € 200,000).
- In accordance with the rules for the application of the unit costs, lump sums and flat rates applied by the Member State for similar types of operation.
- Flat rates and specific methods provided in the Fund Regulations.
- Application of normal cost accounting practices of individual beneficiaries.

Methodologies for calculation of SCOs must be fair (reasonable, based on real data), equitable (not favouring some beneficiaries or types of transactions to the disadvantage of others) and verifiable (based on documentary evidence that can be verified).

Methodologies for calculate SCOs:

- Standard scales of unit costs, lump sums, flat rate financing (simplified costs).
- A combination of the previous forms.

In case of standard scales of unit costs, all or part of the eligible costs of an operation shall be calculated on activities, inputs, outputs or quantified results, which shall be multiplied using standard tables of predetermined unit costs.

In case of lump sums, all or part of the eligible costs of an operation shall be calculated on a predetermined lump sum. The grant shall be paid if the default terms of the assets and/or outputs agreement are met.

In case of flat-rate financing, specific categories of clearly identified eligible costs shall be calculated by applying an ex ante fixed rate for one or several other categories of eligible costs.

Amounts and rates established by Member States need to be a reliable proxy to real costs. Periodic adjustments are a good practice in the context of multiannual programme implementation to take into account factors affecting rates and amounts.

In order to ensure compliance with the principles of transparency and equal treatment of beneficiaries, the scope of the simplified cost options to be applied, that is the category of projects and activities for which they will be available, should be specified and published in the call for applications.

For the transnational or cross-border Operational Groups, there is no specific regulatory framework; however, this opportunity has been underutilized due to difficulties in establishing the delivery model since the last programming period.

In this regard, as demonstrated in the case presented in this Compendium, it is possible to adopt, with some adaptations, delivery models whose implementation methods are already widely practiced and consolidated within the LEADER approach, and which are familiar to the managing authorities of CAP programs.

Besides, similarly to LEADER approach, the INTERREG initiative includes a well consolidated delivery model that might be adapted to the case of operational groups.

So far, the practices presented in this 'Compendium' showcase the full discretion of member states in choosing among the different delivery options for interventions, according to their own needs and availability. Besides, these practices let emerge the importance of streamlined processes, effective coordination, and strategic facilitation by CAP networks in enhancing the delivery mechanisms of public strategies and interventions within the AKIS strategies, and particularly.

- **Streamlined Processes:** Preliminary definitions of procedures, documentation, and arrangements for the implementation of certain delivery mechanisms (e.g., the use of simplified cost options and calls for transnational Operational Groups) have demonstrated effectiveness in reducing bureaucratic burdens for beneficiaries and Managing Authorities, making funding more accessible, equitable, and efficient.
- **Strategic facilitation by CAP Networks:** Help project applicants connect with partners even from other Member States and organize joint events to promote collaboration and knowledge sharing among stakeholders. In the cases of the simplified cost options, the CAP network helped also defining and disseminating common methods for standard costs determination.





Questions for opening the discussion and reflect on how to better direct AKIS interventions towards the better integration of the advisory services are:

Delivery

- How to organize coordinated calls and arrangements for applications for trans-national/trans-regional/cross-border operational groups?
- How to ensure a transparent and efficient definitions of roles and functions within trans-national/trans-regional/cross-border operational groups?
- How to assess the feasibility of the different methodologies for the simplified cost options?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- The **collection of "AKIS-in-Practice"** must be expanded through continuous dialogue with partners to provide a broader scope of the different delivery mechanisms for supporting trans-national/trans-regional/cross-border operational groups.
- **Workshops within the CoPs (WP4)** might include public servants that are responsible for the implementation of LEADER approaches and for INTERREG initiatives , in view to share knowledge and experiences leading to increase familiarity and to co-develop adaptable delivery models for supporting trans-national/trans-regional/cross-border operational groups.

FURTHER SOURCES OF INFORMATION



- Presentation of Nordic-Baltic TNC EIP cooperation during the Subgroup on Innovation & Knowledge Exchange (SoIKE) 4 th meeting Brussels 27 October 2023.
- LEADER transnational cooperation guidance.



Delivery mechanisms for the AKIS strategies

AKIS-in-Practice! 2.9

Application of flat rate for indirect costs of Operational Groups and demonstration projects in Flanders



Keywords/Tags

-  Simplification
-  Flat rate
-  Indirect cost
-  Direct staff costs
-  Off the shelf
-  EIP
-  Farm demonstration

Potential users

-  EIP operational groups
-  Demonstration farms
-  Managing authorities of the CAP strategic Plans
-  Paying agencies, auditors, and certifying bodies



RATIONALE



For the 2023-2027 period, CAP support for the set of interventions (Article 83 of EU Regulation 2021/2115) may, among other options, be provided in the form of unit costs. Under Article 83(1) of the CAP Strategic Plan Regulation, three forms of simplified cost option may be used: 1) unit costs; 2) lump sums and 3) flat-rate financing.

Point 2 of the same Article sets out the methods for determining the amounts applicable to SCOs, which includes the possibility of applying SCOs used in similar types of operations in Union or national policies based on the rules for the application of unit costs, lump sums and flat rates.

These points are almost identical to the corresponding points in the Common Provision Regulation. However, the latter includes 6 fully and 1 semi "off-the-shelf" SCOs which can be used in Structural and Cohesion Fund programs without any justification. One of these fully "off-the-shelf" solutions is that where the flat rate is used to cover indirect costs up to 15% of direct staff cost.

The use of the flat rate for indirect costs is twofold. On the one hand, to reduce the administrative burden for beneficiaries by not having to claim indirect costs on an itemized invoice basis. On the other hand, to reduce the error rate as well as time spent on checking and controlling the payment claims since real indirect costs do not have to be checked.

For the EIP AGRI Operational Groups and the farm demonstration interventions, there was no previous experience of applying flat rate in Flanders. The main argument in favour of this solution was that, as it is an "off the shelf" solution, the method and the value is set by the Commission and does not require any justification, which makes it much easier to implement and reduces the audit risk. The other main argument is that this solution has been and is being successfully used in LEADER implementation in the previous programming period.

SOLUTION



The Belgium (Flanders) CAP Strategic Plan 2023-2027 allows for the financing of indirect costs up to 15% of direct personnel costs on a flat-rate basis for the European Innovation Partnership operational groups and the demonstration farms intervention

IN PRACTICE



The costs covered by the flat rate are office and administrative costs, which are as follows:

- Payments for office rent.
- Maintenance costs of buildings, infrastructure and vehicles.
- Costs for heating, lighting, water, gas, electricity, telephone and internet.
- Consumables not directly linked to the project (paper, printer,...).
- All insurances (except employees' insurance for accidents covered under staff costs).
- License fees for standard software.
- Management and maintenance of general website.
- Staff costs of managerial and general support staff (reception, secretariat) not directly involved in the project.
- Professional clothing.
- Professional literature.
- Staff activities (team building, etc.).
- Catering for staff (coffee, water fountain, fruits, etc.).

When applying the 15% flat rate, indirect costs do not have to be accounted for item by item, using invoices.

The main focuses of the verification are that:

- There is no ineligible expenditure included in the staff costs which are the 'basis costs', and 15% of those are reported as indirect costs.
- There is no double declaration of the same cost item: the direct costs in the payment claim may not include any cost item that falls under the 15% flat rate, to avoid double financing.
- The amount calculated by applying the 15% flat rate is proportionally adjusted if the value of the staff costs (used as basis costs) to which the flat rate is applied have been modified.
- Staff costs are calculated on the basis of the standard hourly rate and registration of hours worked on the project (see the other Flemish AKIS-in-practice format).

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- An examination of similar interventions to justify the application of the flat rate (whether the cost structure of the subsidised improvements is in line with the 15% flat rate).
- Incorporate the application of the percentage flat rate in the CAP Strategic Plan for the measures concerned.

BENEFITS



- It can be used without the need for a detailed supporting study.
- More flexibility and reduced administrative burdens for beneficiaries through simplification.
- The same method is used for several funding instruments thus becoming a practice for applicants and implementing institutions.
- Less time spent on checking payment claims by managing authorities since real costs do not have to be checked.

FURTHER SOURCES OF INFORMATION



- European Commission: COMMISSION NOTICE GUIDELINES ON THE USE OF SIMPLIFIED COST OPTIONS WITHIN THE EUROPEAN STRUCTURAL AND INVESTMENT FUNDS (ESI) – REVISED VERSION (2021/C 200/01)



Belgium, Flanders



Flemish Government - Department of Agriculture and Fisheries:
Els Lapage
Els.Lapage@lv.vlaanderen.be





**Delivery
mechanisms for
the AKIS strategies**

AKIS-in-practice! 2.10

**Application of standard scale
of unit cost: hourly staff rate
for EIP and demonstration
projects in Flanders**



Keywords/Tags



Simplification



Standard unit costs



Hourly staff rate



EIP



Farm demonstration

Potential users



EIP operational groups



Demonstration farms



Managing authorities of the CAP
Strategic Plan



Paying agencies, auditors, and
certifying bodies



RATIONALE



At the root of the efforts to simplify the accounting of personnel costs is the complexity of the legal framework for this type of cost and the variety of calculation methods. This has raised several questions and, in many cases led to disputes with beneficiaries and a high error rate concerning the verification process.

The main objective behind introducing this method is the simplification of calculation of staff costs and reduction of the administrative burden for beneficiaries as well as for Managing Authorities. The goal was to improve the effectiveness of the management and control systems by allowing verifications to focus on areas with a higher risk (other than staff costs). This simplification method is used by several other aid instruments such as ERDF programs, Interreg, regional aid, etc. By introducing it into the rural development program, the aim was to harmonize conditions and opportunities for beneficiaries implementing projects financed by different funding instruments. The adoption of this tool is a good example of where top-down initiatives meet bottom-up needs. The Commission has put in place the legal framework and encouraged the transfer to the CAP of methods successfully used in other programs. It met the needs of the beneficiaries asking if they could use the same method as they use for ERFD.

SOLUTION



Hourly staff rate, as a form of unit cost was applied by the Rural Development Program 2014-2022 for EIP Operational Groups and farm demonstrations. This practice continued in the current period (2021-2027) under the CAP Strategic Plan. The method is based on a similar type of operation applied in another funding measure as it is allowed by the CAP Regulation Art 83(2)(c). The hourly staff rate methodology ("Standard Hourly Rate") is developed for Flemish beneficiaries of the funding instruments of the European Regional Development Fund (ERDF) and European Territorial Co-operation (ETC) (Interreg). The methodology is based on an external study and approved by the European Commission. The study was financed by the contact point for ERDF in Flanders. The result was taken over by the CAP implementation.

The application is mandatory for each beneficiary, including the employees of the project promoter and the partner organisations who are directly working on the project implementation. It is not used in case of self-employment, such as farmers.

In the budget plan for the application, it is needed to estimate the hourly rate of staff cost. While in the payment claim, the beneficiary calculates the personnel costs for each employee working on the project, based on the hours worked. Support is paid based on the hours spent on the project, which is recorded in the timesheets. Timesheets are part of the payment claims.

The model takes into account staff costs in a fair and reasonable way.

IN PRACTICE



The hourly staff rate covers all salary payments related to the project activities and any other costs directly linked to salary payments, such as employment taxes and social security. Overheads and any other office and administrative costs, travel and accommodation costs are not included in the hourly staff rate.

The formula to calculate the hourly staff rate is:

$$\text{Hourly staff rate} = \text{gross monthly salary} \times 1.2\%$$

Factor of 1.2 is designed to automatically take into account:

- A fair and reasonable share of salary costs on top of the gross salary.
- Salary cost reductions for the employer/employee.
- All non-project hours such as holidays and sick leave.

For example:

- € 3,000 gross monthly salary = $3,000 \times 1.2\% = € 36/\text{hour}$.
- € 4,000 gross monthly salary = $4,000 \times 1.2\% = € 48/\text{hour}$.

For staff with a monthly salary based on an hourly wage (e.g. workers) a slightly modified formula is used:

$$\text{Hourly staff rate} = \text{gross hourly wage} \times 7.6 \text{ (hours per day)} \times 21.5 \text{ (days per months)} \times 1.2\%$$

The pay slip of January of the year in which the project activities are executed is used for gross monthly salary. If the employee is new, alternatively the pay slip of the first full month after the employee started to work in the organization can be used.

Only the amount on the pay slip under the header “Gross salary” to be included and no other salary costs. For part-time employment contracts the full-time equivalent gross monthly salary is the basis of the calculation.

The maximum eligible hourly rate is € 100/hour.

The formula to calculate eligible staff cost:

$$\text{Staff cost} = \text{hours worked on the project} \times \text{hourly staff rate}$$

The number of hours worked is based on time registration. Only hours worked on the project need to be recorded. Template for time registration is the same as for ERDF/ETC projects. The working hours in the time sheet cannot exceed the number of contractual working hours per month. Overtime is only eligible if only eligible if compensated by extra leave or if paid by the employer.

Administrative control:

Documents to be provided in the payment claim:

- January pay slip for each calendar year the employee works for the project. Or for staff not employed in January, the pay slip of the first full working month.
- Time registration signed by employee and employer, with a clear and sound description of the project activities performed.
- If the number of contractual working hours per month is not indicated on the pay slip, the employment contract should be provided.
- If applicable, the proof of payment or compensation of overtime to be provided.

What to verify?:

- Correct application of the calculation method.
- Time registration: eligibility of project activities in line with the project proposal.

External study for the calculation of the factor

For the study, expertise from a social-accounting secretariat was purchased. This because of the mass of up-to-date salary cost data that such a secretariat has available, their capacity to carry out quick and accurate simulations on this mass of data as well as their legal know-how related to salary policy and taxation.

The following things were first identified:

- The most likely and common type of staff for ERDF programs, i.e. employees on white-collar contracts.
- The existing gross salaries for this category of workers ranked and grouped from low to high including indication of their frequency.
- The different salary costs on top of and according to gross salaries for this category of employees including magnitude and frequency.
- Possible reductions on labour costs including magnitude and frequency.

This provided a clear picture of the composition and weight of a salary cost in Belgium/Flanders.

Next a formula was worked out to capture the fair and reasonable share of the salary cost to be funded. This share is expressed by a factor. This formula was then simulated using two standards regarding productive hours/year:

- A standard used within the Flemish government (1,520 hours/year).
- The EC standard from article 68(2) CPR no. 1303/2013 (1,720 hours).

The factor calculated on the basis of the ‘less favourable’ EC standard was finally selected.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The factor (for Flanders 1.2) differs from one region/member state to another since it depends on the salary structure of a certain region/member state. Thus it is important to calculate a specific factor according to the country data. See 'Catalogue of eligible costs Interreg' under 'Further sources of information'.

BENEFITS



- One of the main benefits is that financial control only addresses correct application of the methodology, which leads to major simplification and reduction of error rate.
- Beneficiaries can apply one method for several types of projects. The method is also used for Leader-projects.

FURTHER SOURCES OF INFORMATION



- CATALOGUE OF ELIGIBLE COSTS - Interreg V-A Euregio Meuse-Rhine - Version 5 - July 2023: <https://www.interregemr.eu/downloads-en> (go to 'Cost catalogue (July 2023)' – See '1.1 Calculation of a standard hourly rate', factors for other regions (Germany, the Netherlands) are mentioned).



Belgium, Flanders

 **Flemish Government - Department of Agriculture and Fisheries:**
Els Lapage
Els.Lapage@lv.vlaanderen.be





**Delivery
mechanisms for
the AKIS strategies**

AKIS-in-Practice! 2.11

Application of flat rates for indirect costs in Finland



Keywords/Tags



Simplification



Flat rate



Indirect cost



Direct costs



Staff costs



EIP



Farmer

Potential users



AKIS coordination bodies



Managing authorities of the CAP
strategic Plans



Paying agencies, auditors, and
certifying bodies



RATIONALE



The use of simplified cost options can streamline administrative processes by reducing bureaucratic burdens both for beneficiaries and for Managing Authorities.

In the 2014-2020 programming period, under Finland's Rural Development Program, flat rate was applied for the implementation of the Knowledge transfer and information (M01), Basic services and village renewal in rural areas (M07), Cooperation (M16) and LAGs running costs and animation (sub)measures. The flat rate basis was the direct staff costs. The following costs were financed as flat rate costs:

- Office costs.
- Travel costs for project staff (FR 24 %).
- Participation fees for project staff in training and seminars.
- Occupational health costs for project staff.
- Premises and machinery allocated to project staff as well as the cost of equipment.
- Serving costs.
- Cost of the project steering group.

Two options were available to applicants: 1) travel costs were reimbursed on a real costs basis and the flat rate was 15%. This was popular in remote regions where travel costs were high; 2) travel costs were included in the 24 % flat rate. Concerning the Knowledge transfer and information (M01), Basic services and village renewal in rural areas (M07) and Cooperation (M16) measures, flat rate was used by 74,3% of the projects. All EIP projects applied flat rate, out of which 88% of them used the 24% option, while 12% used the 15% option. The positive experience, the very few problems and the popularity based on major simplification justify the use of flat rate in the implementation of the CAP Strategic Plan 2021-2027.

SOLUTION



In the 2021-2027 programming period 19% and 40% flat rate is allowed through the CAP Strategic Plan. The legal basis for both options is the Common Provisions Regulation (CPR). The modification in the flat rate value compared to the previous period (15% and 24%) was based on an external study ordered by the Finnish Ministry of Agriculture and Forestry to KPMG Ltd. The aim of the study was to elaborate methods and models of simplified cost options including flat rate and other options as well. The revision of the 15% and 24% flat rate model was also part of the study. Based on this study 19% and 40% flat rate model was selected by the Ministry. The study suggested to use not more than two alternatives, to keep it simple for the beneficiaries. This recommendation was agreed by the Ministry and the Paying Agency as well. The 19% flat rate is based on (EU) 1060/2021 Art. 53 and Art. 54.

Flat rate is used to cover indirect costs of an operation. According to Art. 54 indirect costs can be financed up to 25% of eligible direct cost, provided that the rate is calculated in accordance with point (a) of Article 53(3). So, a fair, equitable and verifiable calculation method is used based on (i) statistical data, other objective information or an expert judgement; (ii) the verified historical data of individual beneficiaries; (iii) the application of the usual cost accounting practices of individual beneficiaries.

The 40% flat rate is based on (EU) 1060/2021 Art. 56, which says that a flat rate of up to 40 % of eligible direct staff costs may be used to cover the remaining eligible costs of an operation. The Member State shall not be required to perform a calculation to determine the applicable rate.

A new element introduced in the 2021-2027 period is that 5,000 euro preparation support can be applied by e.g. formulating EIP Operational Groups on a lump sum base. It is used for partner search and for preparing the application. Also new rule that the percentage for covering holiday pay, holiday compensation and employer's social security contributions is standard, 39 % in all cases.





The calculations are based on the application and payment data related to development and farms projects that ended in the 2014–2020 programming period as well as the financial statements of farms according to industry classification from Statistics Finland's database, including supported project beneficiaries.

Other data included information collected through various surveys, such as the employer's incidental costs, the collective agreements to be complied with, and the working time used for preparing the projects.

The study included the analysis of the composition of the direct and indirect costs as well as the detailed comparison of different flat rate options with conclusions. The models are based on the actual costs of the development projects.

The final decision on the models to be applied was made by the Ministry.

Calculation steps and method for Model 1: 19% flat rate

1. Step 1: The ratio of other business costs to total company costs was calculated based on data from Statistics Finland for the years 2012–2020. The calculation used the company financial statements according to industry classification. The result on average is 18.85% (rounded to 19%).

2. Step 2: The same ratio was calculated considering the 2017–2020 financial statements of supported beneficiaries. The result on average is 23.82% (rounded to 24%).

3. Step 3: With a flat rate, the indirect costs of the project are to be compensated, for example, for the project staff travel costs and participation fees for trainings/seminars and project share of the premises, machines and equipment in daily use of the company.

4. Step 4: Calculation of the amount of indirect costs (€) from the salary costs of completed development projects using a flat rate of 24% (see Step 2 of the calculation). The euro amount of indirect costs was €30,080,602. (Salaries €125,335,841 * 24%).

Two different options were used to calculate the flat rate percentage, which gives the flat rate share in euros the same amount as in step 4 of the calculation.

1. In alternative 1, the flat rate base includes salaries, bonuses, purchasing services, rents, other direct expenses and other expenses. The flat rate is 17.5% (rounded to 18%)
2. In alternative 2, the flat rate base includes salaries, fees and purchasing services. The flat rate 18.5% (rounded 19%).

Version b) was selected by the Ministry.

In the case of the 19% flat rate, the flat rate base is the staff costs (including holiday pay, holiday compensation and employer's social security contributions) and the services procurement costs. The flat rate covers the indirect costs such as:

- Project staff travel costs.
- Premises costs.
- Machine and equipment costs.
- Software costs.
- Office expenses.
- Education expenses.
- Occupational health costs.
- Project catering costs

Indirect costs are regulated in national legislation.

This option is suitable for measures 1 (training and information transfer) and 16 (collaboration) of development projects in situations where the share of salary costs is small and purchasing services play a significant role. This option is also suitable for measure 7 of development projects (development of rural services and villages).

There is no such calculation for Model 2: 40 % flat rate. However, calculations above showed that the median share of personnel costs of development projects in the total costs of the project is 58.9 %. The use of flat rate 40 % option is advocated if the project does not have a significant amount of service purchase, other direct costs or travel costs. It is suitable for measures 1 (training and information transfer) and 16 (cooperation) of development projects, where personnel costs are on average slightly more than 60% of the total costs of the project. This option is not suitable for measure 7 of the development projects (development of rural services and villages), where the average wage costs are significantly lower than measures 1 and 16.

The administration of the 40% flat rate model is very simple. The flat rate base is the staff costs (including holiday pay, holiday compensation and employer's social security contributions). The flat rate cost covers all costs other than staff costs.

Applicants can choose between the real cost based and the two flat rate-based methods.

The granting authority makes the decision on the cost model for the entire project implementation period.

IT-system calculates automatically the percentage for covering holiday pay, holiday compensation and employer's social security contributions and the share of chosen flat rate (Fig. 1)

Figure 1: Finnish IT-system

Kustannukset ja rahoitus
Eurooppalainen innovaatiokumppanuus EIP-hanke

Kustannusmalli ja tuen maksutapa

Kohdassa valitaan, mitä kustannusmallia ja tuen maksutapaa hankkeessa käytetään. Viranomainen tekee lopullisen päätöksen kustannusmallista ja tuen maksutavasta, eikä niitä voi muuttaa tukipäätöksen jälkeen.

Jos hanke sisältää tuen siirtoa, on valittu kustannusmalli ja tuen maksutapa käytössä kaikilla hankkeen toteuttajilla.

Kaikki tähellik (*) merkityt kentät ovat pakollisia.

Käytettävä kustannusmalli: *

- Tosiasialiset kustannukset
- Laskennalliset kustannukset 19 %
- Laskennalliset kustannukset 40 %

Käytettävä tuen maksutapa: *

Kustannusperusteinen

Maksua haetteessa on esittettävä toteutuneet todelliset kustannukset laskennallisia kustannuksia lukuun ottamatta tilinpitoasiakirjoilla.

Tallenna ja sulje **Peruuta**

Kustannukset ja rahoitus
Eurooppalainen innovaatiokumppanuus EIP-hanke

Hankkeen kustannusarvio

Kustannukset	Summa
Palkat	100 000,00 €
Palkkojen laskennallinen osuus	39 000,00 €
Ostopalvelut	€
Muut välittömät kulut	€
Laskennalliset yleiskustannukset, 19%	26 410,00 €
Vastikkeeton työ	€
Kustannukset yhteensä	165 410,00 €
Hankkeen tulot (vähennetään)	€
Kustannukset yhteensä vähennettynä tulolla	165 410,00 €

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Verification that the project has not started before initiation. For example, binding contracts cannot be made before the project starts, or salary expenses cannot be paid until the project has started. This can be checked from pay slips.
- Accurate definition of direct and indirect costs - prevention of double funding.
- The correctness of the public procurement procedure in the flat rate 40% model. In the flat rate 40% model, public procurement is included in indirect costs. Indirect costs are calculated, which are meant to cover the organization's other costs (e.g. premises costs and travel costs). Purchasing services, which include public procurement, are also indirect. In the flat rate 40% model, indirect costs are not intended to be examined during the subsidy payment phase, but in the case of public procurements, it must be checked that they have been handled in accordance with regulations.

BENEFITS



- Main benefit is the significantly reduced administrative burden. There is no need to submit and control receipts and accounting documents for flat rate indirect costs. The focus of project implementation is much more on the results.

FURTHER SOURCES OF INFORMATION



- Finland – CAP Strategic Plan.



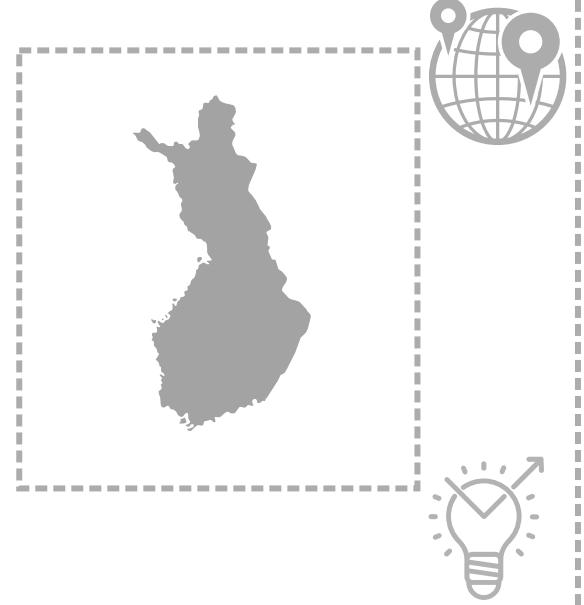
Finland



Finnish Food Authority, Paying Agency:

Noora Pehkonen

noora.pehkonen@ruokavirasto.fi





**Delivery
mechanisms for
the AKIS strategies**

AKIS-in-practice! 2.12

Enhancing Transnational Cooperation for innovation through EIP-Agri Projects



Keywords/Tags



Operational Group



Transitional
cooperation



Peer-to-leraning

Potential users



Farmers



AKIS Coordination Bodies



Managing Authorities



Advisors



Operational Group coordinators



CAP Networks

RATIONALE



The European Innovation Partnership for Agricultural Productivity and Sustainability (EIP-AGRI) Operational Groups have been instrumental in facilitating knowledge exchange and fostering collaboration among farmers, researchers, and businesses across Europe. These groups, by addressing key challenges in the agricultural sector, have driven the development of innovative solutions tailored to local contexts. Despite their success in promoting national-level innovation, there remains a significant gap in terms of formalized administrative structures and procedures for transnational cooperation, including cross-border ones. Although, since the CAP programming period 2014-2020 the opportunity for transnational cooperation for innovation has been mooted by many and promoted by EC, still, even under the CAP 2023-2027, there's not a dedicated framework to support structured transnational EIP-Agri OGs. In fact, this lack has hampered the efforts by both managing authorities and of potential partners of transnational OGs to search for collaborations in other member states of EU aimed to address common issues and opportunities. On this regard, experiences, regulatory and administrative arrangements already put in practice under other EU funding schemes, like LEADER (Transnational and transregional cooperation among LAGS) and INTERREG (transnational and cross-border cooperation among MS) can represent relevant framework to refer to when arranging such cooperation within the EIP-Agri.

Estonia has a solid track record in fostering transnational cooperation, leveraging its experience from previous LEADER projects and its active CAP Network. The Estonian CAP Network has played a vital role in matchmaking and facilitating innovation-sharing events, such as joint workshops and field visits, aimed at promoting collaboration with neighboring countries like Finland. Such initiatives have set a precedent for future transnational projects, emphasizing the added value of cooperation and knowledge exchange.

SOLUTION



Similarly to other EU funding schemes, already under the Rural Development policy 2014–2022, Nordic-Baltic Countries held the joint decision to launch a call for EIP-AGRI OGs that was explicitly targeted to possible cross-border/transnational cooperation projects.

This initiative required project partners from the adhering countries to plan and implement their activities in unison while applying for funding through their respective national Managing Authorities.

For the upcoming call for transnational OGs (in 2025), Estonia, Finland, Latvia, and Sweden are working closely to ensure smooth coordination of transnational calls. Several workshops, both online and in person, have been organized to facilitate collaboration and understanding between the participating countries.

Moreover, a survey conducted among Managing Authorities (MA), Paying Agencies (PA), and National CAP Networks in these four countries provided valuable insights into the following areas:

1. Managing Authorities: Questions focused on project topics from the previous programming period, the budget, calls (e.g., thematic, transnational, continuous), and experiences with transnational OGs.
2. Paying Agencies: These questions covered the application process, changes in the new programming period, feedback from applicants, and potential challenges for transnational OGs.
3. National CAP Networks: Questions addressed networking between OGs, the dissemination of project results, supporting the uptake of results by farmers, and other types of support offered during the EIP process.

The survey highlighted that the projects address a diverse array of topics, which vary considerably based on national contexts but also share significant commonalities, reinforcing the importance of cross-border and transnational collaboration. MAs and PAs at the national level have introduced several updates to streamline application and implementation processes, reducing administrative complexities. Additionally, national networks are focused on extensively sharing the outcomes of these projects, both domestically and internationally, to promote wider adoption of practical solutions and contribute to enhancing the competitiveness and sustainability of farms.

The survey highlighted that the projects address a diverse array of topics, which vary considerably based on national contexts but also share significant commonalities, reinforcing the importance of cross-border and transnational collaboration. MAs and PAs at the national level have introduced several updates to streamline application and implementation processes, reducing administrative complexities. Additionally, national networks are focused on extensively sharing the outcomes of these projects, both domestically and internationally, to promote wider adoption of practical solutions and contribute to enhancing the competitiveness and sustainability of farms.



In practical terms, MAs of the CAP SPs of different MSs launch the respective call for applications for EIP-Agri OGs that have just a national relevance but enable possible transnational cooperation by including some common key requirements for projects:

- **Justification of Transnational Cooperation:** Applicants must demonstrate the added value of transnational collaboration, particularly how it is meant to address common agricultural challenges.
- **Funding Applications:** applications must address the call for applications held under the CAP Plan of own member state. This foresees as eligible for support the costs occurred for coordination, including planning, joint events, and project management.
- **Written Agreement:** A written agreement between transnational partners is recommended to ensure clear communication and distribution of responsibilities.
- **Joint Project Planning and Execution:** The planning phase must involve collaborative goal setting, joint activities, and clearly defined roles for each partner in the different Member States.
- **Clear distinction, within the project plan, between transnational and in-country activities:** So that, each OG partnership remains the primary responsible for own in-country activities as they are planned by the innovation project.
- **National scope of regulations, administrative procedures and eligible costs:** The paying agencies (PA) in each country were responsible for instructing the project partners about national regulations, administrative procedures, and eligible costs.

Moreover, formalized through a Letter of Intent (LOI) between potential partners from different countries agreeing on the cooperation for innovation in the specific project have been resolute to deal with the not-fully synchronization of the calls of applications of the Member States.

Following these processes, two transnational collaboration (TNC) projects were successfully established between the EIP OGs of Estonia and Finland. The main beneficiary in Estonia had additional funding specifically allocated for the coordination of transnational cooperation, while the Finnish EIP OG had a travel budget for field trips to Estonia.

Eventually, it's worth noting that, national CAP Networks played a pivotal role in facilitating transnational partnerships, reducing barriers such as language differences, and promoting networking opportunities through joint events and initiatives.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



To ensure the successful replication of such initiatives across different regions/Member States, the following factors are crucial:

- **Coordination:** Effective cooperation between MAs, PAs, and CAP Networks is essential throughout both the application and implementation phases. Information exchange regarding timing, themes of calls, and specific national requirements for EIP projects is key to aligning efforts.
- **Language Barriers:** The inclusion of translation costs as eligible expenses would encourage greater participation and ensure smoother communication between partners.
- **National CAP Networks:** These networks can serve as strategic facilitators by helping project applicants find partners from other Member States and by organizing joint events to foster collaboration.
- **Joint organization of brokerage events** with cross border countries can enable the creation of networking opportunities.

BENEFITS



Engaging in cross-border/transnational EIP-AGRI projects offers multiple benefits:

- **Addressing cross-border/transnational challenges:** Such projects provide an opportunity to tackle shared agricultural issues collaboratively, leading to more robust and scalable solutions.
- **Enhanced knowledge exchange:** Actors from different AKIS in various Member States can share best practices, which strengthens the overall agricultural innovation capacity.
- **Innovation synergies:** By working across borders, OGs can draw on a broader range of expertise and resources, resulting in more innovative and effective project outcomes.
- **Adaptation:** Despite the absence of a joint budget for transnational EIP-AGRI projects, the flexibility of these calls allows partners to adapt to the different timelines and funding mechanisms in each participating country.

FURTHER SOURCES OF INFORMATION



- Call for applications in Estonia – Year 2017
- EIP Measures in Nordic-Baltic Countries: A Reflection on the Past and a Glimpse into the Future – Survey Results
- Materials of the workshop: “Towards Transnational Cooperation in EIP – What Does It Mean?” – 17/09/2024
- Presentation of Nordic-Baltic TNC EIP cooperation during the Subgroup on Innovation & Knowledge Exchange (SoIKE) 4 th meeting Brussels 27 October 2023



Estonia, Finland



Leena Anttila – Finnish Ministry of Agriculture and Forestry:

leena.anttila@gov.fi

Helena Pärenson - Ministry of Regional Affairs and Agriculture:

helena.parensen@agri.ee

Konstantin Mihhejev – Estonian CAP Network:

konstantin.mihhejev@metk.agri.ee

Tuija Kallio – Finnish CAP Network:

tuija.kallio@ruokavirasto.fi

Watch this AKIS-in-Practice!



Theme 3

Training, knowledge exchange and information

Keywords/Tags



Training



Advisors



Integration



Knowledge exchange



RATIONALE



What competences for advisors?

Strengthening competencies is one of the two main paths to strengthen the agricultural advisory services within the AKIS.

Art. 15 Reg. (EC) 2021/2115 states that "Member States shall include in their CAP Strategic Plans a system providing services for advising farmers and other beneficiaries of CAP support on land management and farm management ('farm advisory services'). Member States may build upon existing systems. The farm advisory services shall cover economic, environmental and social dimensions, taking into account existing farming practices, and deliver up-to-date technological and scientific information developed by means of research and innovation projects, including as regards the provision of public goods...".

The aim of this provision is to support farm decision-making through a holistic approach, integrating the various sources of information and the farm context. The advisor should be able to consider all aspects of agriculture, from the overall effect on farm profitability to changing parts of production to specific technical advice. In short, the aim is to promote prompt, tailor-made, trusted advice.

To this aim, Member States must ensure adequate training and the integration of all advisors, public and private. Since the challenges are becoming more and more complex, advisors should be ready for change. Linear advice (based on technical knowledge transfer) will always continue to play a role, but the future advisor should be more listening-oriented, able to act as an intermediary and to support the farmer by adapting information to the specific farm circumstances and farmer's needs. Moreover, more and more competences are needed to support multi-actor innovation processes.

Acquiring soft skills, including cognitive (involving the use of logical, intuitive and creative thinking) or practical (involving the use of methods, materials, tools and instruments) ability to apply knowledge and use know-how to complete tasks and solve complex problems, asks for new training approaches based on experiential and transformative learning and interactive methods.

In this respect, the SWG SCAR-AKIS Policy Brief on New approaches on Agricultural Education Systems recommend focusing on multi-actor approaches (e.g., masterclasses that could be developed by researchers, teachers/education and advisors together with agricultural entrepreneurs) and peer to peer learning initiatives (e.g., study groups).

Six different training practices are presented in this section: demonstration projects and demonstration actions, international study visit and cross visit, the Mötesplats AKIS meeting and the Copernicus Academy.

THE STRATEGIC FUNCTION TRAINING



Article 15 goes on to state that "...Farm advisory services shall be integrated within the interrelated services of farm advisors, researchers, farmer organisations and other relevant stakeholders that form the AKIS. Member States shall ensure that the advice given is impartial and that advisors are suitably qualified, appropriately trained and have no conflict of interest.

The farm advisory services shall be adapted to the various types of production and farms". Education programmes for advisors are generally defined by advisors, education centres (e.g., universities), and public institutions responsible for policies/programmes, resulting in different objectives and achievements.

To better connect advisors into the AKIS, there is the need of aligning advisors' 'skills and messages they deliver to farmers to policies objectives, programmes and strategies focusing on agricultural and rural development.

Advisory services should cover the needs of a variety of farmers, both small and large scale, as well as have a deeper understanding of agroecological & organic practices and production techniques and how these can be applied in the different farming systems.

This is the main reason why advisors' training should be publicly funded.

Moreover, in many cases, specific advisory competences are missing (e.g., new techniques, new crops, minor sectors, drones, etc.) and this undermines farmers' trust.

Therefore, it is important to keep impartial advisors up with the latest knowledge in order to be on an equal footing with staff from private firms which is paid for commercial goals.

In addition, public authorities have a responsibility to push the knowledge frontier even further, communicating research results in a format so that the advisors can incorporate the new knowledge in their advice. Since agricultural higher education is more and more going away from practical applications and getting oriented to the most "publishable" research results, the need for a more holistic approach offered by advisory services becomes more urgent.



The practice presented in this "Compendium" showcases some interesting and replicable approaches: the first two describe how Demonstration projects and Demonstration actions are going to be implemented under the CAP SP 2023-2027, respectively in the Netherlands and in Latvia.

The third case illustrates how international study visits were used by Sweden to learn from neighboring countries how they have successfully integrated research and advisory services. Similarly, a cross visit was organized by the Veneto Region, as a part of a broader training program titled "I am an AKIS Actor! Toward New Horizons in Agricultural Advisory 2023-2027: Scenes Inside and Out," to engage directly with on-the-ground examples of innovative practices and solutions applied in Flanders and, in this way, learn how other countries deal with AKIS interventions.

The Mötesplats AKIS meeting shows a practical example on how to provide a "safety space" to different actors (advisors, researchers, people working with policy makers, public servants and governmental bodies, universities and people from other organizations that work on agricultural development) to share knowledge and experiences along with networking. Finally, the Copernicus Academy illustrates a training project aimed at providing sensitization and awareness among advisors on the use of digital tools for supporting more sustainable practices in farming systems, along with training on the possible joint use of agronomic knowledge with earth observation and georeferencing information on land.

FOOD FOR THINKING



Advisor training is much more than a regulatory requirement. Training is an opportunity to continuously improve individuals' competencies, giving them the chance to explore topics of public interest and discover new things that open up new horizons. It also keeps professionals up to date with the rapidly changing environment and profession, providing them with the necessary competencies. All this results in a guarantee for farmers and foresters: a curious advisor, who does not stop updating, will continue to offer a quality service, thus gaining the trust of his/her clients.

In this perspective, we could raise a few questions (not exhaustive) to help us reflect on training implementation:

- How to define training of trainers? How to find trainers? How to ensure training replication on the territory by the trained advisors?
- How to define an effective training plan?
- How to define curricula for advisors that take into account the latest results of research and innovation projects?
- How to facilitate the acquisition of the soft and cross-cutting skills? by which methods?
- How to remove barriers, typical of certain institutional cultures within policy making and administrators that "cage" training within traditional frameworks that hardly contemplate experiential methods and the opportunity to travel?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- CoPs' workshop aimed at defining a training plan. The workshop could be attended, for instance, by trainers from the i2connect and ATTRACTISS projects (concerning soft skills) and trainers from projects that are working on technical aspects related to sustainability (e.g., Climate Smart Advisors).
- Agreements for the implementation of training modules developed by European projects within the framework of CAP-supported interventions: the Member State provides the course and the trainers are paid by the project.

FURTHER SOURCES OF INFORMATION



- Regulation (EU) 2021/2115 of the European Parliament and of the Council, art. 15 and art. 78
- EU SCAR AKIS (2019), Preparing for Future AKIS in Europe. Brussels, European Commission.
- SWG SCAR-AKIS Policy Brief on New approaches on Agricultural Education Systems <https://scar-europe.org/akis-documents>





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.6

Fostering Sustainable Farming: Tailored Demonstration Projects for Climate Change Mitigation



Keywords/Tags



Peer-to-peer learning



Demo-farms



Climate change



Potential users



Managing Authorities/AKIS
coordination bodies



Trainers



Advisors/Innovations support services
providers



Farmers and other agricultural
enterprises



RATIONALE



The engagement and adoption of innovative, environmentally sustainable farming practices by farmers, which reduce greenhouse gas (GHG) emissions, are seen as key drivers in accelerating the agricultural sector's adaptation to climate change.

Moreover, peer-to-peer actions and demonstrations of innovative solutions are highly effective in supporting green transition pathways, as they raise awareness of potential benefits, foster a sense of contribution to the broader ecological transformation, encourage emulation, and reduce resistance to change.



Source: Netherlands Enterprise Agency

In fact, the EC supports EU R&I projects that include demonstration farms pilots and networks aiming at disseminating climate change adaptation conducive practices.

SOLUTION



The CAP Strategic Plan (SP) of the Netherlands strongly supports farmers that contribute to the transition to sustainable agriculture, by tailored solutions at territorial level. Consistently, AKIS-related interventions are well organized to pursue this strategic objective, in view of increasing a major consciousness on climate change mitigation and environmental care practices, through boosting a grassroot transition to a more sustainable agriculture. For example, demonstration projects of farmers and other enterprises having sustainable agricultural business aimed at sharing and transferring knowledge on environmentally friendly agriculture with less emissions and more biodiversity are specifically subsidized.

IN PRACTICE



The farms and other agricultural enterprises can apply to call on subsidies for demonstration projects launched by the Managing Authority of the CAP SP 2023-2027.

Demonstration projects can be candidate by an individual or collaborative application and the activities must target farms.

The selection is due to the inclusion of knowledge exchange and transfer actions to farms on at least 5 of the environmentally friendly practices listed by the call (box 1).

Among the others, possible commercial conflict of interest on the demonstration activities is avoided by the exclusion of companies/affiliated with companies that sell crop protection products, animal feed, agricultural machinery products or fertilizers.

Box 1: Sustainable agriculture related topics of demonstration projects

- Lower nitrogen emissions (mandatory subject).
- Lower use of crop protection products and the use of integrated crop protection.
- Lower greenhouse gas emissions.
- Lower emissions of nitrate and other fertilizers.
- Increase biodiversity.
- Strengthen sustainable soil management.
- Increased reuse of animal feed (circularity).
- Improve animal welfare and animal health.



Box 2: Key contents of the demonstration project plan

- Demonstration activities by topic and date.
- Budget, by detailing cost efficiency justification.
- Costs calculation and reporting method (actual costs/SCO).
- Qualified and skilled trainers, to check based on CVs or other documents.
- Cooperation agreement, in case of collective action, including details of the project activities and budget allocations by each partner.

A minimum and a maximum budget by projects and by farmers are established and the subsidy percentage is of 100% so that all eligible costs are reimbursed based on actual costs or on simplified cost options (SCO).

The reimbursement is due to the approval of the application, intermediary, based on partial documented achievements, and final payment.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Guidelines and templates for the applications (project plan and cooperation agreement) and reporting of the demonstration projects and costs must be established to ensure harmonization and compliance by beneficiaries.
- Identification of a list of eligible, possibly strategic, environment-friendly practices to share by demonstration activities.

BENEFITS



- Smooth administrative procedure to endorse demonstration activities.
- Major efficacy of peer-to-peer demonstration activities compared to others.
- Creation of an enabling environment for innovation scaling.

FURTHER SOURCES OF INFORMATION



- Call for applications for demonstration projects

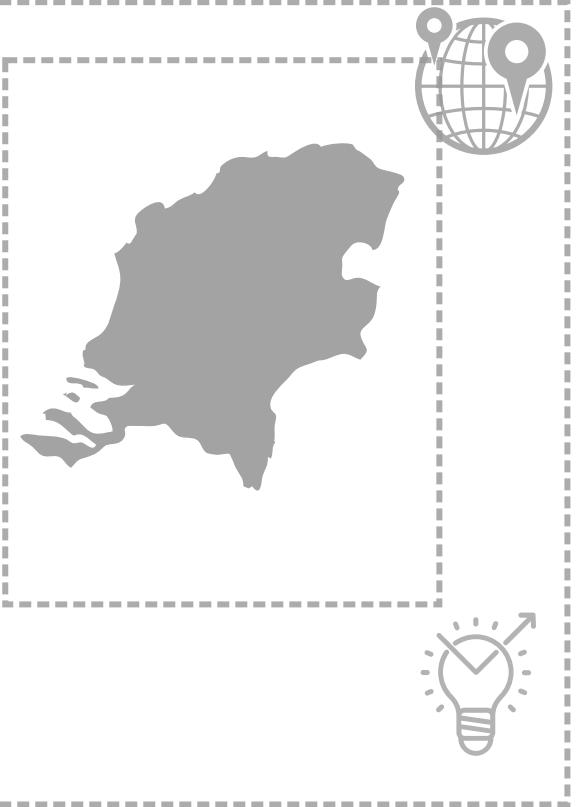


Netherlands

 **Ministry of Agriculture, Nature and Food Quality**
– Netherlands:

J.W.J. van (Jan) Esch
j.w.j.vanesch@minlnv.nl

Watch this AKIS-in-Practice!





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.7

Bridging the gap between research and practice: demonstrative actions in Latvia



Keywords/Tags

-  Demo-farms
-  Peer-to-peer
learning



Potential users

-  Managing Authorities/AKIS
coordination bodies
-  Farmers and other agricultural
enterprises
-  Advisors/Innovations support services
providers
-  Trainers



RATIONALE



Demonstration actions are a very powerful tool for accelerating knowledge transfer, through bridging the gap between research and practice and ensuring that results of research are effectively disseminated across the agricultural systems, in view of possible adoption and innovations by the farms.

This type of initiative can serve as knowledge brokerage, to show to a wide of potential users, such as farmers and other rural entrepreneurs, advisors and researchers, and discuss on advantages and feasibility of the latest agricultural methods, technologies, and, possibly sustainable, solutions for farming.

Moreover, demonstrative actions in farms have a great potential for encouraging adoption of the results of research by farms, as by showcasing successful applications and tangible results, they lead reducing uncertainty and risk perceptions among potential adopters.

Some key functions of the demonstrative actions in research and agricultural knowledge and innovation systems regard:

- **Knowledge transfer:** They facilitate the sharing of knowledge between researchers, farmers, and other stakeholders. By demonstrating practices in real-world settings, participants can see the benefits and applicability of new techniques.
- **Capacity building:** Demonstrative actions help build the skills and confidence of farmers and practitioners. By engaging in hands-on activities, they gain practical experience that can enhance their decision-making.
- **Feedback loop:** These actions create opportunities for feedback from farmers and other users, allowing researchers to refine and adapt technologies and practices based on real-world challenges and successes.
- **Validation of innovations:** Demonstrative actions can serve as trials to validate new technologies or practices under local conditions, helping to assess their effectiveness and suitability.
- **Networking and collaboration:** They promote interaction among various stakeholders, fostering collaborations that can lead to more integrated and sustainable agricultural practices.

In Latvia, there's the need to increase the level of knowledge of farmers, as well as rural entrepreneurs of other sectors operating in rural areas, given that only 28.4% of farmers possess specialized agricultural education. As well, farmers need advice on topics that are relevant for their development and for the CAP, such as environmental impact of productions, biodiversity maintenance, food protection and health quality.

Solution

SOLUTION



In Latvia, the demonstration activities have been supported by the Rural Development Program 2014-2020 with the aim to ensure the establishment (creation, furnishing, installation of equipment) and implementation of a demonstration that practically demonstrates or demonstrably demonstrates the advantages of a new agrotechnical technique, technological process, crop or animal breed, which have been tested in research and reflect at least two variants - the current standard techniques and new techniques.

Through well-organized events like farm visits, demonstrations, workshops, and advice, farmers and rural entrepreneurs gain practical insights into sustainable practices, biodiversity conservation, and climate-resilient agriculture, fostering a more informed and capable agricultural workforce.





The Managing Authority of the RDP 2014-2020 of Latvia launched a call for applications for the following type of initiatives:

- Demonstration installation, implementation, promotion and dissemination of the results of the demonstration.
- Investments in tangible assets and intangible investments that are directly related to the achievement of the objectives of the demonstration.

The beneficiaries are legal entities that are registered in the Register of Scientific Institutions or the Register of Educational Institutions of the Ministry of Education and Science for demonstration events and information events.

The requirements for support applicant are:

- At least three years of experience in setting up demonstrations, organizing field days or public seminars in the agricultural sector.
- At least three years of experience in advisory services in the agricultural sector.
- Developed proposal for setting up and implementing a demonstration in which at least one association representing producers, a scientific organization, an advisory organization and a farm or commercial company that is registered in the Enterprise Register, commercial register or is registered as a tax payer confirms its participation.
- For the installation and implementation of the demonstration, an industry specialist and a scientific leader who represents the academic staff of universities or holds an academic position in a scientific institution or who has at least a master's degree in agriculture or natural sciences are engaged.

Eligible Costs

The program provided funding for all necessary expenses associated with setting up and maintaining the demonstration, with a maximum eligible cost of 15,000 euros per demonstration per year (excluding VAT).

Eligible costs included:

- Demonstration installation, implementation, promotion and dissemination of results:
 - Compensation for the personnel involved.
 - The cost of teaching materials related to the demonstration.
 - Transportation expenses.
 - Costs of purchase of materials and services necessary for setting up and implementing the demonstration;
 - Publicity costs.
 - General costs (including administrative costs).
- Investments in tangible assets and such intangible investments in the demonstration farm that are directly related to the achievement of the objectives of the demonstration. The costs of tangible and intangible investments are applicable only for the time of installation and implementation of the demonstration (rental).



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Inter-Ministerial coordination to facilitate collaboration among relevant ministries to identify and verify eligible beneficiaries effectively, enabling smooth registration and alignment of program requirements across sectors.
- Identification of a list of eligible, possibly strategic, environment-friendly practices to share by demonstration activities.
- Provision of the presence of scientists/researchers to facilitate knowledge transfer among participants and a detailed explanation of the innovations implemented in the farm.

BENEFITS



- **Access expert solutions:** Involve skilled advisors who can identify overlooked issues and suggest targeted solutions to enhance farm profitability.
- **Build long-term knowledge:** Acquire knowledge that empowers informed, strategic decisions not only for immediate concerns but also for future planning, strengthening the resilience of farms.
- **Streamlined administrative process:** Efficient procedures ensure rapid and uncomplicated endorsement of demonstration activities, reducing bureaucratic delays and fostering smoother project initiation.
- **Enhanced impact of interactive demonstrations:** Demonstrations conducted in an interactive way can foster practical learning and encourage greater participant engagement and knowledge transfer.
- **Supportive environment for scaling innovations:** The initiative promotes a conducive atmosphere for the broader adoption and scaling of innovative practices, facilitating the diffusion of new techniques across the sector.



FURTHER SOURCES OF INFORMATION



Call for applications for demonstration projects Latvian RDP 2024-2022.

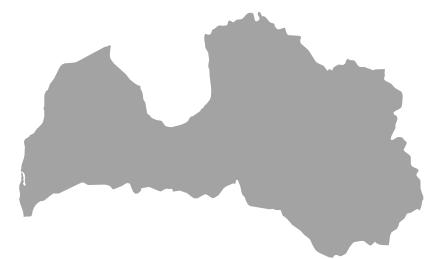


LATVIA



Latvian Rural Advisory and Training Centre:
Kaspars Zurins:
kaspars.zurins@llkc.lv

Watch this AKIS-in-Practice!





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.8

**International study visits to
Denmark and Finland:
increasing capacities for
Swedish AKIS actors**



Keywords/Tags



Peer-to-peer learning



Study visits



Potential users



MAs/AKIS coordination bodies



Partners of OGs



Advisors/ISS



Farmers and other agricultural workers



Researchers and other AKIS actors



RATIONALE

The CAP 2023-2027 regulations emphasize the need for holistic advisory services to promote sustainable agriculture. However, Swedish AKIS encounters several challenges, including fragmentation, a lack of collaboration among actors, limited knowledge resources, and disconnection between basic research, applied research, advisory services, farmers, agri-food businesses, and rural entrepreneurs. Regional disparities highlight the importance of policy coordination, both within the innovation support system and across national, regional, and local levels.

Particularly, Swedish advisory services are diverse, with different work methods and knowledge sources, often seeking knowledge abroad due to limited domestic availability. There is also no formal training for advisors in Sweden, leading to a shortage of skilled professionals.

Lately, Swedish AKIS actors have identified several needs: developing better access to relevant knowledge, strengthening collaboration between academia and practice, and fostering knowledge exchange across different regions. Besides, opportunities for Sweden lie in fostering innovation, digitization, and enhanced collaboration, with international exchanges offering a pathway to address these gaps and drive improvements in Sweden's agricultural advisory services and innovation system.

SOLUTION



International collaborations, including study visits, offer a platform to learn from neighboring countries that have successfully integrated research and advisory services. For this purpose, some lectures were organized to introduce to the Swedish AKIS analysis group the AKIS systems of the other countries. Following this, two international study visits were organized to neighboring Denmark and Finland to look at their AKIS, strengthening CAP strategies and respective actors. During and after these trips, the AKIS analyzing group of Sweden was engaged in a collective reflection in the experience and the key lessons to follow-up within Sweden.

IN PRACTICE



An AKIS analysis group has been set up and it consists of 12 members focusing discussing and analysing challenges and opportunities for Swedish national AKIS on overall system level. This group includes AKIS actors in Sweden, such as green clusters/regional innovation hubs, national knowledge hubs, research, the Federation of Swedish Farmers, the Sami Parliament, advisors, financiers. Ultimately, the Swedish Board of Agriculture that plays the role of the AKIS Coordination Body is member of this AKIS analysis group.

The support of the CAP network, the Swedish CAP network and the Finnish CAP network, was crucial for the organization of the trips on the field and the contact with the hosting bodies.

The international study visits were planned by the AKIS analysis group who was directly engaged in defining content and learning programs as well as contacting the people/organizations to visit.

The study visits abroad were scheduled over two days each and the agenda included (table 2 and 3):

- Meeting some key AKIS actors in the Countries: Agri-food clusters, Universities, private advisory companies, research bodies and infrastructures and agricultural colleges.
- Comparing key features of Swedish AKIS with the ones in Finland and Denmark, based on presentations and open discussions.
- Taking advantage of the bus travelling around the hosting countries to discuss and reflect collectively on lessons learned and possible take-ins.

The agenda for each of study visits included the description of AKIS in countries, by deepening the advisory services organization, pros and cons of the different organizational models and lessons to learn. All in all, the study visits agenda were structured as showed in Table 1.

Table 1: Agenda of the two international study visits

Study visit in Denmark (January 2023)	Study visit in Finland (September 2023)
Day 1	Day 1
10.30: Departure from Malmö Central	10.00: Arrival at Natural Resources Institute Finland
12.00: Landbrug og Fødevarer (Agriculture & Food)	10.30: Presentation of AKIS in Finland and in Sweden
Introduction to the food Cluster in Denmark	12.00: Lunch
The Danish agriculture – future and challenges.	13.00: Introduction to the University of Helsinki - Faculty of
Introduction to Danish AKIS	Agriculture and Forestry
15.00 – 18.30: Travel to Aarhus	14.00: Visit to SMEAR-Agri station
19.00 Dinner at the hotel	16.00: Departure to Hämeenlinna
	19.00: Dinner and networking
Day 2	Day 2
08.00: Arrival at SEGES Innovation.	8.00: Departure to Mustiala
09.00: Presentation of SEGES and tour at Agro Food Park.	9.00: Presentation of Advisory services in Finland
10.45: Presentation by Food and Biocluster Denmark	10.00: Presentation of Continuous education
11.45 Lunch	11.00: Discussion
12.15 – 12:30: Departure towards the consulting company Velas.	11.30: Lunch
12:30-14:00 - Presentation of Velas.	12.30: Mustiala campus visit (Carbon Action cooperation; TP Organics Lighthouse farm)
14.00 – 18:20: Travel back to Malmö.	14.30 – 16:20: Travel back to Helsinki



Both visits provided the participants with great exchange and very valuable knowledge. The set-up during the visit to Denmark meant that AKIS analysis group got to know each other very well and that the commitment and cooperation were subsequently raised several levels. So, a bonus of traveling that way was that the group became tight.

Table 2: Overview of the hosting AKIS actors in Denmark

<p><u>Landbrug og Fødevarer</u> (Agriculture & Food) is Denmark's key food cluster, formed in 2009 from a merger of various agricultural organizations. It plays a vital role in the Danish economy, with exports exceeding DKK 199 billion in 2023 and employing 180,000 people. The organization represents the entire food value chain, including about 22,000 local farmers and 300 company members, ranging from large corporations to small businesses involved in food production, processing, and related services.</p> <p>The company members include i.e. dairies, slaughterhouses, raw materials companies, refining and processing companies, trading companies, manufacturers of agricultural machinery, stable equipment, etc., manufacturers of machines for the food industry, manufacturers of ingredients and auxiliary substances, research and consulting companies, financial institutions and insurance companies.</p> <p>Landbrug og Fødevarer is deeply integrated into Denmark's AKIS and emphasizes research, innovation, and demonstration through collaborations with universities and institutes. It offers diverse services to its members, including legal and tax assistance, market analysis, veterinary diagnostics, and a livestock welfare hotline.</p> <p>Source: <u>Landbrug og Fødevarer website</u></p>
--

Food and Biocluster Denmark is the national cluster focused on enhancing the Danish food and bioresource sectors, which are key strengths of the Danish economy. The organization aims to unite the industry to foster innovation, development, and competitiveness both domestically and internationally. Rooted in a tradition of collaboration from the Danish cooperative movement, the cluster seeks to strengthen innovation throughout the entire value chain of food and bioresources.

The cluster's goals include supporting startups and stimulating innovation in established companies, increasing the speed and quality of innovation, and fostering an ecosystem that promotes growth. By facilitating partnerships and commercializing research-based knowledge, Food & Bio Cluster Denmark aims to enhance global competitiveness for its members, ultimately leading to improved turnover, job creation, and export share. With over 450 members, the cluster addresses significant contemporary challenges through collaboration and innovation, covering all aspects of the supply chain from primary production to the processing and distribution of food, as well as the utilization of biological residues and environmentally friendly alternatives. Membership provides access to valuable networking opportunities, knowledge resources, events, and benefits that can drive growth and business development in the industry.

Source: [Food and Biocluster Denmark website](#)

SEGES Innovation is an independent research and innovation organization dedicated to promoting sustainable and competitive agriculture and food production. SEGES Innovations integrates scientific knowledge with digital technologies to apply new insights in stables, fields, and throughout the entire value chain from farm to fork. It develops approaches for sustainable agri-food production both in Denmark and internationally, combining professional expertise with digital skills to ensure that new knowledge is actively utilized in barns, fields, offices, and across the value chain. Established over fifty years ago, today, it can count on 500 employees and generate over DKK 600 million in revenue. The organization encompasses a diverse range of expertise, collaborating on projects with research institutes and major companies on topics such as sustainable crop and livestock production, creating attractive workplaces, and addressing climate and environmental issues. The services provision of SEGES Innovation includes digital solutions for enhancing sustainable agri-food production, tailored consulting services, events and educational opportunities, testing and trials, and data analysis to assess carbon footprints at the farm level.

Source: [SEGES Innovation website](#)



Advisory company Velas is the leading consulting firm in agriculture, ready to provide expert advice that will enhance the business of farms, based on a team of selected specialists to address a holistic advice along with specific challenges and ensuring the best tailored guidance.

As the largest consulting company in the country, it assists all agricultural areas (crop cultivation, cattle or pig production, or aspects like accounting, taxation, generational transition, and legal matters). The services offered include agricultural advice on farm management (housing construction, recruitment and salaries, business and tax matters, EU support, and accounting), comprehensive guidance in crop breeding and livestock production, and initiatives for more sustainable and modern farming practices, including climate, biodiversity, and environmental reporting.

Source: [Advisory company Velas website](#)

Table 3: Overview of the hosting AKIS actors in Finland

Natural Resources Institute Finland - Luke is a research organisation operating under the Ministry of Agriculture and Forestry of Finland. Luke's task is to promote competitive business based on the sustainable use of renewable natural resources, as well as wellbeing and the vitality of the rural areas.

It employs some 1,300 people and operates in 24 locations in Finland. Luke resolves challenges in the sustainable and profitable use of renewable natural resources in four phenomenon-based research programmes. Every year, Luke has more than 700 research projects in progress, roughly 100 of which are EU projects.

Source: [Natural Resources Institute Finland \(Luke\) website](#)

University of Helsinki - Faculty of Agriculture and Forestry is a unique national institution with high international recognition, specializing in sustainable bioeconomy and related business operations. It focuses on research and education in the use of renewable resources, agriculture, food, forests, and water. Its research strengths include resilient forest and food systems, climate-smart solutions, wellbeing, and equitable sustainability transitions. Located on Viikki Campus in Helsinki, the Faculty also operates research facilities in Seinäjoki, Mikkeli, and Juupajoki. It is highly involved in international cooperation, with student and teacher exchanges primarily through Erasmus and bilateral agreements and coordinates some Erasmus+ projects related to agriculture and the environment: ECOIMPACT, FRAME, FOREHAL, CliMed.

Source: [University of Helsinki - Faculty of Agriculture and Forestry website](#)

SMEAR-agri station, the SMEAR-Agri Viikki & Haltiala measurement stations, located in Helsinki, are the first comprehensive agricultural stations in Finland dedicated to studying the impacts of agricultural land use on climate and waterways through year-round measurements. These stations, that are maintained by the University of Helsinki and part of the SMEAR network and INAR RI Agriculture infrastructures, focus on biosphere-aerosol-cloud-climate interactions, biogeochemical cycles, pollutant analysis, and soil-water-carbon-nutrient budgets. Established in 2020 and 2021, the stations provide continuous data on greenhouse gas (GHG) fluxes, soil carbon, nutrient stocks, and climate-smart practices, serving as research platforms for studying the climate and air quality impacts of northern agriculture.

Source: [SMEAR website](#)

Häme University of Applied Sciences HAMK - Mustiala campus is a learning and research hub. As a university of applied sciences, it focuses on delivering high-quality education rooted in applied research. HAMK actively collaborates with businesses, public organizations, and the third sector, and is part of RUN European University, a network of eight higher education institutions from seven countries working towards a shared vision.

HAMK fosters three key innovation ecosystems: Smart Systems and Biotechnology, Smart and Sustainable Built Environment, and Smart Future Education and Capacity Building.

The university includes research specialists and multidisciplinary experts providing research, development and innovation (RDI) for raw material production, the circular economy, sustainable construction and the built environment, and future skills and education.

The HAMK Mustiala campus is an organic dairy farm that serves as a center for research, education, and innovation. In collaboration with research institutes, advisory services, and agricultural companies, the farm conducts projects focused on animal welfare and sustainable agricultural practices. It maintains 79 dairy cows, 66 young cattle, and operates 185 hectares of arable land, producing organic feed for its livestock and selling products locally. As a certified organic farm, it benefits from premium pricing, ensuring long-term economic viability. Mustiala also serves as a "lighthouse" for organic smart farming, offering courses and testing innovative technologies such as digital tools and drone imaging. Students engage in practical activities, including data collection and field trials. The farm incorporates research into daily operations, with AI-driven animal welfare studies and experiments in biochar, crop rotation, and natural weed control.

The farm collaborates with the Natural Resources Institute of Finland (Luke) and other partners to advance research in natural resources, bioeconomy, and the circular economy. It offers degree programs in Finnish and English through the Häme Vocational Institute, balancing applied research with economic sustainability, with projects supporting the farm's financial independence.

The campus provides educational programs at the bachelor's and master's levels in agriculture, climate-smart farming, and bioeconomy solutions, integrating students into hands-on learning and research. The Mustiala farm is involved in EIP-AGRI Operational Groups.

Source: [Häme University of Applied Sciences HAMK and Mustiala campus websites](#)

Gerda Jonasz & Korinna Varga (2022) "Organic living labs and lighthouse farms in Europe" [TPO Organics](#).

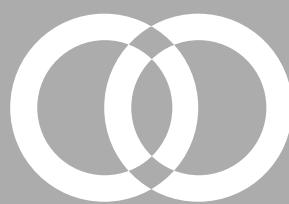
EIP Smart Drink Dispenser 2022 project, during the study visit, the Swedish delegation had the opportunity to learn about this EIP-Agri operational group project (09/2022-12/2024; total budget €210,702.40), in which the Mustiala campus is participating. The project focuses on developing technology to measure a cow's water consumption both at an individual and herd level. Monitoring water intake can enhance the early detection of changes in welfare, behavior, and productivity.

Source: [EIP Smart Drink Dispenser 2022 project website and EU CAP Network](#)

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- **Costs:** they regard the travel and accommodation of the participants along with the bus valet for the trip on the field.
- **Budget planning:** the adequateness of the budget planned for the trip is crucial and it needs to be set at the very early stage of program organization, as well as the number of the participants and locations to reach during the trips.
- **Funding:** in the case of the trip to Denmark the costs were fully covered within the frame of the Swedish CAP network. In the case of the visit to Finland the Finnish CAP network covered the bus rental and one dinner; while the other costs were covered by the participants, who paid a fixed fee.
- **Contents planning:** the contents and lessons to learn from the trips must be well agreed with host countries from the very early stage of organization. This includes well structure the schedule of the different relations. As well, methodologies for timely and collective reflection should be better pre-defined. For example, the bus trips were used for summarizing, discussing and learning from lessons and presentations just attended by the participants.
- **Organization:** the organization is time-consuming. Relying on their knowledge and embeddedness into local AKIS by the CAP networks of the hosting countries is valuable. For example, using their contacts of AKIS actors was crucial for the timely and true engagement during the trips.



BENEFITS



- Learning from other countries contributes to the development of Swedish AKIS.
- Valuable to have the opportunity to discuss common challenges with actors in other countries.
- The participants get to know each other, and the group develops.
- Contacts are created in other countries, which simplifies cooperation in the future.

FURTHER SOURCES OF INFORMATION



- [Podcast about AKIS in our Nordic neighbouring countries: #167 AKIS i våra nordiska grannländer – vad kan vi lära oss?](#)
- [Landsbygdsnätverket \(landsbygdsnätverket.se\)](#).
- [Article about what we can learn from Finland about AKIS: Vad kan vi lära av Finland om kunskaps- och innovationssystem för lantbruk?](#) - [Landsbygdsnätverket \(landsbygdsnätverket.se\)](#)
- [AKIS Reports on Sweden 2020 and 2024 \(i2connect project H2020\)](#)



SWEDEN, DENMARK AND FINLAND



Jennie Cederholm Björklund
Jennie.cederholmbjorklund@jordbruksverket.se





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.9

International Cross Visits: peer-to-peer learning among advisors from Veneto and Belgium



Keywords/Tags



Study visits



Peer-to-peer
learning

Advisory service



Potential users



Managing authorities of the CAP
Strategic Plans



Farmers

AKIS coordination bodies

Innovation Support Services providers

Operational Groups



RATIONALE



Integrating advisors into Agricultural Knowledge and Innovation Systems (AKIS) is crucial for fostering a comprehensive understanding of the economic, environmental, and social dimensions of agriculture. By ensuring that advisors are actively involved in AKIS, they can provide up-to-date technological and scientific insights derived from research and innovation (R&I), thus enhancing the overall effectiveness of agricultural practices. To achieve this goal, Managing Authorities must develop and implement robust strategies that prioritize and boost the professional development of both advisors and innovation support service providers.

One effective approach to strengthen this integration is to create training pathways that emphasize live exchanges of knowledge and experiences. Such hands-on learning opportunities facilitate deeper understanding and practical application of concepts, allowing advisors to engage directly with innovative practices in real-world settings. This interactive form of education promotes collaboration, encourages the sharing of best practices, and enables participants to learn from each other's successes and challenges. In contrast to traditional training methods, which often rely on one-way communication, these dynamic experiences empower advisors to develop a diverse skill set, better equipping them to address agricultural challenges.

SOLUTION



To enhance advisors' capacities through peer-to-peer learning on interactive innovations, a Cross Visit (CV) of advisors from Veneto in Flanders was organized in collaboration between the AKIS coordination body of the RDCP 2023-2027 of Veneto Region and the Managing Authority of the CAP Strategic Plan (SP) of Flanders (BE).

The cross visit was organized as part of the Training for Advisors measure funded by the 2014-2020 Rural Development Program of Veneto Region and managed by **Veneto Agricoltura Agency**.

The CV approach promoted the exchange of experiences through peer-to-peer learning between actors from different contexts. The primary objective was to understand the background of the innovation process and the role advisors play in it, with the overall aim of transferring this knowledge to their respective professional contexts and beyond. CVs acts as a catalyst for inspiration, providing participants with a wealth of valuable insights, practical tools, and a common language that enhances their ability to collaborate and innovate. These experiences not only broaden advisors' perspectives but also equip them with the skills and confidence needed to apply new approaches and address complex challenges when they return to their respective regions. By fostering peer-to-peer learning and real-world exchanges, CVs empower advisory services providers to adopt innovative practices more effectively and contribute to sustainable solutions tailored to their local contexts.

IN PRACTICE



The Cross Visit was part of a broader training program titled "I am an AKIS Actor! Toward New Horizons in Agricultural Advisory 2023-2027: Scenes Inside and Out," which spanned a total duration of five days.

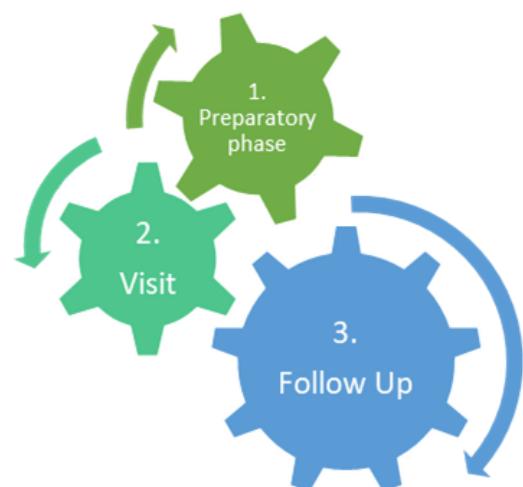
Out of them, the cross-visit consisted of 3 days (see orange cells in table 1) and engaged 13 participants (9 advisors and 4 tutors from Veneto Region) visiting some representatives from the European Commission (EC) and EU CAP Network and some Flemish farms involved in Operational Groups (OGs).

The cross visit was decided due to the meeting of the AKIS coordination body of Veneto Region and the managing authority of the CAP SP of Flanders, held during one of the general assemblies of the AKIS coordination bodies of modernAKIS project EU.

The CV was structured into three key phases:

1) Preparatory phase

Before departure, a preparatory session was conducted to engage participants and foster collaboration. During this session, an overview of the regional AKIS framework was presented, with particular emphasis on the New Delivery Model and the role of the Back Office in supporting consultancy services. This provided participants with a solid understanding of how the AKIS system operates at the regional level, ensuring they are well-prepared to contribute meaningfully during the visit and align their insights with current strategic approaches.



2) Visit Phase

During the Cross Visit days, participants engaged directly with on-the-ground examples of innovative practices and solutions applied in Flanders. They interacted with key stakeholders, such as farmers, advisors, operational groups, and European Authorities (EC and EU CAP Network) who shared insights and demonstrated successful approaches in solving local agricultural challenges. This phase was highly interactive, allowing participants to observe practical applications of concepts discussed during the preparatory phase. The hands-on nature of the visit provided valuable real-world context and deepened understanding, as participants had the opportunity to ask questions, exchange ideas, and compare practices with those from their own regions.

The focus of the peer-to-peer exchange was on the following topics:

- Different types of advisors involved in the observed innovative practices.
- AKIS Integration of different measures.
- Role of advisors in OGs and in Demonstration projects.
- Activities and methods to share the results of the OGs.
- Vocational training measure.
- Knowledge e-wallet in Flanders.
- Financial support from Flemish agricultural investment fund (VLIF): Aim is to stimulate sustainable investments with focus on funding for innovative investments.
- Role and functions of the AKIS Coordination Body.

3) Follow-up Phase

After the visit, a follow-up phase was conducted to ensure the knowledge gained was effectively retained and applied. This included the following activities:

- **Satisfaction survey:** Participants completed the satisfaction questionnaires to provide feedback on the different aspects of the visit, allowing organizers to assess the impact of the various interventions and presentations. This feedback also helps identify which activities or insights were most valuable for participants' professional development.
- **Role-playing game session:** participants were divided into three groups, each focusing on a specific theme related to advisory services. Each group was tasked with designing an advisory proposal addressing a particular problem. The proposal must include the problem the advice was aimed to solve, the objectives, relevant regulations to take into account, and a detailed description of the proposed service, by detailing the number of visits required, the data to be collected, and other logistical details. This collaborative group work was time-bound, lasting 45 minutes, and encouraged participants to think critically and creatively about real-world advisory challenges.

The follow-up phase encourages reflection and reinforces the lessons learned, ensuring that the knowledge acquired during the visit was translated into practical improvements in advisory practices once participants return to their territories.



Table 1: Program of the course “I am an AKIS Actor! Toward New Horizons in Agricultural Advisory 2023-2027: Scenes Inside and Out”

Days	Timetable	Topic	Location
DAY 1	14:00-14:30	The regional strategy for AKIS strengthening	Headquarters of the Veneto Region
	14:30-15:00	The New Delivery Model and Indicator section	
	15:00-16:00	The Back Office for AKIS	
	16:00-18:00	Interactive co-design session for a tailor-made AKIS Back Office	
	11:00 -11:15	Being actors in advisory without borders	
DAY 2	11:15 -11:45	Casa Veneta in Brussels (activities and opportunities for advisors)	Region of Veneto, Unit Organisational Unit Relations with the European Union - Bruxelles
	11:45 -13:00	Presentation of OrganicAdviceNetwork Project HE and discussion	
	15:45-16:00	Being actors in advisory without borders	European CAP Network, Bruxelles
	16:00 -17:30	Role, activities and opportunities for advisors in the European CAP Network	
DAY 3	9:00 - 9:15	Being actors in advisory without borders	Farm 1 - Flanders
	9:15 - 12:00	The farm/advisor relationship: the case of farm 1	
	14:00 -14:15	Being actors in consultancy without borders	Farm 2 - Flanders
	14:15 -17:00	The farm/advisor relationship: the case of farm 2	
DAY 4	9:00-9:15	Being Veneto actors in advisory without borders	Flanders Region Office
	9:15 -11:00	Support for advisory services in Flanders: Benchmarking the system of advisory and AKIS in Veneto and Flanders	
	11:00-13:00	AKIS, the role of advisors and their importance for the CAP 2023-2027	
	13:00-13:30	Support for farm advisory in Flanders: Benchmarking the system of advisory and AKIS in Veneto and Flanders	
DAY 5	9:00 -10:00	Presentation of inspirations collected by questionnaire	Veneto agricultura Office – Veneto Region
	10:00-11:00	Interactive session: lighting and shadows of the visit	
	11:00 -12:00	The advisory project: how to write it	
	12:00-13:00	Interactive session: writing tests	



PRACTICAL IMPLICATIONS FOR REPLICABILITY



The following steps are essential for organizing a Cross Visit:

- Define an adequate budget for the implementation of cross visits, under Article 78 of EU Regulation 2021/2115, covering travel, accommodation, and meal expenses.
- Provide specific training to expert advisors on tools and methods to facilitate interactive innovation processes.
- Select 10-12 trained advisors from different regions or countries to participate in the cross visit to ensure diverse exchange. A larger group is not recommended to maintain a high level of interaction.
- Identify at least two Operational Groups to visit.
- Define administrative procedure for the selection of a provider of the services related to the cross visit (e.g. travel, accommodation, insurance) in advance.
- Ensure translation is available in the case of foreign participants, or involve individuals with a strong command of English, especially for farmers.

BENEFITS



- Inspire improvements in services and reflect on solutions to similar problems.
- Promote the development of skills and competencies through peer-to-peer learning.
- Enhance the understanding of innovation processes.
- Provide a framework for investigating innovation practices and the role of support service providers.
- Create a professional network of innovation support agents across Europe.
- Encourage open knowledge sharing.
- Create spaces where diverse actors can meet and develop new ideas.



FURTHER SOURCES OF INFORMATION



- Veneto RDP website: <https://psrveneto.it/>
- Veneto Agricoltura website: <https://www.venetoagricoltura.org>



Italy, Belgium



Head of the Quality, Knowledge and Agri-Food Innovations Operational Unit.

Agrifood Directorate - Veneto Region:

Giorgio Trentin

giorgio.trentin@regione.veneto.it

Flemish Government - Department of Agriculture and Fisheries:

Els Lapage

Els.Lapage@lv.vlaanderen.be

Flemish CAP Network:

Margo Weckx

margo.weckx@lv.vlaanderen.be

Watch this AKIS-in-Practice!





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.10

Mötesplats AKIS, a yearly meeting of the AKIS actors in Sweden: the key role of the CAP networks on knowledge flows



Keywords/Tags



Info days



Dissemination



CAP Network



Knowledge exchange



Potential users



MAs/AKIS coordination bodies



Partners of OGs



Advisors/ISS



Farmers and other agricultural workers



Researchers and other AKIS actors



RATIONALE



One of the tasks of the national CAP Networks is to promote and facilitate the exchange and dissemination of knowledge and innovations across the countries. As a matter of fact, they play a crucial role in interpreting and selecting the most relevant information for their Member State or region, as well as in enhancing awareness and comprehension of the funding opportunities available for cooperative innovation projects. They also contribute to capacity building for Member States administrations and of other actors involved in the implementation of CAP Strategic Plans also by organizing events that can facilitate exchanges of experience between stakeholders.

These activities are very much needed in contexts like Sweden where the AKIS is made up of a wide variety of actors, including farmers, advisory services, research institutions, universities, industry organizations, and government agencies. However, the system's complexity and lack of coordination between these groups create challenges. There is a disconnect between research institutions and practical applications, preventing innovations from reaching farmers and agribusinesses. Advisory services, though widespread, are not consistently linked to research outputs, limiting the transfer of new knowledge and technologies to the field.

SOLUTION



Meeting places and networking events have been frequently requested to the CAP network for several years, in Sweden, to contribute to improve interactions and cooperation within the AKIS.

Meeting place AKIS (Mötesplats AKIS) are successfully organized by the Swedish CAP network, during the last five years. This is a yearly online meeting for everyone who works with the Swedish knowledge and innovation systems for agriculture (AKIS). The aim is to share knowledge about AKIS and provide updates and information about what is going on within AKIS - both in Sweden and internationally - as well as to collect needs for development to work with onwards.

IN PRACTICE



The Mötesplats AKIS meeting is normally held in mid-March each year and, since the pandemic, it has been carried out online. This is greatly appreciated by participants because of the major accessibility (e.g. no travel) and flexibility in participation (e.g. coming and getting out of the meeting).

Participants are advisors, researchers, people working with policy makers, public servants and governmental bodies (e.g. Swedish Board of Agriculture and regional governments), universities and people from other organizations that work on agricultural development (e.g. green clusters).

The agenda includes about 3,30/4 hours meeting, and it is structured to enable participants to share knowledge and experiences along with networking, as follows:

- 5-minute presentations on the topical matters of the year. For example, for 2024, the update on what is ongoing under the CAP strategic plan in Sweden was the focus of Mötesplats AKIS meeting. The Swedish Agency for Agriculture, along with several knowledge hubs supported by the Strategic Plan, provided status updates and discussed their contributions to development and innovation.
- The two analytical groups within the Rural Network focused on AKIS issues were introduced, along with the new approaches involving both analytical and implementation groups.
- Open Q&A. In 2024, the discussion clarified the concept of AKIS for many participants, emphasizing the importance of a systems approach and the need for platforms and tools to facilitate effective collaboration and communication among various actors and systems. In general, many questions arose about how to avoid duplication and to use the results that already exist, the projects that have been completed and the educational concepts that were previously developed to improve the AKIS in the country.
- Panel discussion with advisers, farmers and researchers on one specific topic. For example, in 2024, participants were engaged in a panel discussion regarding the role of advisory services from a preparedness perspective for their duly integration not the CAP strategic plan in view to contribute to strengthen the AKIS.
- Prioritization of needs about topics and issues to work on over the coming year.

For example, the discussion held during the meeting in 2024 brought out around 100 entries, that were collected and categorized by the CAP network. Particularly, expectations and needs emerged for:

- Continuous work to reduce overlap in efforts, promoting collaboration, cooperation, networking, and communication among stakeholders.

- Enhancing learning within and between organizations and systems, also by cross-functional groups with diverse skills from various segments of the food chain and regional collaboration with people who work on skills development at the County Boards around the country.
- Coordination and collaboration for joint conferences and events on themes of common interest.
- A communication platform remains relevant and in high demand, aimed at facilitating cooperation and coordination among actors.
- Building thematic networks and organizing AKIS theme meetings was made to ensure coordination and create synergies.

Normally, the number of participants is more than 100 hundred and in 2024 it raised up to 150.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Schedule the meeting as part of the **CAP Network action plan** and rely on its capacities for organization and networking, by including a certain flexibility to follow-up its results with possible new activities.
- **Periodicity and systematic review** of the results and follow-up by the CAP network is essential to help familiarize potential participants with the annual Mötesplats AKIS meeting and make them aware of this valuable opportunity for engagement.
- **A vast communication campaign** preceding the meeting is fundamental to reach relevant stakeholders and even the hard-to-reach ones. This is done mostly by posts on the Swedish CAP network's website, in newsletter, and in social media (X, LinkedIn, Facebook).
- **Advertising the agenda** of the Mötesplats AKIS meeting beforehand, by requesting registration, is relevant to evaluate about further promotion of the event. The registration includes the link to the meeting, the name, organization, e-mail and possible calendar booking, that renders all the registered visible.
- **Sharing the presentations of the meeting is important to enable reflection upon learnings.** Presenters are encouraged to make their presentations user-friendly by linking to pages and materials that participants may find useful. The presentations are sent to participants just after the meeting and published on the website of the CAP Network.
- The **satisfaction survey**, just after the meeting, is useful to evaluate opportunities to improve the agenda, contents and moderation of the meeting.

BENEFITS



- Provides easily accessible information and updates about AKIS.
- Enables dialogue and cooperation between AKIS actors.
- Over the years it increases sense of belonging and mutual recognition and trust.
- Collect and prioritize needs to work with over the coming year.
- Increases contact surfaces and networks.
- With a low budget it is possible to meet a large number of key AKIS actors and to create a networking opportunity.



FURTHER SOURCES OF INFORMATION



- The Swedish CAP network website, where Meeting.place AKIS have pages
- Article about Meeting.place AKIS 2024
- Webpage of the meeting.place



SWEDEN



Jennie Cederholm Björklund
Jennie.cederholmbjorklund@
jordbruksverket.se





Training,
knowledge
exchange and
information

AKIS-in-Practice! 3.11

Copernicus Academy: the open school of the NRN for advisors



Keywords/Tags

-  Synergies with H2020/HEU
-  Digital tools
-  E-learning
-  Big data



Potential users

-  Managing authorities
-  Advisors/ISS
-  Researchers and Universities
-  Providers of digital tools and methods for land observation
-  Educators and trainers



RATIONALE



The CAP 2023-2027 emphasizes sustainability and climate mitigation to tackle environmental challenges and conserve biodiversity, by including taking advantage of climate-smart technologies.

On this regard, the role of the Agricultural Knowledge and Innovation Systems (AKIS) and, specifically of the advice, is crucial to conjugate the modernisation of the agricultural sector and rural areas with the environmental care and climate change mitigation, to ensure a system perspective, a collaborative research and innovation pathways and a digitalization of the agricultural sector that are likely to address tailored and context-sensitive opportunities of a sustainable development.

Among the others, EU programmes and digital platforms (e.g. Copernicus, Galileo) include large datasets from satellites, drones, sensors and GPS, along with from in situ sources that represent valuable and on time information on, for example, soil health, weather conditions and crop performance, and have the enormous potential for sustainability and environmental monitoring (e.g. biodiversity, carbon footprints, and compliance with environmental standards) and for data-driven decision-making of farmers to meet CAP's sustainability goals.



Particularly, they have the potential to support better planning, monitoring, and risk management, and optimizing farming processes like irrigation, fertilization, and pest control, improving yields while reducing resource use.

On this regard, the CAP networks can support the AKIS pursuing these important CAP objectives, through systematizing the different sources and infrastructures of knowledge and encouraging the widespread of use of digital tools by facilitating the interactions among the actors and contributing to their capacity development.

However, in Italy, the level of access and adoption of digital technologies by farms is still unsatisfactory due the costs, the scarce information and tools tailored to the needs and specificities of the territories and of the insufficient incentives on investments and of digital skills and tools of advisors and of difficulties with digital infrastructures in remote and marginal areas.

Copernicus, the Earth observation component of the EU's Space Programme, provides free and accessible data from satellites and in situ sources to monitor the planet and its environment. Managed by the European Commission, it helps improve quality of life by offering valuable information to service providers, public authorities, and organizations. In agriculture, Copernicus plays a key role in advisory services by providing real-time data on soil, crops, weather, and environmental changes. This enables farmers to optimize resource use, improve yields, and adopt sustainable practices, making it essential for precision agriculture and reducing environmental impact. The services provided by Copernicus platform include:

- Copernicus Atmosphere Monitoring Service (CAMS).
- Copernicus Marine Service.
- Copernicus Land Monitoring Service (CLMS).
- Copernicus Climate Change Service (C3S).
- Copernicus service for Security applications.
- Copernicus Emergency Management Service (Copernicus EMS).

The Copernicus Academy is the network established by the European Commission as part of the Space Strategy for Europe, that connects universities, research institutions, business schools, and organizations across Copernicus Participating Countries and beyond. Its goal is to link academia with authorities and service providers, promote collaborative research, and develop educational resources such as lectures, training sessions, and internships. The Academy aims to equip the next generation of researchers, scientists, and entrepreneurs with the skills needed to fully utilize Copernicus data and services.

[Copernicus programme website](#)





The managing authority of the NRN programme established the project entitled "ISMEA Copernicus Academy for the National Rural Network", that developed the format for training courses to be conducted at regional level on the European Earth Observation Programme Copernicus to inform and develop capacities on the Copernicus platform for its use of tool for the provision of services aiming at improving innovativeness and sustainability of farms in the territories.

ISMEA – Institute of services for the agricultural food market, is partner of the Copernicus Academy and of the NRN. The project is implemented through local "Open Schools" that are shaped by a network model, promoting cooperation and skills in the specific area, by engaging managing authorities of the rural development plans, agencies for environmental protection (ARPA), firms having a specific Copernicus expertise, advisors and farms, research and academic bodies and the National Coordination of the Copernicus Academy.

The format includes the engagement of partners of relevant national and Horizon projects (e.g. [LANDSUPPORT](#)) as trainers, with the aim of exploring opportunities to put these projects into practical application.

At first two open schools were realized as pilots at regional level: Region Campania and Region Veneto.

ISMEA Copernicus Academy is coordinated at national level and it is advertised by webinars, articles on the NRN magazine and informative videos.

IN PRACTICE



At national level, ISMEA Copernicus Academy set the framework for the organization of the open schools in the territories, by including:

- A guideline for local committees and organization open schools and training courses.
- A platform that includes the didactical materials provided during the training courses, including slides, recordings and regulatory and technical-scientific references. The access to the platform is due to registration (<https://openschool.ismea.it/>).

Furthermore, the project foresees the setting up of a MOOC platform, to support the systematization at national level of didactical materials and continuous training of advisors on the different topics.

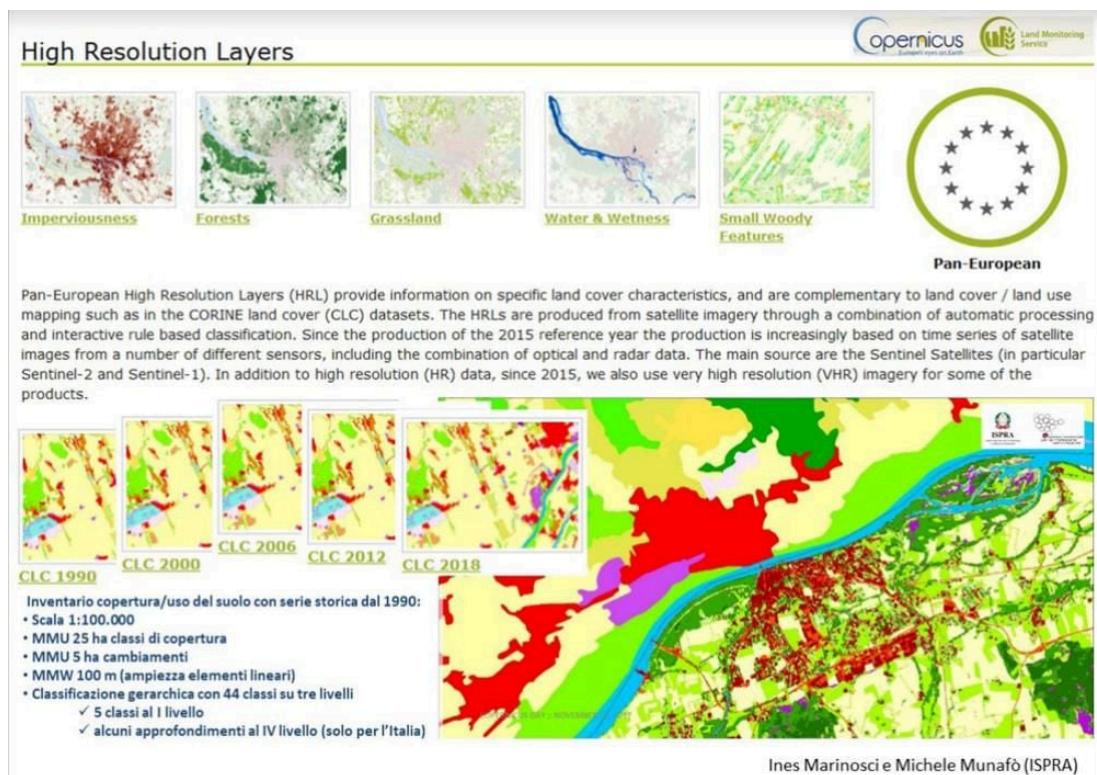
In view to activate the open schools at regional level, local committees are set up in regions to engage institutional and practitioner relevant actors in their organization.

The learning agenda is based on a virtuous path of needs assessment of the farms and offer of competences on specific topics relating to earth observation, geoinformation and ICT.

The training agenda is structured around four days and organized to provide sensibilization and awareness among advisors on the use of digital tools for supporting more sustainable practices in farming systems, along with training on their availability and possible joint use of agronomic knowledge with earth observation and georeferencing information on land three days of full training and one day of open discussion between trainers and trainees, with the view to reflect on lessons learned and apply Copernicus at local level to provide relevant advisory services to farms (box 2).

Certificates of full attendance are delivered under the condition of a full participation to all the 4 training days as well as training credits to professional advisors.

Figure 2: Servizi di informazione basati sull'osservazione satellitare della Terra e dati in situ (non spaziali)



Box 1: Training agenda

The training agenda is structured around three main points:

- 1) Introduction to the earth observation (EO), geographic information system (GIS), available ICT tools and methods that are benefit from Open Source and Open Data.
- 2) Demonstration about the services of the Copernicus platform and of their potential use for advisory purposes. As well, this part includes the demonstration of some other products/services of other providers on the same topics (e.g. LANSUPPORT).
- 3) Contextualization. Advisors are accompanied, through tutoring, in dealing with a specific problem of a farmer through the use of services and products on which they've been just trained.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Adhesion to the Copernicus Academy.
- Definition of guidelines and procedures for local open schools.
- Availability of budget and professional capacities by the CAP network.
- Ability to engage local institutional and practitioner actors.
- Trainees must have downloaded GIS open source QGIS application (desktop version).

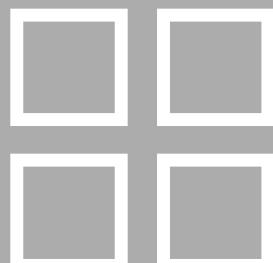
BENEFITS



By exploiting the information assets and know-how of local and national competence centres and promoting the databases and information and methodologies made available by the EU's Copernicus Programme, the project creates a favourable environment for the promotion and development of back-office services advocated by the CAP.

Specific benefits highlighted for this practice are:

- Capacity building of advisors on tools and topics that are less known by the most and that can greatly contribute to support agriculture to climate change mitigation.
- The holistic, practice-based approach and lengthiness of this course are well combined to help advisors acquiring competencies and capacities along with strengthening interconnections within the AKIS at territorial level.
- Systematization and sharing of knowledge materials and uses of Copernicus platform and other available services/products.
- Creation of an enabling environment for the development of synergies between different initiatives (e.g. Horizon projects and Copernicus) that have the potential to enlarge the offer of products/services for digital tools based on in-situ earth observation, environmental care and climate change mitigation.



FURTHER SOURCES OF INFORMATION



- [Open school of Campania Region](#)
- [Open school of Veneto Region](#)
- [Webpage of ISMEA Copernicus Academy for the National Rural Network](#)
- [Divulgative article](#)
- [Registration to the open school platform](#)
- [Informative presentations](#)



ITALY



National Rural Network:

Camillo Zaccarini Bonelli:
c.zaccarini@ismea.it

Antonio Denaro:
a.denaro@ismea.it

Campania Region:

amedeo.dantonio@regione.
campania.it

Veneto Region:

luca.boscolobielo@regione.
veneto.it



Watch this AKIS-in-Practice!



Theme 4

CAP networks and Knowledge hub

Keywords/Tags



Governance



Networking



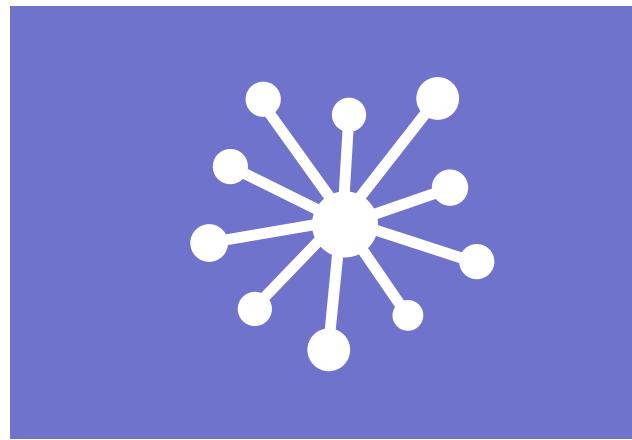
Knowledge sharing



CAP network



Interaction



RATIONALE



The AKIS perspective emphasizes the knowledge flows and diffusion based on exchange within heterogeneous and multi-stakeholder contexts, networks or platforms. This can lead to increasing access to knowledge, learning by interacting and by using it until innovation development. Besides, it is recognized that multistakeholder networks are fundamental levers of spreading and scaling of innovations processes along the agricultural sector and rural areas as they are likely to influence individual behaviours and practices towards social and technological change.

On this regard, multi stakeholder networks that effectively pursued knowledge exchange and spread of innovations have shown some common successful factors.

First, the bigger it is the size of the network, in terms of both numerosity and typologies of AKIS actors, the better is the outreach of its influence and effects on system change and transformation. This derives mostly from the potential of boosting a wider interconnectivity, by enabling the environment to start new and/or to consolidate interactions, and likely by including hard-to-reach people.

Second factor of success is the multitude of knowledge and innovations to share that networks can effectively help to emerge through empowering actors to deploy and recombine the different types of tacit and codified knowledge. So, that this should enable AKIS actors accessing, exchange and develop knowledge and practices to build upon leading to innovations.

Thirdly there's the regularity and continuity over time of stakeholders' inclusion in participatory engagement activities. These can lead maturing a wider sense of belonging to the system and trust among each other, that is fundamental to reinforce the potential of the network to enable the environment for knowledge exchange and to foster influence and emulation of experiences among stakeholders.

Consequently, continuity in funding schemes for networking activities is necessary.

All in all, the more the actors within the AKIS are well-interconnected and interact, the more effectively the knowledge is disseminated. In fact, innovation and change can be realised, as in any systemic approach, by networking processes which resources are mobilised and knowledge flows from different sources are channelled and used (Cristiano et al, 2023; D1.1; Annex 2).

To this effect, networking organization and action has become to all intents and purposes a matter of institutional functioning and embedding.

Box 1: Brief overview on European and National Rural Networks under CAP policy

Building on the experience of LEADER networks (2000-2006), under the EU regulatory framework, National rural networks (NRNs) group administrations and organisations involved in rural development (art. 68 Reg. CE 1698/2005; art. 54 Reg. CE 1303/2013) and have been introduced since EU rural development policy 2007-2013 with the aim to support policies for the development of agricultural areas in a way that fosters exchanges of experience and knowledge between practitioners, institutions and all those who live and work in rural areas. In particular, in the programming period 2014-2022, networking by the National Rural Networks aimed to: (a) increase the involvement of stakeholders in the implementation of rural development; (b) improve the quality of implementation of rural development programmes; (c) inform the broader public and potential beneficiaries on rural development policy and funding opportunities; (d) foster innovation in agriculture, food production, forestry and rural areas. Besides, the European Network for Rural Development (ENRD) has been put in place (art. 67 Reg. CE 1698/2005; art. 52 Reg. CE 1303/2013) for the networking of national networks, organisations and administrations active in the field of rural development. Still at EU level, together with the ENRD, two additional networks/networking units were established: i) **the European Evaluation Helpdesk** having the purpose to ensure the effectiveness of CAP evaluations by specifically assisting managing authorities, national CAP networks, paying agencies, evaluators and the European Commission. It also analyses the implementation of CAP interventions by EU Member States and disseminates useful monitoring and evaluation practices among the EU CAP Network; ii) **the EIP-Agri Support Facility for Innovation and Knowledge exchange** (yet EIP-Agri network) which role is to facilitate cooperation between those with a keen interest in sharing knowledge and innovative ideas for sustainable agriculture, forestry and rural areas.

The action plan of the NRN should have included at least the following activities (art. 54 Reg. CE 1303/2013): (i) the collection of examples of projects covering all priorities of the rural development programmes; (ii) the facilitation of thematic and analytical exchanges between rural development stakeholders, sharing and dissemination of findings; (iii) the provision of training and networking for local action groups and in particular technical assistance for inter-territorial and transnational co-operation, facilitation of co-operation among local action groups and the search of partners for the measure referred to "Co-operation"; (iv) the provision of networking for advisors and innovation support services; (v) the sharing and dissemination of monitoring and evaluation findings; (vi) a communication plan including publicity and information concerning the rural development programme in agreement with the Managing Authorities and information and communication activities aimed at a broader public; (vii) the participation in and contribution to the European network for rural development.

In fact, for the CAP programming period 2023-2027, networks as recognized by regulation (art. 126 UE Reg 2115/2021) as key tools to drive and steer policy and to promote stakeholder engagement, knowledge sharing and capacity building for Member States and other actors.

On this regard, each Member State is called to establish a CAP network at national level (**National networks directory**) for the networking of organisations and administrations, advisors, researchers and other innovation actors in the field of agriculture and rural development.

Networking through the national CAP networks shall have the following objectives: (a) increase the involvement of all relevant stakeholders in the implementation of CAP Strategic Plans and, where relevant, in their design; (b) accompany the Member States' administrations in the implementation of CAP Strategic Plans and the transition to a performance-based delivery model; (c) contribute to improving the quality of implementation of CAP Strategic Plans; (d) contribute to the information of the public and potential beneficiaries on the CAP and funding opportunities; (e) foster innovation in agriculture and rural development and support peer-to-peer learning and the inclusion of, and the interaction between, all stakeholders in the knowledge-exchange and knowledge-building process; (f) contribute to monitoring and evaluation capacity and activities; (g) contribute to the dissemination of CAP Strategic Plans results.

The functions of the CAP National Networks in achieving the above-mentioned objectives encompass:

- Collection, analysis and dissemination of information on actions and good practices implemented or supported under CAP Strategic Plans as well as analysis on developments in agriculture and rural areas.
- Contribution to capacity building for Member States administrations and of other actors involved in the implementation of CAP Strategic Plans, including as regards monitoring and evaluation processes.
- Creation of platforms, fora and events to facilitate exchanges of experience between stakeholders and peer-to-peer learning, including where relevant exchanges with networks in third countries.
- Collection of information and facilitation of its dissemination as well as networking of funded structures and projects, such as local action groups, EIP operational groups and equivalent structures and projects.
- Support for cooperation projects between EIP operational groups, local action groups or similar local development structures, including transnational cooperation.
- Creation of links to other Union-funded strategies or networks.
- Contribution to the further development of the CAP and preparation of any subsequent CAP Strategic Plan period.
- Dissemination of the summary of the plans of the EIP OGs and of the results of their projects.
- Participating in, and contributing to, the activities of the European CAP network.

With respect to support the AKIS strengthening, CAP networks, through their National Supports Units (NSUs) for innovation networking, can help to smooth innovation and knowledge exchange concerning all 9 CAP objectives by bringing together all the resources they can access through the OGs, Horizon 2020 multi-actor projects, the EIP website and new knowledge reservoirs. Linking all these sources of information provides a wealth of material for local AKIS actors.

In this view, the NSUs have the task of supporting both (a) the strengthening of national agricultural knowledge and innovation systems (AKIS) and (b) the development of links with research and innovation policy under Horizon Europe and other national instruments.

This role is feasible because Rural Networks already worked in synergy with a variety of actors (farming organisations, LAGs and their associations, rural NGOs, educational and research institutions, business clusters, etc.), linking them to the practical implementation of rural development policies and promoting information exchange between the EU, national and local levels, thus facilitating the development of existing potential and strengthens capacity building.

Interestingly, from a consultation of the former NRNs 2014-2020 that was conducted by European CAP network during July-September 2022 it came out that all the CAP Networks 2023-2027 aim to involve AKIS stakeholders in view to address the need to support innovation in agriculture and rural areas. In fact, in 27 out of 28 cases the Exchange knowledge and networking with AKIS stakeholders is a priority of the CAP networks, while the Support innovation in agriculture via EIP-AGRI Operational Groups is set 19 of the cases (**Network mapping surveys, 2023**).

Eventually, it is worth to consider that specific independent evaluations of CAP networks can be put in place by the managing authorities of the CAP strategic plans in view to support, preferably on on-going basis, timely melioration of the specific functions of promoting knowledge exchange, of enabling and spreading innovations, and of supporting the increase of system capacities of AKIS actors. On this regard, some evaluations of CAP networks implemented already in previous CAP programming periods can be inspirational to draw lessons on how to better configure their role, organization and functions and on how to adequately plan utilization focused evaluations (**Evaluation Helpdesk**).

Box 2: European CAP Network 2023-2027

A fundamental point of reference for CAP networks is the European CAP Network (yet ERDN - European Rural Development Network) which since the 2007-2013 programming period has performed functions of guidance, sharing of experiences and knowledge among Member States, analyses, tools, and capacity building activities. The Network is a forum through which National CAP Networks, organisations, administrations, researchers, entrepreneurs and practitioners can share knowledge and information (e.g. via peer-to-peer learning and good practices) about agriculture and rural policy (CAP Network website). The EU CAP Network has been set up by the European Commission in line with the European Regulation to support the achievement and implementation of specific objectives of the new EU Common Agricultural Policy (CAP), while optimising the flow of information about agriculture and rural policy within the EU (CAP Network website). The current CAP network 2023-2027 includes the previous European Network for Rural Development, the Evaluation Helpdesk and EIP-AGRI network by which it supports design and implementation of CAP strategic plans, innovation and knowledge exchange, including EIP-AGRI, and evaluation and monitoring of the CAP.

**Box 3: European CAP Network 2023-2027**

During the meeting of 23rd NRN meeting held on 20 and 21 September 2022, some ideas on CAP networks' role in strengthening innovation support emerged from the discussion among the 66 participants, as it follows. The National Supports Units - of the national CAP Networks (hereby NSUs) - can help by providing "innovation networking", by bringing people together in groups, for instance by organising opportunities such as targeted events (online/in-person), study groups and workshops, which help interaction. These activities provide occasions for farmers to engage effectively with a diverse range of organisations within the AKIS, including with their peers, advisors, researchers, and others who may help generate ideas for EIP Operational group projects, thanks to the cross-fertilisation among the participants. Other opportunities lie in the provision of opportunities for farm businesses to tell their stories, the "innovation ambassadors", and to open their farms to others, including to their peers. Competitions can provide opportunities to socialise and celebrate the achievements of farm businesses and others in the innovation space. All this is very useful to create an innovation-attentive environment and supports the AKIS innovation ecosystem. Furthermore, the development and promotion of a digital Platform (innovation ideas hub) on the CAP NSU webpage for capturing ideas could be envisaged. A platform may take many forms, e.g. a portal where ideas can be submitted and displayed, and/or a vehicle to connect and share ideas between parties. The generation of innovative ideas may not come naturally to individuals: an experienced and supportive listener is often essential. The development of innovative ideas therefore often relies on advisers or innovation brokers, who analyse and help define the idea after capturing it. There may be significant opportunities for NSUs to work closely with such partners to further enhance opportunities around innovation support & networking.

Highlights Report of the 23rd NRN meeting

Synthesis of session on CAP networks & innovation – Lessons from the 23rd NRN Meeting



The practices presented in this "Compendium" provide an overview on some functions that CAP networks can play in MSs, that beyond the EU regulatory requirements, shed the light on the value of centralized, user-friendly platforms in fostering collaboration, enhancing data accessibility, and supporting informed decision-making within the agricultural sector. Particularly, they reveal several key similarities and insights:

- Centralized Access and Integration: Both platforms act as centralized databases that aggregate diverse agricultural information, simplifying access and promoting a comprehensive understanding of innovations.
- User-Friendly Interfaces: The emphasis on user-friendly searchability, demonstrated by Innovarurale's filtering system and the AKIS Platform's design, highlights the importance of accessible interfaces for efficiently locating relevant data.
- Facilitation of Collaboration: Both platforms encourage collaboration among stakeholders—farmers, researchers, advisors, and policymakers—enhancing knowledge exchange and the sharing of best practices.
- Support for Decision-Making: Designed to provide reliable, up-to-date information, these platforms aid informed decision-making and contribute to sustainable agricultural practices.
- Importance of Data Sharing: They underscore the critical role of data sharing in improving transparency and coordination among stakeholders.
- Capacity Building and Ongoing Evaluation: Incorporating elements like webinars and networks, both cases emphasize the need for continuous skill development and the importance of data collection for periodic reporting to track progress.
- Interoperability and Visual Representation: The integration of diverse information systems enhances understanding, while graphical summaries make data more accessible and comprehensible.

FOOD FOR THINKING



In this perspective, we could raise some questions (not exhaustive) to help us reflecting and co-building new solutions on:

- How to set up AKIS knowledge platforms and ensure prompt update of information?
- How to set up adequate standards and procedure for good quality data and information to share?
- How to engage knowledge providers in deliver on-time data and information?
- How to develop an action plan for the NSUs?
- How many resources, which competencies and which governance for the NSUs?
- Which and how many stakeholders should be involved in networking activities and how to assess their actual connectivity? How to take advantage of the potential of some stakeholders to increase trust and interactions within the AKIS?
- What is it meant by knowledge flows, exchange and circulation?
- What is it meant by networking activities? what do they include, and which methodologies and tools can be applied?
- How to ensure continuity in participatory activities and funding?
- How to better develop synergic interconnectivity between modernAKIS network and EU/National CAP networks to benefit from differences and complementarities?
- How to differentiate networking activities of modernAKIS and the CAP Networks?
- What is the relation between the networking activities and the Community of Practices (CoPs) in modernAKIS?
- Which selection criteria, procedures, templates and timing for collecting relevant knowledge and innovations' materials to feed repositories/databases/digital networking platforms?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



The overview on roles and functions of networks and the observation of the practices of CAP networks brings some reflections on the needs for capacity building and networking activities that can be certainly considered in modernAKIS:

- Inclusion of CAP networks in modernAKIS network that can enable taking advantage of the wider perspective and basin of.
- Joint development of material and organization of meetings with CAP networks.
- Follow-ups of activities and results through dissemination among the CAP networks and modernAKIS respective networks.
- CoPs events focused on CAP Networks.
- Compendium of methodologies and practices of multi-stakeholder networks.
- Systematization of results of evaluations on NRNs activities, good/bad practices supporting knowledge exchange and innovation.

FURTHER SOURCES OF INFORMATION



- ADE S.A CCRI, OIR (2022), Study on the ENRD and the NRNs' contribution to the implementation of EU Rural Development policy - Final Report (Directorate-General for Agriculture and Rural Development - December 2022)
- EU SCAR AKIS (2019), Preparing for Future AKIS in Europe. Brussels, European Commission.
- European Commission – Directorate-General for Agriculture and Rural Development – Unit E.4 (2016): Guidelines Evaluation of National Rural Networks 2014-2020. Brussels
- RESR (2016), Connettere l'Europa rurale 2014-2020, ISBN 978-92-79-55135-2, febbraio 2016 <https://ec.europa.eu/enrd/sites/enrd/files/publi-enrd-booklet-2016-it.pdf>





Keywords/Tags	Potential users
 Knowledge hubs	 Managing Authorities/AKIS coordination bodies
 Advisory services	 Cooperatives and farmer organizations
 Innovation support services	 Advisory services provider
	 Farmers
	 Researchers institutions and academics
	 Agricultural suppliers and technology providers
	 ISS
	 CAP Network

RATIONALE	
-----------	---

The need for a centralized point of reference for AKIS (Agricultural Knowledge and Innovation System) actors is crucial for improving the flow of knowledge within the agricultural sector. Currently, in Portugal, information is often scattered across various organizations, research bodies, advisory services, and educational institutions, making it challenging for farmers, advisors, and other stakeholders to access the relevant knowledge at the right time. To this aspect the same European Commission (EC) also recommended, for the purpose of the CAP Strategic Plan (SP), investments in coordinating and increasing knowledge flows (especially between farmers, researchers, advisors, education and the CAP network) to strengthen the impact of EU and national funding for research and innovation.

In fact, establishing a central knowledge platform can help streamline fragmented information, ensuring that innovations, best practices, and research findings are easily accessible to those who need them.

Digital platforms offer an effective means for knowledge sharing by consolidating research data, innovation initiatives, skill-building resources, and networking opportunities.

Moreover, they have a great potential to make new agricultural methods and technologies more accessible to the wider public and to boost innovation scaling across the agricultural sector.

Often these platforms are established within the scope of the CAP networks to facilitate communication and outreach, creating centralized hubs where farmers, researchers, and advisors can access valuable information and practical solutions. With features like databases, discussion forums, and networking tools, they promote real-time knowledge exchange and cross-sector collaboration.

SOLUTION



The AKIS Platform was launched in later November 2023 by the managing authority of the Rural Development Program 2014-22, together with the national CAP Network and under the framework of the Portugal 2030 strategy. This is a digital platform that integrates and centralizes knowledge and innovation in place within the agricultural sector, through facilitating better coordination among various system actors, such as farmers, researchers, advisors, and policymakers. Its primary aim is to address the fragmentation of information across regional and national systems, promoting efficient and accessible data sharing for all stakeholders.

In fact, the platform enhances the interoperability of diverse information systems by consolidating technological innovations, best practices, and ongoing research projects into a single interface. Designed to ensure that all users can access reliable and up-to-date information, it supports informed decision-making and the adoption of more sustainable and innovative practices.

In addition, the platform includes capacity-building tools and collaborative networks that enable users to participate in webinars, access documents, and connect with other professionals in the sector. This interactive component not only promotes the dissemination of knowledge but also encourages innovation through the exchange of experiences and practical solutions.

The digitization of knowledge and the integration of a collaborative system will increase the efficiency of information dissemination and empower actors in the Portuguese agricultural sector to adopt more sustainable, innovative, and resilient practices.

Box 1: Portugal 2030 Strategy

Portugal2030 is a strategic framework aimed at guiding Portugal's economic and social development from 2021 to 2027, in alignment with the European Union's multi-annual financial framework. It focuses on leveraging EU funds to promote sustainable growth, innovation, and social cohesion in the country based on key Programmes, organised by topics and regions. Key priorities include enhancing competitiveness, boosting digital and green transitions, improving infrastructure, and addressing social inequalities, with the ultimate goal of fostering a resilient and inclusive economy that meets EU climate and digital goals.

For further info please visit <https://portugal2030.pt/>.



The Portuguese AKIS Platform offers several key features designed to foster collaboration and knowledge sharing:

- **Publicizing training and workshops:** it allows advertising training courses and workshops and freely disseminate relevant news for members.
- **Discussion forums:** Spaces for discussion on various thematic areas, promoting the exchange of ideas and good practices between members. It is possible to cross-pollinate various thematic areas, enriching the discussion.
- **Interaction groups:** Creation of thematic groups where members can interact, collaborate, and share documents in their resource centers. These documents can be made available publicly or privately.
- **Events calendar:** a public agenda where all the members can post relevant events for the agricultural sector. This serves giving accessibility to the events to the wider public and easier coordinating their dates and times.
- **Networking:** Connects all stakeholders in support of innovation, promoting co-creation with research and development organizations (R&D).
- **Projects and good practices repository:** Bring together information, projects and good practices, facilitating access to knowledge and innovation.
- **Interactive platforms and e-learning:** An interactive module will soon be launched to allow e-learning training to be carried out both synchronously and asynchronously, helping farmers and advisors improve their skills and stay updated on the latest trends and innovations. By doing so, it plays a key role in promoting sustainable agricultural practices and improving the resilience of the sector in response to challenges such as climate change.
- **Mobile app:** The platform will soon have a mobile app up and running, expanding access to and usability of the platform.

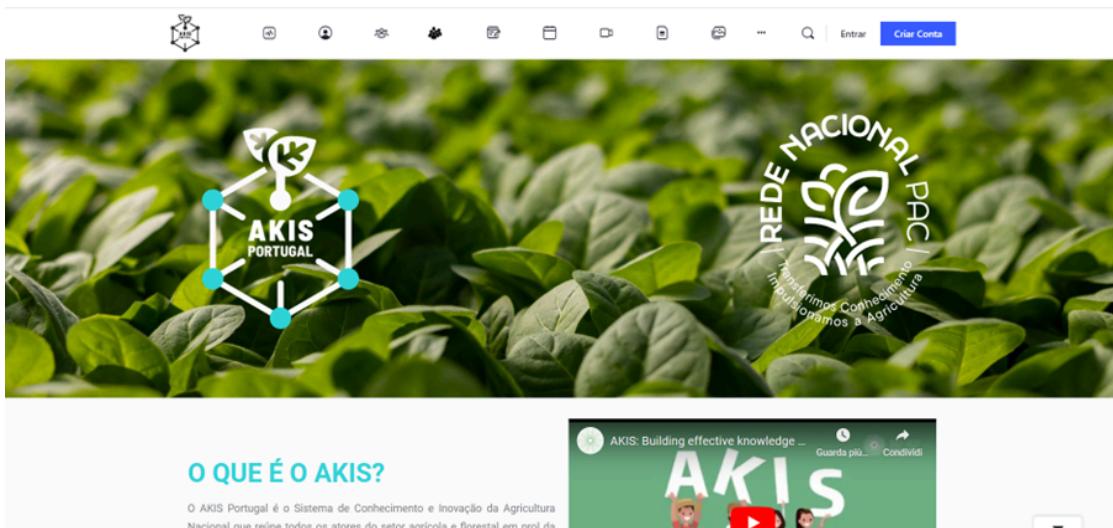


Figure 1 : Some sections of the AKIS platform

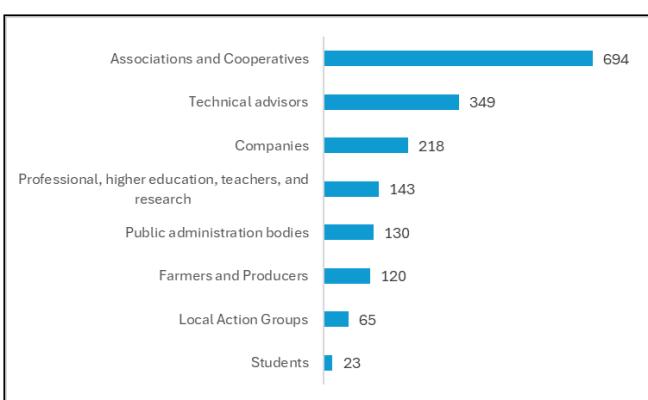
The image shows two screenshots of the AKIS platform. The left screenshot displays the 'What's New' section, which includes a list of recent publications and activities. The right screenshot shows a 'Groups' page with a grid of cards for various groups, each with a thumbnail, title, and a brief description.

Since its creation the AKIS digital platform has an increasing number of members and groups.

With reference to the membership, there is strong involvement from associations, cooperatives, and technical advisors, and increased engagement from farmers and students, and other key stakeholders in agricultural innovation systems.

This screenshot shows a different view of the 'Groups' section of the AKIS platform, displaying a grid of cards for various groups, each with a thumbnail, title, and a brief description.

Figure 2: Members of the AKIS Digital platform by categories



Source: Elaboration on Consulai data - July 2024

Overall, there is a strong focus on Competence Centers and R&D initiatives, while smaller, more specialized groups like Focus Groups and PRR-related projects are less prominent within the AKIS framework. This highlights a potential area for growth and more targeted inclusion of niche and emerging agricultural themes.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



Replicating this platform would require a well-structured approach to integrating various stakeholders from agriculture, research, and policy sectors. Key considerations include:

- **Stakeholder Engagement:** early involvement of a wide range of stakeholders, including farmers, academic institutions, and public bodies, is fundamental to success in a prompt membership and collection of relevant knowledge to share through the platform.
- **Digital Infrastructure:** A robust digital infrastructure along with a skilled ICT team is crucial for managing large volumes of data, members, and resources.
- **User-Friendly Interface:** To ensure widespread adoption, the platform must be designed with a user-friendly interface that is easily accessible to all stakeholders, including farmers, advisors, researchers, and policymakers. A seamless user experience is vital for engagement and regular usage.
- **Training and Support:** Adequate training and support systems should be in place to ensure that platform users can fully utilize its functionalities, especially for farmers unfamiliar with digital tools.
- **Customization:** The platform should be adapted to the specific needs of the agricultural sector in the target region, including local languages, agricultural practices, and sustainability challenges.
- **Interactivity and Collaboration:** Platforms that encourage interactivity, such as discussion forums and networking tools, are particularly effective in driving knowledge exchange. Replicating the Portuguese model would benefit from including tools that promote real-time collaboration, webinars, and capacity-building initiatives.
- **Funding and Policy Support:** Strong government backing and funding will be required to maintain the platform and ensure its sustainability over the long term.

BENEFITS



The Portuguese AKIS Platform offers numerous benefits that enhance collaboration and knowledge dissemination across the agricultural sector such as:

- Systematization of all the research and innovation projects' information and materials in one point of access for all the potential users.
- Dissemination of up-to-date research results and innovations.
- Strengthen linkages between digital infrastructures and exchanging of R&I knowledge and experiences.
- Facilitation of knowledge sharing by enabling discussions across multiple thematic areas, enriching dialogue and the cross-pollination of ideas between diverse groups of stakeholders.
- Document sharing.
- A common and generally accessible events calendar.

FURTHER SOURCES OF INFORMATION



- AKIS Digital Platform website: <https://akisportugal.pt/>
- Portuguese AKIS Platform tutorial video: <https://www.youtube.com/watch?v=4kkOv54x7b0>

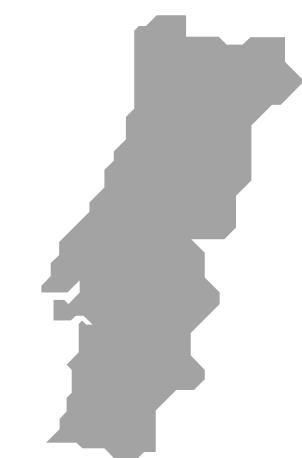


Portugal



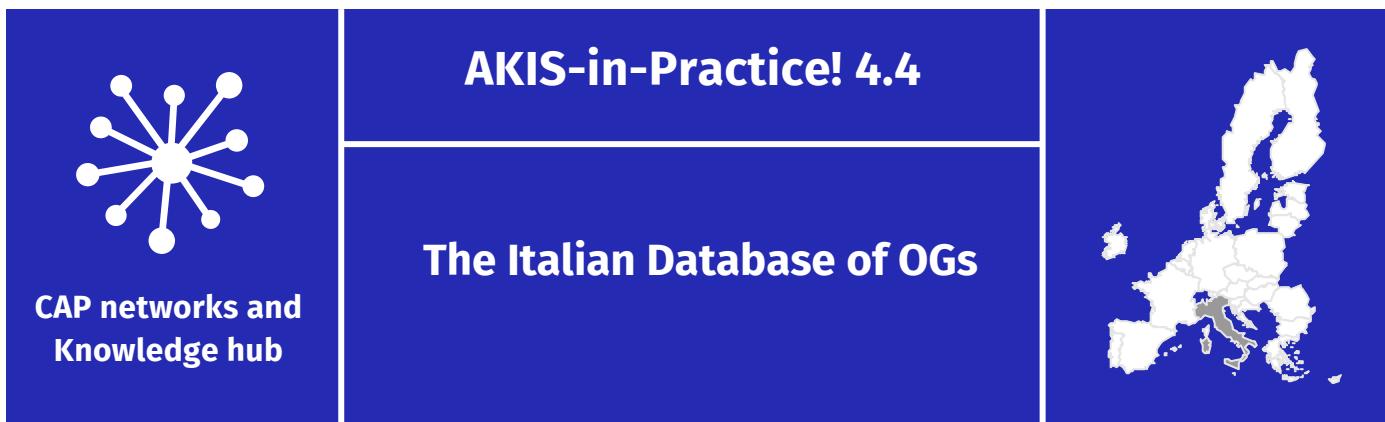
Directorate-General for Agriculture and Rural Development - Portugal:

Maria Custódia Correia
mccorreia@dgadr.pt



Watch this AKIS-in-Practice!





Keywords/Tags	Potential users
 Innovation	 Policy makers
 Interactions	 Advisors
 Actors	 Farmers and foresters
 Evaluation	 Researchers
 CAP	 Evaluators
 Database	



The CAP Networks are essential for promoting the exchange and dissemination of knowledge and innovations within the agricultural sector. With the introduction of the EIP-Agri initiative, particularly through the Rural Development Programs (RDPs) for 2014-2022, there has been an intensified focus on fostering collaboration among Operational Groups (OGs). In a regionalized country like Italy, the risk of information dispersion among the various OGs is considerable. Each region may develop its unique innovations and practices, which can lead to a fragmented understanding of practices and resources. This fragmentation may hamper effective knowledge sharing and limit the potential for collaborative learning across regions. A national database to centralize information about OGs is essential to mitigate these issues, enabling stakeholders to access comprehensive data on projects, results, and innovations. By fostering a more integrated approach, such a database would not only streamline communication but also enhance the overall effectiveness of the CAP Networks and the EIP-Agri initiative.

SOLUTION



The Italian OG database has been set up by the Italian NRN to collect information since the OGs 2014-2022 at national level, by avoiding the dispersion of information about partnerships and innovations. Its searchable features, which include project details and participant information, allow for effective knowledge sharing and informed decision-making, ultimately strengthening the agricultural sector's innovation capacity. The database also supports transparency and accountability by documenting all project materials and outcomes.

The screenshot shows the INNOVARURALE website with a navigation bar at the top. The main content area features a banner for 'PEI-AGRI' and a section titled 'Banca dati dei Gruppi Operativi'. The sidebar on the left lists 'Gruppi Operativi', 'I GO in Italia', 'Banca dati dei GO', 'Schede GO', and 'Materiali dei GO'. The main content area includes a sub-section for 'Banca dati dei Gruppi Operativi' with a list of benefits: '• favorire la diffusione della conoscenza e dell'innovazione e la trasparenza informativa sulle modalità di utilizzo dei fondi', '• facilitare l'attività di creazione di nuovi GO mediante la condivisione dei progetti in corso', '• promuovere il collegamento tra GO e le operazioni in contesti regionali diversi', and '• consentire elaborazioni ad analisi finalizzate ad impiegare le future strategie di innovazione'. At the bottom, there is a link to 'Guida all'utilizzo e consigli per migliorare la tua esperienza' and a 'Maggiori informazioni' button.

IN PRACTICE



The database enables users to apply various filters for enhanced searchability, including Region, project title/acronym, partner name, keywords, innovation topics, sector/value chain, focus area, programming period, project status, and timing. This functionality ensures that users can easily find specific information relevant to their interests and needs. The database for Operational Groups (OGs) has been developed based on the Italian “**NRN common format**” for practice abstracts (PAs). This excel format not only aligns with the information requested by the **EIP-AGRI common format** but also integrates additional data categories to ensure a holistic view of each project (Table 1). By capturing a broader spectrum of information - including partner details, project objectives, innovation descriptions, and impacts - this database enhances the capacity for knowledge sharing of innovative practices across the sector.

Table 1: Information requested in the Italian NRN common format for OGs PAs

Partner	Full Name Type of partner (NRN classification) Sector/Value chain ATECO Code - Classification of Economic Activity. Contact point (person) Legal Full address Operational full address Previous experience in OGs/other Research projects.
---------	---

Innovation	Description of Innovation (free text) Innovation sector (list of statistical classification) Objective of the innovation 1, 2, 3, (list of possible objectives) Problem Area (list of problem areas of USDA classification) Main characteristics of innovations Typology (list: agronomic, animal husbandry, biological, transformation, biotech, chemical, genetic, informatic, biochemical, ...) Potential recipients of innovation (free text) Productive, economic, environmental and social effects Effect 1, 2, 3, 4: (list of categories ± linked to FADN indicators: productivity improvement, increase of quality product, commercialization increase, improvement of profitability margins, diversification of products, improvement of quality soil, quality water, quality air, biodiversity prevention, energy safe, water safe, ...)
Actions	List of actions: Preparatory activities, coordination and facilitation, adaptation of the innovation, dissemination, monitoring, ... List of products and number by action: minutes of the meeting, field visit, report, communication material, ...
Interactions	List and number of type of event: project meeting, labs, tests, demonstration events at farms, advisory, ... Description: free text Participants: list of typologies
Material	Typology/Description/link to the website
Costs	Public contribution, Private co-financing share, Total project cost Total project cost by partner Total project cost by cost category (personnel, dissemination, travel, advisory services, ect...) Total project cost by type of intervention (training, advisory services, investments, ...)

It is worth noting that this additional information is not recorder neither by AGRIDATA.

The database collects also the material (pdfs) of the OGs, including videos, events and workshops materials and the final reports of the OGs projects where available.

The database is updated through the submission of OGs PAs by Regional MAs. Once the OGs are selected, the Regional MAs send the relevant PAs to the CAP Network. This mechanism ensures that crucial information about the activities and innovations of the OGs is systematically collected and integrated into the database. Due to privacy issues, some of the data can be directly downloaded from the website by the users.

The data collected in the database are downloadable for every OG in pdf format, and are automatically elaborated to create graphical representations, statistical summaries, and tables such as the following examples:

- Statistics of the OGs.
- Graphics of the OGs.
- Informative factsheets of the OGs.

Moreover, the collected information is also used to prepare periodic reports by the CAP Network on the progress of the implementation of Operational Groups at regional and national level.

The database will continue to be maintained throughout the 2023-2027 programming period and will be updated with new Italian Operational Groups.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Procedures and timelines for the transmission of the PAs need to be established at both the national and EU levels to ensure updated information.
- Define a set of information that aligns with the EU common format to avoid duplication of efforts in data collection.
- Integrate the common format into the call for applications for OG support interventions to ensure that data on OGs is collected from the outset.

BENEFITS



- **Centralized information** reduces the risk of information dispersion among Operational Groups (OGs) by centralizing data at the national level.
- **Facilitation of knowledge sharing** and collaboration across regions, promoting innovation and best practices.
- **User-Friendly** access allows users to filter and search for specific information, enhancing the relevance and utility of the data.
- **Enhancement of the transparency and accountability.**
- **Support for M&E and reporting** useful for OGs, policy makers and program evaluators

FURTHER SOURCES OF INFORMATION



Italian OGs Database (IT).



Italy



CREA:

Andrea Bonfiglio
andrea.bonfiglio@crea.gov.it



Theme 6

Integration of advisory services

Keywords/Tags



Advisory services



Methods and tools



Farmer



Cooperation



Training



Back office



RATIONALE



Agricultural advisory services are essential for supporting farmers in managing productive processes, gathering their needs, sharing information, promoting new farming practices, and fostering collaboration among stakeholders toward the further development and the modernization of the sector. However, over the last two decades in the EU, the provision of agricultural services has faced several challenges, including a lack of closeness to farmers, misalignment between farmers' needs and the services provided, a lack of credibility/trust, and reluctance to pay for agricultural support services. Additionally, they lack up-to-date competencies and capacities to address the complexity and dynamics of contemporary AKIS.

In this regard, it is worth noting that modern agricultural systems exhibit a plurality of agricultural service providers, as well as various advisory approaches, methods, and tools for provision, along with new and diverse relational dynamics among advisors. The farmer is no longer the sole target of agricultural service provision but rather the final recipient of a series of knowledge flows and relational interactions that are necessary for delivering the service.

To cope with the weaknesses and challenges, advisory services have gained centrality under 2023-2027 CAP, where their competencies, roles and functions are emphasized as crucial for enabling its functioning and innovativeness in view of the modernization of the sector (Tab.1). In fact, the integration of advisory services within AKIS signifies a general strengthening of these services in terms of competencies and the ability to provide useful and necessary support to farmers. It also involves the reorganization of their relational dynamics within AKIS, including repositioning within and outside agricultural systems and interconnecting with all relevant actors who influence the quality and performance of consultancy services upstream and downstream of service provision.

The CAP, therefore, offers a diverse range of support, from setting up and reorganizing the consultancy structures themselves to enhancing competencies and promoting forms of networking and interconnection with relevant actors and knowledge and innovation infrastructures, as well as participation in innovation processes.

In this respect, through the CAP it is intended to empower the advisory services tackling with the following key challenges:

- Better tailoring advice upon farmers' needs and opportunities.
- Addressing emerging needs, including innovation brokerage, modernization and digitalization, climate change and market-related issues.
- Adapting to diverse farmer profiles, including new entrants, part-time farmers, and those who are hard to reach.
- Expanding access to information through interdisciplinary and transdisciplinary cooperation, as well as the use of ICT tools.
- Bridging the gap with research and increase participation in research and innovation projects, in view to get on-time information and maintain up-to-date competences.
- Intermediate between researchers and farmers by ensuring communication of farmers' needs back to the researchers and well-tailored innovative solutions.
- Engaging in a holistic approach to advice that connects technical guidance with farm profitability and market concerns while also pursuing specialized support.
- Connecting with international networks to access knowledge and advisors with specialized expertise when necessary.
- Participating more actively in the definition of policies and programs to inform decision-making, gain ownership, and ensure precise up-to-date and relevant competencies for supporting farmers in their implementation.
- Seeking insights from specialists within and out respective AKIS, including in other countries.

Table 1: Approaches to advisory

Objectives	Approach	Key components
Transfer of knowledge	Advisor tells farmer what to do	(1) The problem and the solutions are known, and (2) the farmers are willing and able to use the advice offered. The advice is standardized and focuses on individuals. The tools could include ICT, radio, television, newspapers, training, farm demonstrations, or some combination therein.
Support for decision making	Advisor gives farmer options	(1) The problem is known and various solutions are possible, depending on the situation of each farmer, and (2) the farmers are willing and able to use the advice offered. The advice is differentiated and focuses on individual situations. The tools could include computerized models and simulation tools.
Problem solving	Advisor supports learning processes to make farmers more autonomous	The problem and the solutions are complex and unknown. The diagnosis and the solutions are constructed by the farmers, who change their perception. The tools could include interactive training in the use of management tools.
Support local initiatives and solve conflict	Advisor facilitates innovation processes and supports negotiations between stakeholders	The problem and the solutions are complex and unknown, and involve various types of stakeholders. The tools could include shared diagnoses, project design by participants, and collective meetings.
Support to integration into supply chains, local and agri-food systems	Advisor helps organize or strengthen networks /support for niche innovation and scaling mechanisms stimulation	The problem and the solutions are complex and unknown, and involve various types of stakeholders. The tools could include shared diagnoses, project design by participants, facilitation/mediation tools and collective meetings.

Source. Our elaboration based on Faure et al., 2016

HOW TO INTEGRATE ADVISORY SERVICES?



Among the others some effective interventions might be the followings (list not exhaustive):

Cooperation for innovation

- Financial and professional incentives/awards for the engagement as partners in operational groups.
- Simplification of bureaucracy for accessing and reporting participation.
- Running the realization of cross visits between operational groups to allow peer-to-peer learning.
- Running the organization of demonstration actions as part of the projects of operational groups.
- Promoting the setting up of operational groups aimed at developing training and advisory models and tools for tailored services.

Training, discussion groups, peer-to-peer reviews, cross-visits and other forms of knowledge sharing

- Financial and professional incentives/awards for the active participation to professional networks, including Horizon EU projects.
- Financial and professional incentives/awards to up-date competences and to act as trainers of trainers
- Peer to peer learning programmes between advisors, cross visits, discussion groups and community of practice that enable systematic collective critical thinking and reflection along with individual learning.
- Vouchers to access to training programs, professional associations and networks.
- Vouchers to buy-in research/academic/expert backoffice.
- Support the setting up of Knowledge Sharing Platforms: Create platforms for sharing experiences, best practices, and lessons learned among advisors and project participants, facilitating ongoing communication and collaboration.

Information access and sharing:

- Backoffice.
- Public repositories of advisors, by detailing competences, topics and contacts, at the benefit of the farmers.
- Digital Datawarehouse that include relevant on-time data for advisory provision.
- Repository of benchmarks of farming indicators/systems.
- Good practices forums.
- Public awareness campaigns to inform about the availability of public funds for the use and provision of advisory services.





The practices presented in this "Compendium" showcase the critical role of data and digital tools in enhancing the effectiveness of advisory services, fostering collaboration, and supporting sustainable agricultural practices. Some key points can be highlighted:

- **Data-Driven Decision Making:** The establishment of interconnected databases, as seen in the Datawarehouse case (ES), highlights the importance of data in providing tailored decision support for farmers and policymakers. Access to comprehensive data allows for informed decision-making that is focused on the needs of the agricultural sector.
- **Coordinated Advisory Services:** The ROPO registry demonstrates the value of a centralized resource that brings together various advisory service providers. This coordination ensures consistent application of regulations and fosters collaboration among stakeholders, enhancing compliance and knowledge sharing.
- **Integration of Knowledge and Resources:** The Digital Knowledge Hubs illustrate the potential for integrating diverse sources of information—from research to capacity-building initiatives—into a cohesive platform. This integration supports continuous learning and adaptation, enabling stakeholders to stay updated on best practices and innovations.
- **Support for Compliance and Best Practices:** The focus on regulatory adherence in the ROPO case underscores the necessity for advisory services to provide clear guidance and support, ensuring that agricultural practices align with legal and environmental standards.
- **Enhanced Communication and Collaboration:** All cases emphasize the role of digital tools and platforms in facilitating communication among farmers, advisors, and policymakers. This connectivity is crucial for sharing knowledge, addressing challenges, and promoting collaboration across different levels of the agricultural system.

FOOD FOR THINKING



Questions for opening the discussion and reflect on how to better direct AKIS interventions towards the better integration of the advisory services are:

Delivery:

- How to organize a feasible system for enabling access to impartial and high-quality service provision?
- How to design and implement advisory services aimed at providing a more targeted support addressing specific farmers' needs? [PP1]
- How can we enhance collaboration among various stakeholders (farmers, researchers, policymakers) to improve the effectiveness of advisory services?
- How mainstream the use/provision of advisory service across the variety of CAP interventions?
- What are the most pressing needs of farmers today that advisory services can address effectively?

Training and Capacity Building

- What training and capacity-building initiatives are necessary for advisors to effectively integrate into AKIS and meet current agricultural challenges?
- How among advisors can be created and enhanced to facilitate knowledge sharing and collaboration across borders?

Monitoring and Evaluation

- How to assess/evaluate advisory service services, by capturing SWOTs, needs for development, actual pathways and effects?
- How to organize and conduct systematic evaluations of the advisory services?
- How can we measure the impact of advisory services within AKIS to ensure they are contributing to sustainable agricultural development?
- How to structure and ensure the implementation of assessment procedures for quality and performances of advisors at system, organizational and individual levels??

Long-Term Vision:

- How to rethink the role and functions of public and private advisory services in the specific AKIS and how to vision their reorganization, in terms of infrastructures, organizations and competencies, to better address needs and opportunities for the modernization of the sector?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- The **collection of "AKIS-in-Practice"** must be expanded through continuous dialogue with partners to provide a broader scope of the different approaches of advisory services.
- A specific **networking** activity with Advisory networks projects (CORENET, EU4Advice, NBSoil, ClimateSmartAdvisors, OrganicAdviceNetwork, AdvisoryNetPEST, STRATUS) funded by Horizon EU that connect advisors across all EU Member States will help sharing knowledge and to be up to date about opportunities that these project can offer in term of training and support to implementing advisory services that are able to best tackle challenges or seize opportunities on farms, in forests and rural villages.
- **Joint workshops with the CoPs** might be directed to increase familiarity and to co-develop possibly innovative and major focused types of interventions and programs to support the major integration of advisory services within the AKIS.

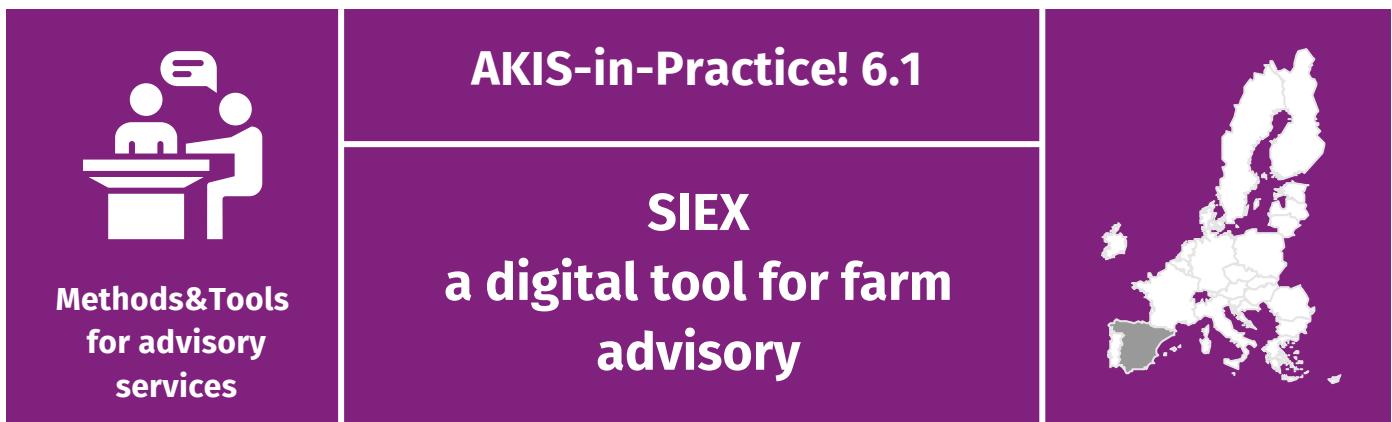


FURTHER SOURCES OF INFORMATION



- EU SCAR AKIS (2019), Preparing for Future AKIS in Europe. Brussels, European Commission
- SWG SCAR-AKIS Policy Brief on the Future of Advisory Services





Keywords/Tags

-  DANTS
-  Decision support tools
-  Training
-  Advisors
-  Farm data



Potential users

-  Advisors
-  Farmers and foresters
-  Policy makers
-  Agrotech companies
-  Developers and other IT professionals



RATIONALE



The variety and multitude of information held by the regional administrative systems about the primary sector as a whole, at the level of the farm holdings and by the diversity of the farming systems in Spain, represents a potential of knowledge from which farmers and advisors can benefit in view of grounding decision making for farm management on tailored and up-to-date relevant knowledge.

Besides, from the policy perspective, this bulk of information is fundamental for evidence-based policy making and it allows the addressing of some requests of the EU Regulation for the CAP programming period 2023-2027 (e.g. Reg. (UE) 2021/2116) for an integrated administration and control system that is challenging particularly for regionalized countries.

In fact, this integrated system should include comprehensive, reliable and comparable data about for example, the agricultural parcels, geo-spatial and animal-based applications, payment entitlements, identity of beneficiaries, and control and penalty mechanisms, to allow monitoring and assessing the performance and progress, particularly, of the agri-environmental and climate policy towards EU objectives and of the impacts of the strategic plans.

However, the fragmentation of this information across the different regional administrative and data systems is likely to lead to narrowing its potential to support the decision making by the different AKIS actors.

SOLUTION



Systematizing the numerous national and regional digital databases and administrative registers already operational throughout Spain by a Datawarehouse complemented by Digital Advisory Tools and Services (DATS), technologies that include computer and mobile phone applications and services available by individual devices or via the web.

This is a set of interconnected databases that enables a wider and multiple use of the diverse array of farms data by the advisors to deliver farmer-focused decision support service and/or by the policy makers and implementers for administrative/communication tasks.

IN PRACTICE



The managing authority of the Spanish CAP SP established the Agrarian Holding Information System (SIEX) that it is based on the interoperability between the different available information sources of the agricultural, livestock and forestry sectors: the Autonomous Registers of Agricultural Holdings (REA), the Digital Farm Notebook (CUE) and other public registers.

In accordance with Spanish regulation which establishes and regulates the Information System for agricultural and livestock farms and agricultural production, as well as the Regional Registry of agricultural farms and the Digital Farm Notebook (CUE), the information contained in SIEX provides support and supply of information to the Integrated System of the CAP SP for verification of compliance with the minimum requirements and the eligibility requirements and commitments of surface-based interventions, and it pursues interoperability with other databases and administrative records dependent on other departments that are relevant for the characterization of agricultural holdings in Spain. Through its interconnection with the different technical services, the CUE will make a Nutrient Agricultural Sustainability Tool (FaST to be established under the CAP SP) available to farmers, that provides customized nutrient management plans and recommendations on crop fertilization and the duty application of established standards for sustainable nutrition in agricultural soils.

In general, the objectives of SIEX are:

- Enable an efficient planning, implementation, management and evaluation (including monitoring and performance evaluation) of the CAP SP 2023-2027.
- Simplify record keeping and farm management, based on the collection of evidence and relevant statistics to support decision-making at farm level.
- Ensure building-up statistical data series for the purposes of the National Statistical Plan and the auditing and control checks for compliance with national and European Union regulations.

It consists of two main components (figure 1):

- the Agricultural, Livestock and Agricultural Production Information System (SIEX) already in place within the Central Administration platform.
- the regional platforms that regard the Autonomous Register of Agricultural Holdings (REA) and the Digital Farm Notebook (CUE).

Figure 1: SIEX operating diagram



This digital platform includes the following type of information about the farm and its farming system/accounts:

- Structural information about the farms (country and Regions, classification of farming system, ...).
- Structural information about the farmer (education level, gender, type of farmer, statistic identification code and others).
- Structural information about the entity/association (i.e. integrated pest management partnerships, breeders' associations, agrifood cooperatives, advisors' organization, certification body, ect) (name, statistic identification code and others).
- Information about the farming activities (statistic identification code, farming system and cultivations, varieties and productions, types of certifications, use of the agricultural areas and tenure regimes, ect).
- Quality schemes.
- Diversified activities of the farm.
- Vineyard register.
- Structures of the farm.
- Productions' plans and data.
- Phytosanitary plans and data.
- Fertilization plan and data.
- Irrigation practices and systems.

The System is still under development, and, following the needs assessment of the potential end users, it will be accessible by public data use profiles that will give aggregate information at several levels (crop, municipality, province, etc.) always ensuring compliance with data protection regulations.

In view to ensure the best advantage and use of SIEX, some training courses for advisors are carried out since its establishment.

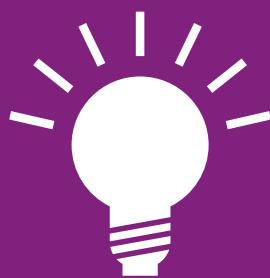
Moreover, the early implementation of the digital farm notebook occurred some difficulties that lead deciding to reinforce training and advice for the implementation of these digital tools, for example, by CAP interventions supporting the digitalization of advisory services and the exchange of knowledge, information and training.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The Ministry of Agriculture, Fisheries and Food established SIEX through a specific royal decree, as obligatory for all the agricultural farms in Spain. The Decree sets the minimum content of the Autonomous Register of Agricultural Holdings and the Digital Farm Notebook and the chronology of their incorporation in SIEX along with of the other sources of information (e.g. electronic register of transactions and operations with plant protection products, Official Agricultural Machinery Registers of the Autonomous Communities, data on CAP payments, etc). Moreover:

- SIEX platform is funded by the national plan of recovery and resilience, under the direction of the Ministry of Agriculture, Fisheries and Food of Spain.
- Main functionalities are decided based on public surveys aimed at capturing expectations and needs of potential end users.
- To ensure the interoperability of SIEX with the sourcing digital repositories and databases, the Ministry of Agriculture, Fisheries and Food of Spain signed individual protocols with the entities providing the information (e.g. Agro-Tech companies running Digital Notebooks).
- Training courses by potential end users are needed. That's why some CAP interventions are giving support to the farmers.
- Replications of this practice implies the review/assessment of conditionalities and interoperability of existing regulatory framework, Geographic Information Systems (GIS), databases, registries that share information from farmers and the necessary computer development.



BENEFITS



- Systematization of different source and types of information about a relevant number of farms.
- Improvement of data quality management.
- Better Statistics (agrarian, environmental and sustainable development, etc.). All the information collected in SIEX will allow obtaining the data necessary for the development, preparation and dissemination of the different statistical operations contained in the National Statistical Plan and the European Statistical Program, reducing the response burden of informants, the costs and contributing to the broader objective of reducing administrative burdens.
- Better agricultural policies.
- Less administrative burden for farmers and foresters.
- Easier management of CAP aid.
- DATS are promoted and developed in the meantime.
- A must for all the current Spanish advisors.
- Great opportunity for agrotech companies that are developing new digital tools.
- Productivity improvement.
- Improvement of the advisory service due to having better data.
- Promotion of the digitalisation in the sector and the adoption of precision agricultural tools to promote economic and environmental sustainability.
- Advancing towards the single window concept.
- Public-private partnership and open data.
- Synchronization and standardization information.



FURTHER SOURCES OF INFORMATION



- [FAIRshare's inventory of DATS](#)
- [SIEX FEGA website](#)
- [SIEX Technical documentation \(ES\)](#)
- [Minimum information of the farm holdings \(ES\)](#)
- [Training course on SIEX \(ES\)](#)
- [Digital Farm Notebook developed by Spanish Agrifood Cooperatives \(ES\)](#)
- [Royal Decree 1054/2022, of 27 December, establishing and regulating the Agrarian and Livestock Holding and Agrarian Production Information System, and the Regional Agrarian Holdings Registers and the Digital Notebooks of Agrarian Holdings \(ES\)](#)
- [Royal Decree 1047/2022, of December 27, which regulates the management and control system of the interventions of the Strategic Plan and other aid of the Common Agricultural Policy \(ES\)](#)



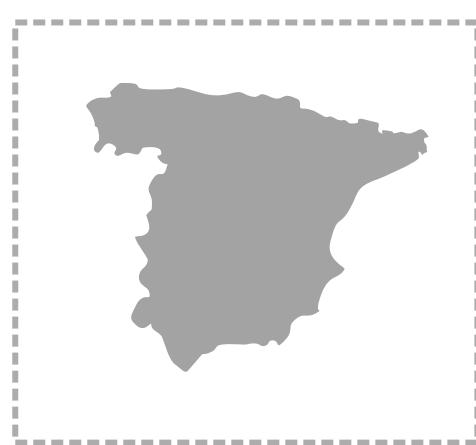
SPAIN



Juan Pedro Romero Trueba
jpromero@mapa.es



Watch this AKIS-in-Practice!





Registration and
Impartiality of
advisors

AKIS-in-practice! 6.2

Lithuania's Registry and Evaluation System for Impartial Agricultural Advisors



Keywords/Tags

-  Registration of advisors
-  Management and monitoring tools
-  Advisors
-  Database

Potential users

-  Managing Authorities
-  Auditors and certifying bodies
-  Farmers
-  Advisors
-  Plant health sector stakeholder
-  Other AKIS actors



RATIONALE

CAP regulations ask for the integration of impartial advisors into the AKIS framework to enhance knowledge transfer and innovation across the agricultural sector. In this context, impartial advisors play a critical role by providing unbiased, high-quality support to farmers and stakeholders. Establishing a formal registry and implementing a service quality assessment system are essential steps to meet regulatory requirements, ensuring advisors are well-qualified and that their guidance aligns with CAP objectives.

SOLUTION



The Lithuanian Agricultural Agency, under the Lithuanian Ministry of Agriculture, set up a list of impartial advisors and defined a quality assessment of the service provided. This list is published online (in Excel format) and includes entities providing farm advisory services according to the selection criteria established at a national level by the Minister of Agriculture.

The procedure for including advisors in the list of impartial advisors is regulated by the document **“Description of the Procedure for Compiling the List of Independent Agricultural Advisors”** which also establishes the obligations of advisors, the conditions for removal of services, the procedure for evaluating the quality of services provided, in order to receive support under the dedicated intervention in the Lithuanian CAP Strategic Plan 2023-2027 and/or national support from programs administered by the Ministry.

Lithuania has long-standing experience with a register of impartial advisors. This circumstance has led to the Public Institution Lithuanian Agricultural Advisory Service (which employs around 350 independent advisors) taking a leading role in the advisory market, while other impartial advisory institutions have significantly fewer human resources for impartial services. The list of impartial advisors for farms has been freely accessible since February 2023, while prior to that, open lists of accredited advisors had been available since 2007.

Box 1: Lithuanian Agricultural Agency

The Agricultural Agency under the Ministry of Agriculture in Lithuania is a key agency responsible for managing agricultural support programs and fostering rural development initiatives in the country. It primarily oversees EU-funded agricultural payments, including subsidies for farmers and rural enterprises, as well as initiatives aligned with Lithuania's Strategic Plan for the EU's Common Agricultural Policy (CAP) 2023-2027. This agency also focuses on ensuring the sustainability and competitiveness of Lithuanian agriculture, promoting the implementation of new technologies, and enhancing rural infrastructure and community projects.

IN PRACTICE



To apply for inclusion in the list of impartial advisors in Lithuania, a natural or a legal person (advisor) must submit a request to the Agricultural Agency, indicating at least one area of advisory services that aligns with their knowledge, skills, and experience. If the advisors wish to specify multiple areas, they should rank them in order of priority, starting with the area that best matches their expertise and progressing to those that are less aligned. This information is published on the Agency's website on a monthly basis.

The advisor must meet at least one of the following conditions:

- 1) Be a legal entity registered in accordance with the laws of the Republic of Lithuania.
- 2) Have registered individual activity in accordance with regulations to provide advisory services.
- 3) Be an association uniting natural and/or legal persons engaged in agriculture, forestry, food, or fisheries.
- 4) Be a recognized agricultural, forestry, food, or fisheries cooperative and/or association of cooperatives.
- 5) Have the right to provide advisory services, i.e. advice is one of the applicant's areas of activity.
- 6) Maintain financial accounting in accordance with the legal requirements of the Republic of Lithuania.
- 7) Be independent in their activities and have no direct commercial interest that could influence the content of the advice.

So, they must be a properly registered entity allowed to provide advisory services, maintain proper accounting, and be free of conflicts of interest that could bias.

The advisor's request is submitted to the Agricultural Agency, which reviews requests once every quarter.

Each year, the advisors must upgrade their qualifications in the areas they are listed for in the advisors list for at least 16 academic hours. The professional qualifications are upgraded through:

- Mandatory training organized by the Lithuanian CAP Network (applies to advisors seeking support under the 2023-2027 Strategic Plan intervention "Advisory Services provision").
- Training courses related to the advisors' areas of expertise.
- Other courses, seminars, internships, and qualification upgrading activities.

Training courses for farmers count towards the qualification upgrading requirement only for farmers and forest managers or their partners who are included in the advisors list and provide service.

The advisors themselves are responsible for the qualification upgrading.

If service activities are suspended for more than six months due to incapacity or parental leave, after resuming, the advisor must upgrade qualifications for at least 16 academic hours within one year from the date of resumption.

Advisors are selected for the List of Impartial Agricultural Advisors to provide services in the following areas:

1. Crop production.
2. Animal husbandry.
3. Forestry.
4. Fisheries.
5. Land management.
6. Personal development of the farmer or forest manager and the development of their farm.



Source: <https://www.lzukt.lt/>

The quality of services provided by advisors is evaluated based on a rating given by the service recipient.

On the Agricultural Agency's website, the service recipient, having identified themselves (by providing their farm number and the number and date of the document based on which the advisory services were received - advisory service contract, project number, acceptance-transfer act, etc.), evaluates the quality of services received within 10 working days after the end of the service provision transaction.

They rate it on a 5-point scale (1 - very poor, 2 - poor, 3 - average, 4 - good, 5 - excellent) based on criteria such as the advisor's knowledge transfer, methodological tools used, necessary information technologies, etc.

Box 2: Questionnaire for evaluating the quality of the services provided by the advisor

- Agricultural holding of the recipient of the service no.
- Number and date of the document on the basis of which advisory services were received (agreement for the provision of advisory services, project number, acceptance-transfer act, etc.)
- Name of advisory institution.
- Advisor's name, surname.
- Advice rea.
- Advice topic.
- Service quality assessment:
 - 1) Identification of the need for advice.
 - 2) Usefulness of advisory service provided.
 - 3) Use of methodological tools.
 - 4) Use of information technology.
 - 5) Use of smart technologies.
 - 6) Providing answers to questions.
 - 7) Presentation of scientific information according to the advice topic and application of its possibilities in the farm.
 - 8) Presentation of good examples of innovations implemented in farms according to the advice topic.
 - 9) The advisory service(s) provided met my expectations.
 - 10) The advisory service(s) provided helped to solve the question/problem I applied for.
 - 11) Quality of services provided by the advisor.

The quality rating is calculated as the arithmetic mean of the ratings provided, given that there are at least three responses from unique service recipients.

If the arithmetic mean is less than 3 points, a dedicated commission decides that the services provided were of poor quality, and the advisor is removed from the advisor list.

For removal from the list, the sample of quality assessments from unique service recipients must be at least 3 responses, and the arithmetic mean of all responses must be less than 3 points.

The results of the quality assessment of services provided by advisors will be published next to the advisors' name in the published advisor list.



The results are published for each represented advisor. The best-rated institution may receive incentives (e.g. priority) when applicants submit applications for support under other national or EU measures. The list of impartial advisors is administered by the state-owned Agricultural Agency, which manually enters each advisor's rating into the system based on the completed survey data. It is expected that by the end of April 2026, once the national AKIS platform is launched, this farmer survey evaluation process will be automated.

Source: <https://www.lzukt.lt/>

PRACTICAL IMPLICATIONS FOR REPLICABILITY

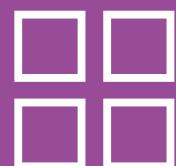


- Establish clear and verifiable criteria for registration on the list and its ongoing maintenance.
- Include a mandatory requirement in CAP SP intervention calls for advisory services to complete the evaluation survey
- Define a set of assessment criteria for farmers that is easy to understand and can be completed through appropriate digital platforms.
- The presence of a national or regional agency is valuable for managing and maintaining the advisor registry, ensuring rigorous selection processes, and upholding high standards of service quality among listed advisors.

BENEFITS



- **Enhancement of quality control:** Regular monitoring ensures advisors meet high standards in knowledge and service quality.
- **Transparent selection:** Clear criteria for listing advisors promote fairness and build trust among farmers and stakeholders.
- **Targeted service:** Advisors are matched to specific areas based on verified skills, enhancing the relevance of advice provided.
- **Continuous Improvement:** Feedback from satisfaction surveys identifies areas for advisor development and service improvement.
- **Informed Policy Adjustments:** Survey data helps shape future CAP interventions and resource allocation.
- **Increased Accountability:** Publicly listing advisors and survey results ensures accountability to both farmers and Managing Authorities.



FURTHER SOURCES OF INFORMATION



The main page view of impartial advisors list:

<https://zua.lrv.lt/public/canonical/1729572244/525/20241021%20Nepriklausom%C5%B3%20konsultant%C5%B3%20s%C4%85ra%C5%A1as.xlsx>

The questionary for farmer to reflect about got servicers:

Anketa - KONSULTANTO SUTEIKTŲ PASLAUGŲ KOKYBĖS VERTINIMO ANKETA

Order regarding the Ministry of Agriculture - february 9, 2023 no. Amendment of 3D-72 "Concerning the approval of the description of the procedure for compiling the list of independent agricultural advisors "

<https://e-tar.lt/portal/lt/legalAct/52ba1110b4ff11eea5a28c81c82193a8>



Lithuania

 **Specialists of the Training Organization
Department of the Agricultural Agency**

Neringa Janušauskienė
n.janusauskiene@zua.lt
Jūratė Spruntulienė
j.spruntuliene@zua.lt



Watch this AKIS-in-Practice!





**Registration and
Impartiality of
advisors**

Get-Inspired4AKIS! 6.3

Establishing a national registry for phytosanitary advisory service in Spain



Keywords/Tags

-  Advisors
-  Database
-  AKIS
-  Registration of advisors
-  Phytosanitary
-  Plant health

Potential users

-  MAs/AKIS coordination bodies
-  Advisors/ISS
-  Farmers
-  Phytosanitary product users
-  Plant health sector stakeholder
-  Operational Group



RATIONALE



Spain, with its 17 autonomous regions, operates under a highly decentralized system, where each administrative region has considerable autonomy in managing agricultural advisory services, including those related to plant health and phytosanitary products.

Given the diversity in Spain's agricultural farming systems across the sector, shaped by vast geographic and climatic differences, each region faces unique challenges, from water scarcity to soil management. This diversity also extends to provincial differences, making a one-size-fits-all approach to agricultural advice ineffective.

Improving farm productivity is a central goal in Spain's agricultural policies. However, this objective is intrinsically linked to maintaining plant health, which is essential not only for farm yield but also for sustainability and environmental protection. Effective advice in phytosanitary management requires customized strategies, where regional needs and specific crop threats are considered. This means that advisory services must be finely tuned to local conditions, supported by efficient coordination mechanisms between regional governments and national agencies, as well as effective management practices that can cater to this complexity.

SOLUTION



The Ministry of Agriculture, Fisheries, and Food (MAPA) has established a unified national registry of producers and operators on phytosanitary products, that includes advisory services providers, supporting the consistent application of plant health regulations across Spain. This registry serves as an essential database, coordinating the knowledge and practices required to adhere to plant health legislation throughout the country. In alignment with Spain's 1978 Constitution, which designates the State Administration as responsible for overarching coordination in economic planning, MAPA assumes the role of managing this registry. Through this centralized system, MAPA ensures that advisors on phytosanitary products are equipped to provide standardized, reliable guidance on plant health, a critical element in safeguarding agricultural productivity and public health.

IN PRACTICE



In accordance with the framework of action to achieve sustainable use of phytosanitary products, MAPA has created a web application for the exchange of information on registrations in the **Official Registry of Producers and Operators (ROPO)**. The registry encompasses a wide range of entities active in the field of phytosanitary protection, including advisors, producers, distributors, and operators.



Particularly, all natural or legal persons who carry out the following activities must be registered in the Registry:

- **Advisory service:** it includes individuals who provide advisory services on integrated pest management to agricultural farms, entities or individuals.
- **Supply of phytosanitary defense means:** it includes manufacturers, distributors (sellers), logistics companies and companies engaged in the storage of phytosanitary defense means (which includes phytosanitary products and Others and certain means of defense).
- **Carrying out phytosanitary treatments:** it includes natural or legal persons who carry out phytosanitary treatments by land, air, or in warehouses or other premises.
- **Handling and use of phytosanitary products for professional use:** it includes users with a professional user card for phytosanitary products.

It is possible to obtain a pest management advisor status by demonstrating possession of the required qualification to the competent authority within a Spanish autonomous community. Specifically, advisors must hold a recognized degree or vocational training certification with a minimum of 40 European Credit Transfer System (ECTS) credits in areas directly related to plant production.

This training should cover core topics such as soil science, plant physiology, botany, crop science, forestry, environmental impact assessment, agricultural mechanization, and plant protection, among others. Specifically, at least 12 ECTS credits must focus on plant protection, including key areas like crop protection, agricultural and forest entomology, plant pathology, weed science, and the use of mechanized equipment for crop protection. In some Spanish autonomous community is registration in the phytosanitary advisory sector of the ROPO is carried out automatically (without the need for a request from the applicant) for individuals who obtain accreditation as an integrated pest management advisor.

Once certified and registered in any ROPO office in the Spanish autonomous regions, the advisor can operate across the entire national territory.

The competent authority of the autonomous community oversees advisory activities to ensure compliance with these requirements, potentially within the framework of official checks on phytosanitary product regulations.

The advisor's certification may be suspended, modified, or revoked if they receive an administrative sanction for a serious or very serious offense related to plant health, public health, or environmental regulations, or if they fail to maintain the requirements set forth in this decree or the relevant law.

This web application allows public consultation of registered entities and advisors, with a dual purpose, on the one hand to make the status of the application known in real time to applicants, and on the other to inform the general public about the certified operators that are entitled to carry out any activity related to the advisory services provision, marketing, distribution and use of any means of phytosanitary defense.

The search engine has the following filters:

- Searches for user and entity registrations can be carried out using the following fields: identification code, ID, name and surname or company name, province, municipality and category.
- Searches for establishment registrations can be carried out using the following fields: identification code, ID, name and surname or company name, province, municipality and category.

Figure 1: ROPO's website app

The figure displays two search forms side-by-side, both titled with a dark blue header. The top form is for 'Consulta de inscripciones' and the bottom form is for 'Consulta de establecimientos'. Both forms include fields for 'Código identificación', 'DNI/NIF/NIE', 'Nombre y apellidos o Denominación social', 'Provincia' (with a dropdown menu), 'Municipio' (with a dropdown menu), and 'Categoría' (with a dropdown menu). Each form has a blue 'Cargar Municipios' button and a blue 'Buscar' button. The background of the forms is white, and the overall layout is clean and organized.

Source: <https://servicio.mapa.gob.es/ropowebwai/default.aspx>

Registration in the ROPO is valid for 10 years. Currently, over 24,000 advisors specializing in phytosanitary products are actively registered in the ROPO.

PRACTICAL IMPLICATIONS FOR REPLICABILITY

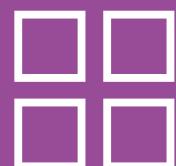


- Establish a national framework for coordinated implementation: In coordination with regional and provincial authorities, define a unified national framework that accommodates local specificities while ensuring consistent application across regions. This framework should outline guidelines, roles, and responsibilities at national/regional level for the management of the register.
- Set clear and consistent standards for the registration/renovation of the advisory service providers: Establish standardized qualifications, performance metrics, and compliance criteria for the advisory providers, ensuring a high level of expertise and accountability across regions.
- Allocate dedicated budget and ICT professionals for the digital infrastructure: Invest in developing, maintaining, and periodically updating a web-based application that serves as a centralized database and resource hub for advisors and users. This application would facilitate access to registration data, real-time updates, and records for both advisory professionals and stakeholders.

BENEFITS



- Transparent and relevant quality standards and procedures for professional advisory providers on the specific topic.
- Networking possibilities between advisors.
- User-friendly tool for farmers to get in contact with specialized and nearby advisors.
- Visibility of advisors.
- The advisor's access data is shared: email, telephone, etc.
- Advisors can easily be included in initiatives to create operational groups or horizon Europe projects.



FURTHER SOURCES OF INFORMATION



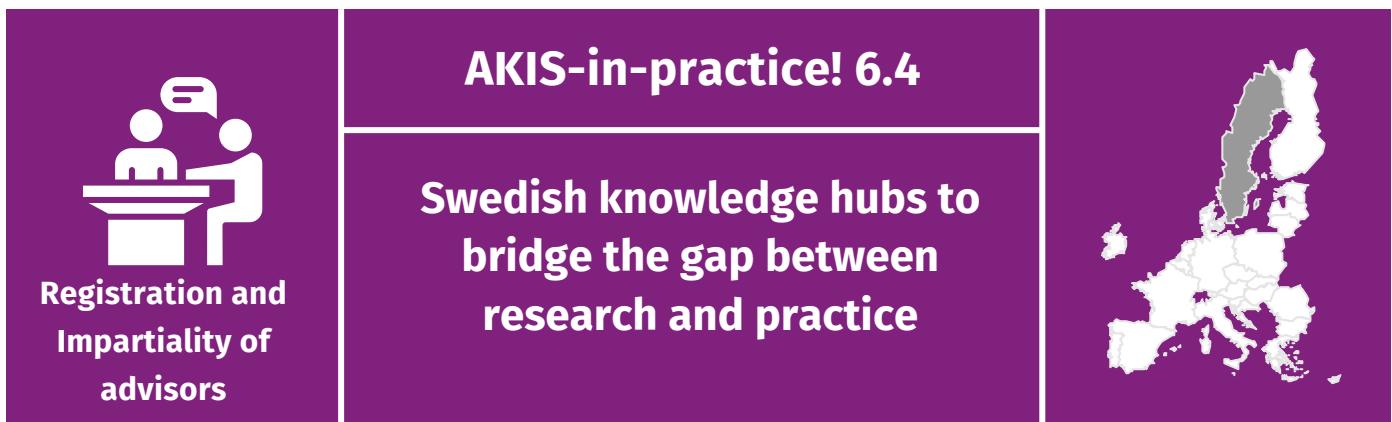
- ROPO's website app (ES).
- ROPO in MAPA's website (ES).
- Sustainable use of phytosanitary products. MAPA's website (ES).
- Royal Decree 1311/2012, of September 14, which establishes the framework for action to achieve sustainable use of phytosanitary products (ES).
- Report on the qualifications that enable you to practice as advisors (ES).
- Advisory documentation for integrated pest management (ES).



Spain

 **Ministry of Agriculture, Fisheries and Food.
General Subdirectorate of Health and Plant and
Forest Hygiene:**
Beatriz Lallana Herráez
blallana@mapa.es





Keywords/Tags	Potential users
 Knowledge hubs	 Advisors
 Digitalization	 Farmers
 Advisory services	 Other AKIS actors



The Swedish AKIS system is broad and includes numerous private and public actors. The SWOT analysis, developed as the foundation for the CAP Strategic Plan (SP) 2023-2027, highlights the need for increased cooperation among AKIS actors in Sweden. Additionally, addressing the compilation and dissemination of knowledge, advisor training, and bridging the gap between research and practice are essential to strengthening Swedish AKIS. Finally, as advisory services in Sweden largely rely on private advisors, it is crucial to ensure they have the support and resources needed to offer market-based advice and access up-to-date knowledge through robust back-office functions.

In this context, digital knowledge hubs serve as a powerful resource for integrating data and information from ongoing research and innovation projects (including databases and repositories) with the latest publications, capacity-building initiatives, networking activities, social media communications, and research outcomes. By facilitating these connections, digital hubs can foster effective knowledge flows among stakeholders and help bridge the gap between research and practice.

SOLUTION



In 2023, a series of national Swedish knowledge hubs was established to bridge the gap between research and practice by consolidating and disseminating information, enhancing collaboration among AKIS actors, and integrating advisors more effectively within the AKIS framework. These include a **knowledge hub for animal production** and one focused on **climate and environment**, both now funded nationally, with the latter previously supported by CAP funds. Two additional hubs were introduced to support **business management and entrepreneurship** (established in 2023) and **digitalization of agriculture** (launched in March 2024). These two hubs are CAP-funded pilot projects with an initial two-year period, after which they will be evaluated. Together, these knowledge hubs aim to strengthen Sweden's agricultural knowledge and innovation systems, promoting sustainable productivity growth and fostering innovation across the sector.

IN PRACTICE



The knowledge hubs for digitalization of agriculture and business management and entrepreneurship are funded through the interventions for knowledge exchange and cooperation, partly from the Swedish Rural Development Program (RDP) 2014-2022 and from the CAP Strategic Plan (SP) 2023-2027. Calls for tenders were used in order to select the most appropriate organizations as hosts for the knowledge hubs. Before initiating the calls for tender, studies were carried out in order to deeper investigate the need for knowledge hubs and pin point how they should operate in order to be fit for purpose. The studies brought about important aspects which lay the basis for the calls for tender.

Box 1 : Knowledge hub for digitalization

The Knowledge hub for digitalization of agriculture is led by Linköping University.

The main aim is to highlight the opportunities of digitalization for Swedish agriculture.

The main actors involved in the hub are:

- A Management team.
- An Expert network: consisting of 14 organizations associated with the hub.
- A Reference network: consisting of, among others, technology companies, advisors, knowledge organizations, active farmers.
- A Steering group.
- An Independent evaluators.

The hub's mission can be summarised in the following five blocks:

- 1) **Block 1: Business intelligence** (Analysis of the business intelligence; best practice and practice analysis; analysis of scientific research).
- 2) **Block 2: Needs analysis** (Identify needs for digital technology through workshops, surveys and interview; analyzing problems related to existing digital technologies; feeding back the results of the scans through seminars, meetings and training courses; analysis of scientific research).
- 3) **Block 3: Cooperation and dialogue** (Regular meetings will take place with all expert organizations as well as with the reference groups and the Swedish Board of Agriculture).
- 4) **Block 4: Test and evaluate** (Testing digital tools and digital services and evaluate them)
- 5) **Block 5: Packetize: providing in-depth reports analyzing** (In-depth reports; Simple reports and training materials; Social media and newsletters).

Source: <https://liu.se/en/research/knowledge-hub-for-the-digitalization-of-agriculture>

Box 2 : Knowledge hub for business management and entrepreneurship

The Knowledge hub for business management and entrepreneurship main goal is to increase knowledge and strengthen collaboration within business management and entrepreneurship in the green industries and thereby strengthen the competitiveness of primary production. The end goal is to create effects among those active in agricultural enterprises.

It is led by the Swedish University of Agricultural Sciences. In February 2024 it offered travel grants to expand Sweden's international exchange of knowledge and research in agricultural business management. The grants were intended for short-term active participation abroad in international congresses, symposia, workshops and courses for entrepreneurs, students, advisers or researchers who work with or study agricultural business management.

Source: <https://www.slu.se/institutioner/institutionen-for-manniska-och-samhalle/kompetenscentrum-foretagsledning/kunskapsnav-inom-foretagsledning-och-entreprenorskap/>

The two newly established knowledge hubs are supported with significant funding to enhance Sweden's agricultural innovation systems. The Digitalization Knowledge Hub is allocated approximately 2 million euros, with activities planned over nearly three years to advance digital integration in agriculture. Meanwhile, the Business Management Knowledge Hub has a budget of approximately 1.2 million euros and will run for a two-year period, focusing on fostering business acumen and entrepreneurship among agricultural stakeholders. These investments are intended to pilot innovative approaches and provide valuable insights into the impact of specialized knowledge hubs on Sweden's agricultural sector.

PRACTICAL IMPLICATIONS FOR REPLICABILITY

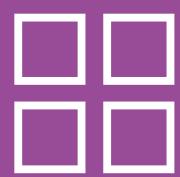


- **Conduct preliminary studies:** Perform initial studies to identify key criteria and determine the optimal organizational structure for each knowledge hub.
- **Issue targeted calls for tender:** Develop calls for tender that align with CAP intervention regulations and address the specific needs of each knowledge hub.
- **Ensure sufficient budget allocation:** Allocate an adequate budget within the CAP intervention to support the sustainability of the knowledge hub during and beyond the programming period.
- **Establish clear evaluation criteria:** Define transparent and relevant criteria based on preliminary studies to guide the selection process for project proposals.

BENEFITS



- Compiling and distributing essential insights and research to make knowledge accessible to all stakeholders.
- Strengthening collaboration and knowledge sharing among stakeholders to build a robust network.
- Conducting thorough assessments of food industry needs to align research and knowledge transfer with real-world demands.
- Improving the integration of advisors within AKIS, enhancing their effectiveness in knowledge dissemination and application.





- Knowledge hub for animal production (SE)
- Knowledge hub for business management and entrepreneurship (SE)
- Knowledge hub for the digitalization of Agriculture (SE)



Sweden



Swedish Board of Agriculture:
akis@jordbruksverket.se



Theme 7

Integration of innovation support services

Keywords/Tags



Innovation support services



Operational groups



Innovation support functions



RATIONALE



The CAP Regulation (EU) 2021/2115 requires EU Member States (MS) to provide support for innovation, in particular for the preparation and implementation of the EIP-Agri operational groups (OGs) whilst capturing and making use of grassroots innovative ideas ((art. 15 (4) (e) and recital 50). The expected result is a general improvement of connections between actors, policies and programmes/projects, knowledge(s) and experience(s), methods and instruments to speed up the creation of innovative solutions.

Innovation support services (ISS) represent a novelty from a policy perspective and, therefore, require governance models, approaches, competences and tools that foster their effective implementation and embedding in the respective national/regional AKIS.

The term 'innovation support services' came into the mainstream a few years ago and it is new in the CAP framework.

To date, there is no shared understanding on ISS, neither in-depth analysis concerning the actors providing the services, their linkages with other actors and the support they provide to innovation processes. Furthermore, there is little awareness of the skills and competencies needed to improve services delivery.

Following recital 50, delivering innovation support services means to turn an innovative idea into a good innovation project plan by capturing individual grassroots innovative ideas, refining them, connecting relevant partners with useful expertise for the objective of the project, preparing a project proposal on which expectations of different actors converge (finding win-win), drafting a cooperation agreement and a final project proposal.

Indeed, this interpretation is rather narrow, compared to what is widely described by the literature, where ISS are referred to as “services that make innovation happen by fostering interactions and constructing knowledge”. These include a wide range of activities aimed at creating the conditions for identifying and discussing solutions, opportunities and new ideas by combining perspectives, knowledge, experience and resources.

According to several European projects, ISS can be summed up into 7 functions (or services) and related activities, that are all important to enable an innovative process to move forward, starting from the birth of an idea to the design of an innovation project, its realisation and, finally, the dissemination and the embeddedness of the realized innovation in a wider environment.

Table 1: Innovation support functions and activities

ISS1. Awareness-raising and knowledge dissemination	ISS1. Description
	It includes all activities contributing to knowledge awareness, dissemination of scientific knowledge, or technical information for farmers. For instance, providing knowledge based on information dissemination forums (website, leaflets), meetings or demonstrations and exchange visits
	ISS1. Detailed activities
	Dissemination of information (website, brochures, magazines, newsletters, bulletins, webinars, etc.), organization of exchange visits, organization of demonstrations, etc. <ul style="list-style-type: none"> ○ Selection and evaluation of information ○ Transformation of information into documents (targets: advisors, farmers, etc.) ○ Language translation
	Meetings
	Communication of project results
	Supply of knowledge and technical information for innovation (knowledge transfer) <ul style="list-style-type: none"> ○ Selection and identification of know-how and transfer of knowledge /technologies
ISS2. Advisory, consultancy and backstopping	ISS2. Description
	It includes targeted, supportive activities aimed at solving complex problems (e.g., a new farming system), based on demands of actors and the co-construction of solutions
	ISS2. Detailed activities
	Articulation of advisory needs / specific need to provide a more targeted support <ul style="list-style-type: none"> ○ Data and information gathering ○ Design of tailored advisory packages
	“Management” of the innovation process (soft skills) <ul style="list-style-type: none"> ○ Support to find specialized advice
ISS3. Demand articulation	Organization of backstopping pools (research / advisory / SME / etc.) to find a solution to a complex problem
	ISS3. Description
	It includes all services targeted to help actors to express clear demands to other actors (research, service providers, etc.). This is targeted support to enhance the innovator's ability to express his/her needs to other relevant actors.
	ISS3. Detailed activities
	Needs analysis
	Strategy and vision development
ISS4. Networking facilitation and brokerage	Feasibility analysis
	Searching for ideas and solutions
	Building bridges with users and intermediary organisations to make the need concrete, defining its contents, specificities and costs
	ISS4. Description
	It includes the provision of services to help organize or strengthen networks, improve the relationships between actors and to align services in order to be able to complement each other (the right service at the right time and place). It also includes all activities aimed at strengthening collaborative and collective action.
	ISS4. Detailed activities

ISS5. Capacity building	ISS5. Description
	It includes services aimed at increasing innovation actors' capacities at the individual, collective and/or organizational level.
	ISS5. Detailed activities
	Traditional training/Face-to-Face individual training Peer-to-peer facilitation/Coaching Experiential learning
ISS6. Enhancing/ supporting access to resources	ISS6. Description
	It includes all services for innovators aimed at enhancing the acquisition of resources to support the process. This could be facilitating access to inputs (seeds, fertilizers etc.), facilities and equipment (technological platforms, labs etc.), and funding (credit, subsidies, grants, loans, etc.).
	ISS6. Detailed activities
	Facilitating access to facilities and equipment (technological platforms, laboratories, etc.) Facilitating access to inputs (seeds, fertilizers, etc.) Facilitating access to financial/insurance services Facilitating access to funding <ul style="list-style-type: none">○ Application preparation and submission to grants (e.g. OGs, HORIZON-EU, ...)
	Project management
	ISS7. Description
	It includes institutional support for niche innovation (incubators, experimental infrastructures etc.) and for scaling out and scaling up the innovation process. This refers to support for the design and enforcement of norms, rules, funding mechanisms, taxes, subsidies, etc. that facilitate the innovation process or the diffusion of innovation
ISS7. Institutional support for niche innovation and scaling mechanisms stimulation	ISS7. Detailed activities
	Negotiation with authorities to create 'protect' space for experiments
	Provision of incubators and experimental infrastructures
	Support for the design and enforcement of norms, rules, funding mechanisms, etc. that facilitate the diffusion of innovation
	Brokerage along the production chain (ISS4)
	Exploitation strategy and action plan design and implementation Supporting intellectual property (patents) and patent authorization processes Negotiation with people affected by the innovation

Source: ATTRACTISS project

In practice, these services are carried out by a variety of providers who can be both public or private and can act with a specific mandate or just because they are interested in pushing the innovation process forward. However, hardly a single service provider is responsible for driving the whole innovation process, but different actors can coordinate with each other's contributing, by performing different functions, to achieve successful outcomes. This is because the services which are needed for driving a whole innovation process evolve along the process itself and might require different competences to be involved in a particular phase.

Currently, ISSs providers differ considerably across EU Member States depending on whether advisory systems are public/privatised, integrated/fragmented, centralised/decentralized.

Due to the novelty of the intervention, it is therefore interesting to see how the different Member States are arranging to meet the regulatory requirement.



FIRST INSIGHTS FROM PRACTICES



The practice presented in this "Compendium" showcases some interesting and replicable approaches: the first directly relates to the implementation of ISS in the Veneto Region, the second one illustrates a method of providing a service. In Italy, the Veneto Region is going to support innovation in agricultural, forestry and agrifood sectors through multi-actor partnerships called "Innovation Hubs", that will be financed through EAFRD funds. Their primary objectives include the identification of grassroot innovative ideas, provision of training, information and knowledge sharing and dissemination, promoting the adoption and sharing of innovations, connecting actors within the Agricultural Knowledge and Innovation System (AKIS). Innovation Hubs can be supported jointly through the interventions "Provision of advisory services" and "Demonstration actions for the agricultural, forestry, and rural sectors".

The Bus trip is an innovative approach that can be used to achieve a variety of goals: enhance interaction and collaboration among partners within EIP-AGRI Operational Groups (OGs) or other multi-actor projects, facilitate experiential learning and knowledge sharing, inspire new ideas.

FOOD FOR THINKING



In this perspective, we could raise a few questions (not exhaustive) to help us reflect on how to better direct AKIS interventions towards the effective organization of innovation support services:

- How to ensure innovation support from the beginning to the end on an innovation process?
- How to give visibility to the variety of innovation support services and providers, recognising the functions they perform to support innovation and, consequently, to the AKIS development?
- How to strengthen competencies that are needed to carry out innovation support services?
- How to incentivize ISS to join operational groups?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- Continuous exchange with the ATTRACTISS project, to be updated on relevant outcomes and activities
- Collection, jointly with the ATTRACTISS project, of the key features of Innovation Support Services in the different MSs in view to share information for knowledge and further interaction.
- Practice workshops, aimed at sharing practices, reflecting on experiences and effectiveness on the models applied to organise and integrate innovation support services and their providers within the AKISs and promote grassroot innovation

FURTHER SOURCES OF INFORMATION



- ATTRACTISS, Deliverable 1.1 Conceptual grounds and common understanding: state of the art, https://attractiss.eu/wp-content/uploads/2023/05/ATTRACTISS_WP1_-D1.1.-Conceptual-grounds-_V5_310123.pdf
- ATTRACTISS, Deliverable 5.8 MA Handbook: monitoring, reporting, evaluating success of ISS measures in CAP AKIS Strategic Plans, <https://attractiss.eu/wp-content/uploads/2024/06/D5.8.pdf>
- ATTRACTISS, Deliverable 4.1 Development of training curricula and agreed delivery, <https://attractiss.eu/wp-content/uploads/2024/06/D4.1.pdf>
- ATTRACTISS, Deliverable 4.2 Updated toolbox developed based on the i2connect project (facilitation for innovation systems) <https://attractiss.eu/wp-content/uploads/2024/06/D4.2.pdf>
- EU SCAR AKIS (2019), Preparing for Future AKIS in Europe. Brussels, European Commission. https://scar-europe.org/images/AKIS/Documents/report-preparing-for-future-akis-in-europe_en.pdf





Keywords/Tags	Potential users
 Hubs	 Managing authorities of the CAP  Strategic Plans
 Advisory services	 AKIS coordination bodies
 Selection criteria	 Training bodies
 Innovation Support Services	 Advisors, including Innovation Support Services providers



The Veneto Agricultural Knowledge and Innovation System (AKIS) involves a diverse range of stakeholders who contribute as both producers and users of knowledge. With the presence of four universities offering relevant programs, the regional agricultural, agri-food, and forestry sectors benefit significantly from research, education, and technology transfer initiatives.

To further enrich this environment, it is essential to promote open knowledge sharing and create collaborative spaces where various actors can meet and develop new ideas. This initiative should support the establishment of aggregative forms, which connect leading entrepreneurs with AKIS participants. By facilitating these connections, the initiative aims to bridge gaps between farmers and those in the AKIS with whom they have limited direct contact. Such interactions can spark innovation, foster partnerships, and ultimately enhance the effectiveness of agricultural practices and policies within the region.

This holistic approach can strengthen existing networks but also encourage the emergence of new collaborations, driving the advancement of sustainable agricultural practices and innovation in Veneto.

SOLUTION



Under the Rural Development Complementary Programmes (RDCP) 2023-2027 of Veneto Region was approved the intervention aims to establish partnerships called "Innovation Hubs" for the implementation of actions to support innovation and the provision of services aimed at the agricultural, forestry and agrifood sectors. These hubs are aimed at addressing systemic needs and challenges faced by farms and rural areas.

The primary objectives of the hubs include:

1. Identifying innovative ideas to meet farmers' needs.
2. Enhancing training, information and knowledge sharing and dissemination.
3. Promoting the adoption and sharing of innovations.
4. Connecting actors within the Agricultural Knowledge and Innovation System (AKIS).

The establishment of the Innovation Hubs is intended to enhance the skills of professionals driving agricultural innovation and to expand the knowledge of farmers participating in these initiatives.

Support is granted in the form of an amount covering only the running costs of the cooperation and the specific costs of the project, using funds from other rural development interventions to cover the costs of other operations implemented (package of interventions).

The application for application for this intervention is submitted by the lead partner that is entitled by the partners as the representative and coordinator of the hub, on behalf of the group. This application must include an activity plan detailing the timeline and expenses for each intervention undertaken by partners. The coordinator also oversees the submission of support requests from partners for planned activities. The implementation of the Innovation Hub is based on using the intervention package method, offering the possibility to use the following interventions:

- Provision of advisory services.
- Demonstration actions for the agricultural, forestry, and rural sectors.

IN PRACTICE



The support application for the Innovation Hub intervention must be submitted by one of the partners, acting as the HUB coordinator under the mandate of the other partners. This application must include support requests from each partner initiating Interventions, if specified in the HUB Activity Plan. The HUB coordinator, therefore, submits an "umbrella application" for Innovation Hub intervention, attaching the Activity Plan, which also contains a timeline and the requested budget for each activated Intervention and partner.

The coordinator oversees the submission of support applications by the partners for the operations outlined in the Activity Plan and links them to the "umbrella application." The eligible Interventions that can be activated within the "umbrella application package" for the Innovation Hub include:

- a) Provision of advisory services.
- b) Demonstration actions for the agricultural, forestry, and rural sectors.

If an application for the Innovation Hub is funded, the other applications for support under the other HUB Activity Plan submitted by the individual Cooperation Group partners are also funded.

The Innovation Hub interacts with the EIP-AGRI OGs as AKIS actors.

The beneficiary of support is the cooperation group (Innovation Hub) or its components. The members of the cooperation group belong to the following three types:

1. Universities or public research institutions.
2. Associations of agricultural or forestry entrepreneurs, or producer organizations.
3. Advisory service providers.

The Innovation Hub must be composed of at least three partners, at least one of which must be from each of the above-mentioned types.

The intervention includes the execution of at least one of the following activities:

- Establishing and managing contact points, idea incubators, and welcoming centers for businesses.
- Organizing integrated training, information, demonstration, and consulting activities targeted at companies.
- Supporting the creation or strengthening of demonstration farms and conducting small-scale experimental trials for testing innovations, as well as facilitating peer-to-peer knowledge exchange.

Table 1: Eligible and non-eligible costs

Eligible Costs	Non-Eligible Costs
<ol style="list-style-type: none">1. Costs for preparatory activities, including stakeholder engagement and needs assessment2. Direct operational costs of cooperation3. Administrative and legal costs for establishing the cooperation group4. Project-specific direct costs necessary for the implementation of activities5. Indirect costs (other costs necessary for the operation of the activities, such as utilities, rents)	<ol style="list-style-type: none">1. Defined by the document "General Procedural Guidelines"2. Investment expenses in tangible fixed assets3. Expenses related to the routine production or service activities performed by the applicant and agents4. Expenses not included among eligible costs

Table 2: Selection criteria

Criteria	Points
Adequacy of activities in relation to the territory and/or supply chain and the need for innovation	20
Adequacy and consistency of expenditures	20
Quality of partnership	20
Contribution of the innovation support service to the achievement of the specific objectives of CAP2030	20
Quality of the context analysis with respect to territory and/or supply chain	20

The coordination group must meet at least twice a year to review the progress of the Activity Plan. Minutes of these meetings must be prepared, including attendance sheets, and both the Agro-Food Directorate of the Regional Government and Veneto Agricoltura Agency are invited to participate.

PRACTICAL IMPLICATIONS FOR REPLICABILITY

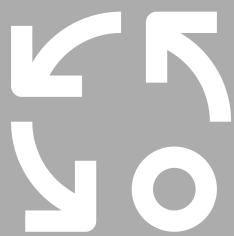


- Meanings and aims of this type of intervention must be duly explained by the MA of the CAP SP and possibly tuned with the participation of potential applicants in view to smooth the application process and ensure consistency of proposals.
- Time alignment of the calls for Action Package.
- Procedures, templates and eligibility requirements along with selection, and reward criteria must be established previously to the call for applications and in a transparent way in view to ensure harmonization, compliance and consistency of the proposals.
- Cooperation and collaboration between the different people in charge of the interventions involved in the Innovation hub is necessary for an effective implementation
- Role of CAP Networks and/or local agencies (or other public entities) is crucial to guide and support beneficiaries before (sensibilization) and after (implementation).

BENEFITS



- Creation of synergies among the AKIS related interventions.
- Straightening knowledge flows in the territory.



FURTHER SOURCES OF INFORMATION



- Intervention description from the Veneto Region CAP SP.
- Call for applications.



Italy, Veneto Region



Head of the Quality, Knowledge and Agri-Food
Innovations Operational Unit. Agrifood
Directorate - Veneto Region:
Giorgio Trentin:
giorgio.trentin@regione.veneto.it

Watch this AKIS-in-Practice!





**Innovation support
services**

AKIS-in-Practice! 7.2

Enhancing Collaboration and Innovation: The Bus trip approach



Keywords/Tags

 Innovation support services

 Operational Groups

 Farmers



Potential users

 Managing authorities of the CAP Strategic Plans

 AKIS coordination bodies

 Training bodies

 Advisors, including Innovation Support Services providers



RATIONALE



Innovation Support Services (ISS) play a pivotal role in enhancing the effectiveness of Agricultural Knowledge and Innovation Systems (AKIS). By providing essential support to various stakeholders, including farmers, advisors, researchers, and policymakers, ISS facilitates the development, dissemination, and adoption of innovative practices and technologies in agriculture and forestry.

One of the primary functions of ISS is to foster collaboration and knowledge exchange among diverse actors within the agricultural sector. By creating networks that connect farmers with researchers and innovation experts, ISS helps bridge the gap between scientific research and practical application. This collaboration is crucial for addressing complex challenges such as climate change, food security, and sustainable resource management. Through workshops, training sessions, and collaborative projects, ISS empowers stakeholders to share their insights, experiences, and best practices, leading to more informed decision-making and innovative solutions.

The introduction of EIP-AGRI Operational Groups (OGs) from the Programming period 2014-2022 has enhanced the need of developing structured methods and tools to facilitate meaningful interactions and to promote active participation. Techniques such as facilitated workshops, brainstorming sessions, and peer-to-peer learning opportunities can encourage actors to express their ideas and contribute to discussions.

SOLUTION



The Bus trip is an innovative approach useful to enhance interaction and collaboration among partners within EIP-AGRI Operational Groups (OGs) or other multi-actor projects. This methodology facilitates experiential learning and knowledge sharing by organizing group visits to various farms/processors/dairies, where participants can engage directly with practices, products, and challenges faced by their peers.

Such method has been implemented in three OGs funded under the Emilia Romagna Region RDP 2014-2022, coordinated by I.TER, an Italian organization specialized in agricultural research, innovation and technology transfer, namely the "FILÒS IN BUS" initiative and the "CASTANIBUS". The name of the first initiative derives from the word 'filòs', which evokes relaxing moments spent in conversation between neighbours, relatives and friends. The second one takes the name from the OGs involved, mainly focused on the chestnut sector.

IN PRACTICE



The bus journey lasted either half a day or a full day. The participants included:

- Partners of the Operational Group (advisors, farmers, researchers).
- Representatives from the Regional Agricultural Ministry involved in the specific topics covered by the Operational Group.
- Journalists (not in every trip).

During the travel on bus, the partners of the OG discuss on project activities and results, by focusing on common matters of interests (soil fertility, carbon footprint, carbon sequestration topic of the OGs involved) around which they share practice and scientific knowledge. This process strengthened team cohesion within the OG, through a major coordination and interaction among the partners, the development of collective knowledge and common understanding on-going achievements of the project and of its results. Moreover, the cross visits on farms supported peer-to-peer processes among the farmers and it represented an opportunity to share knowledge on territories, local products and other local actors.



Throughout the trip, all participants were encouraged to engage in constructive dialogue. Each participant had the opportunity to share their key ideas in response to a question related to the visit, as defined by the OG coordinator at the beginning of the journey. An "Excursion Guide" was provided, which included the trip agenda and cards/post-it notes for discussion.

At the end of the day, participants used these materials to write down their keywords on a dedicated board (one for each category of participants: Farmers, Research/Advisory Service Providers, Emilia-Romagna Regional Government, Common Activities), along with comments explaining their ideas or proposals. The involvement of the Regional Government was beneficial as it facilitated a direct exchange of insights between policymakers and practitioners, ensuring that local agricultural challenges and innovative practices were effectively communicated and understood at the decision-making level.

Table 1: Example of a bus trip agenda from one of the "CASTANIBUS" initiative

Timetable	Topic
8:00	Gather at the meeting point for bus departure
10:00	Stop to Farm 1 and tasting of farm products
11:30	Stop to Farm 2 and tasting of farm products
12:10	Stop to Farm 3 and tasting of farm products
12:15	Stop to Farm 4 visit and tasting of farm products
12:45	Lunch (at participants' expense)
13:45	Dialogue among participants and answer to the question defined at the beginning of the trip
15:15	Meeting with other regional actors
15:45	Departure
17:30	Arrival at the meeting point

PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Provision of a dedicated budget at OG level for activities dedicated to the interaction.
- Organization of structured feedback utilizing an "Excursion Guide" and discussion cards to capture participant ideas and proposals effectively.



BENEFITS



- Enhanced interaction: Promotes collaboration among diverse actors and stakeholders within Operational Groups and multi-actor projects.
- Experiential learning: Facilitates hands-on experience through farm visits, allowing participants to learn directly from peers.
- Knowledge sharing: Encourages sharing of expertise and insights, enriching collective understanding of key topics.
- Strengthened cohesion: Builds trust and camaraderie among participants, enhancing team cohesion within the Operational Group.
- Peer-to-Peer learning: Supports knowledge exchange among farmers, inspiring innovative solutions through shared local practices.
- Adaptable framework: Easily replicable in various contexts and topics across different regions.

FURTHER SOURCES OF INFORMATION



- OG CASTANICO (IT).
- OG Biodiversamente Castagno (IT).
- Agenda of the FILÒS IN BUS - OG PRATI_CO (IT).



Italy, Emilia Romagna Region



I.TER SOC. COOP:

Carla Scotti

scotti@pedologia.net



Theme 8

Climate change mitigation & Environmental care

Keywords/Tags



Environmental care



Climate change mitigation



Farmer



Sustainability



Biodiversity



RATIONALE



Agriculture is one of the sectors most vulnerable to climate change, facing pressures from water scarcity, shifting precipitation patterns, heat stress, and extreme weather events like droughts and floods. These factors disrupt farming cycles and increase the risk of diseases and pests. In the EU, agriculture is particularly susceptible, and its resilience is critical for mitigating potential climate impacts. Sustainable agriculture must incorporate the ability to adapt to changing climatic conditions.

Despite the challenges, agriculture plays a vital role in climate change mitigation. Farmland, through crops, hedgerows, and trees, sequesters carbon, while well-managed soils and grasslands provide long-term carbon storage. The EU agricultural sector has reduced its greenhouse gas emissions by 24% between 1990 and 2021, contributing around 11% of total emissions, primarily from methane and nitrous oxide associated with livestock and fertilization practices. Protecting soil is essential, as it supplies crucial nutrients and support for plant growth.

The Agenda 2030 and the Paris Agreement emphasize the need for transformational shifts toward climate-resilient development, by underscoring the importance of strengthening adaptive capacities for vulnerable populations facing climate-related hazards and other shocks, like the COVID-19 pandemic.

The EU is committed to the Paris Agreement, setting ambitious targets for a 40% reduction in emissions by 2030 across all economic sectors, which necessitates significant efforts in agricultural and forestry practices to reduce greenhouse gas emissions and implement adaptation strategies.

In response, the European Green Deal's Farm to Fork strategy provides a framework for transitioning to a sustainable food system, enabling farmers to meet food demands while protecting the climate. The Common Agricultural Policy (CAP) for 2023-2027 aims to facilitate the transition towards sustainable agriculture by supporting climate change mitigation and adaptation, enhancing carbon sequestration, promoting sustainable energy, and efficiently managing natural resources. It focuses on reducing chemical dependency and maintaining biodiversity through climate-smart innovations. Aligned with the European Green Deal and Farm to Fork strategy, the CAP has three key environmental goals: tackling climate change, protecting natural resources, and enhancing biodiversity. It promotes these objectives by encouraging organic farming and responsible management of pesticides and fertilizers, enabling farmers to produce safe and healthy food while safeguarding natural resources and contributing to climate change mitigation. To achieve its environmental goals sustainably for farmers and rural communities, the CAP includes several measures:

- **Conditionality Standards:** Financial support is linked to compliance with EU environmental, health, and safety rules.
- **Eco-Schemes:** These encourage farmers to adopt practices that contribute to EU environmental and climate goals.
- **Rural Development Interventions:** Support is provided for commitments related to agri-environment-climate, sustainable forest management, investments, cooperation, and knowledge transfer, all aimed at promoting climate action, sustainable resource management, and biodiversity.

All of this requires comprehensive cooperation among policymakers, local communities, and global stakeholders, fostering transdisciplinary scientific collaboration that encompasses ecological, social, economic, and ethical dimensions.

To effectively tackle climate change, countries need proactive and flexible approaches that integrate risk management strategies. Embracing systemic approaches is essential for climate change mitigation and environmental care, as these frameworks recognize the interconnectedness of ecological, social, and economic systems. They promote a holistic understanding of climate challenges, enabling solutions that address root causes rather than just symptoms.

Central to these approaches is the concept of resilience, which emphasizes the need for adaptive capacity within social-ecological systems to enhance environmental health and community well-being. Systemic strategies foster collaboration across sectors, encouraging innovation and collective action, with successful examples including ecosystem-based management and circular economy models.

Besides, policy implementation must tackle various barriers that hinder the adoption of new technologies and the transformation of production systems. These barriers encompass bio-physical constraints, cognitive and behavioural challenges, and social and institutional factors.

Essential for effectively addressing climate change mitigation and enhancing environmental care is the use of shared datasets obtained through advanced land monitoring technologies, such as satellites. This includes establishing common indicators and robust monitoring systems to improve reporting and verification of emissions and removals, enable informed decision-making, and foster coordinated efforts across sectors to address climate challenges and promote sustainable practices.



HOW CAN STRENGTHENING AKIS STRATEGIES CONTRIBUTE TO ACHIEVING CLIMATE CHANGE MITIGATION AND ENHANCING ENVIRONMENTAL CARE?



Agricultural Knowledge and Innovation Systems (AKIS) play a crucial role in modernizing the agricultural sector while strengthening environmental care and climate change mitigation through collaborative research and innovation, advisory, innovation support services, knowledge sharing and digitalization.

In general, AKIS-related interventions help acquire and develop the awareness and capacities needed to engage in more sustainable practices and consumption. This empowers farmers, advisors, and other AKIS actors to better navigate transformative paths toward a more sustainable and resilient agricultural sector. Additionally, it promotes sustainable-oriented research and innovation that addresses the actual barriers and challenges impeding these transformative pathways.

In light of the AKIS systemic approach, it is crucial to interconnect the various types of AKIS-related interventions with those that more directly address environmental care, including biodiversity preservation and restoration, as well as climate change mitigation.

Among the others some effective interventions might be the followings (list not exhaustive):

Cooperation for innovation

- Encourage collaborative models for sustainability-oriented R&I.
- Promoting the development of collective sustainability-oriented farming protocols and business models that are tailored upon the specific territory.
- Encourage innovative solutions for monitoring and verifying climate-sensitive performance, translating these efforts into economic benefits and competitive advantages for farmers.
- Promoting multiactor cooperation for sustainability-oriented governance and partnership models that foster collective climate change action.

Training, discussion groups, peer-to-peer reviews, cross-visits and other forms of knowledge sharing

- Training, and demonstrations on farms on sustainable practices, including organic farming, agroecology, and regenerative agriculture.
- Training on EU environmental and health regulations, including CAP conditionality standards (SMR and GAECC).
- Training and demonstrations on farms on the use of precision farming, including technologies such as GPS, drones, and data analytics for efficient resource management.
- Training and demonstrations on farms on integration of renewable energy and resource management.
- Demonstration actions, through showcase of innovative sustainable practices and technologies to encourage adoption. Demonstration actions might be promoted as part of operational groups' dissemination or as solely initiatives organized by innovative eco-friendly farms and as part of wider training programmes. Moreover, this type of intervention might include the setting up, coordination and implementation of networks demonstration eco-friendly farms.
- Training on new business models and use of tools for sustainability-oriented farm management.
- Research-and-Trainers/Advisors knowledge exchange initiatives, to incentive collaborations in view of keeping researchers/advisors informed on the latest problems on fields/research and innovations in sustainable agriculture.
- Training on accessing CAP funding, grants, and incentives for sustainable practices and public goods.

Advisory and innovation support services:

- Tailored Advisory Services: One-on-one consultations to assess specific farm contexts and tailor sustainability strategies, and support action plan development (e.g. nutrient management, efficient fertilizer use and soil health; resource efficiency and diversification; irrigation management and water-efficient cropping systems).
- Knowledge and innovation brokerage on sustainable agriculture.
- Development of and use emissions tracking advisory tools to monitor greenhouse gas emissions.

Information access and sharing:

- Partnership Development: Facilitating networks among farmers, researchers, NGOs, and local authorities for knowledge sharing.
- Benchmarking: Establishing performance benchmarks to evaluate water, soil, and energy use against peers.
- Good practices forums: Organizing events for farmers/advisors to share successful sustainability initiatives and innovations.
- Public awareness campaigns: Engaging the wider community in understanding the benefits of sustainable farming.
- Climate impact guidance: Providing resources and tools to assess and adapt to changing climate conditions and performances.

FIRST INSIGHTS FROM PRACTICES



The practices presented in this "Compendium" showcase some and diverse interesting and replicable approaches that effectively leverage the potential of AKIS interventions to contribute enhancing climate change actions and environmental care in different ways.

These practices highlight the variety of solutions that can be implemented to support a smoother ecological transition in Member States through AKIS-related interventions, ranging from on-the-spot training on relevant topics (e.g. Polland case) to more complex and structured training and advisory programs (e.g. Ireland case). Overall, the importance of training, information, and advisory services emerges as crucial for enhancing local capacities to address climate change mitigation and sustainable agriculture. Additionally, they emphasize the need for well-structured training and advisory programs that align transitions toward more sustainable farming practices with business and territorial development.

These programs are tailored to the specific needs of particular rural areas and are complemented by incentives and benefits for participants (e.g., free advisory services, academic credits) to address potential barriers while recognizing the commitment of farmers and advisors.

Ultimately, it worths noting the multiple role that the national CAP networks can play to boost the use of most advanced information and advisory tools in member states: (i) knowledge broker, by matching the information on Copernicus EU-level platform with to the need for knowledge and tools of national/subnational level; (ii) training designer of the course on how to use Copernicus platform; (iii) intermediary of local communities and institutions to jointly organize tailored training courses.



Questions for opening the discussion and reflect on how to better direct AKIS interventions towards a climate change mitigation are:

Delivery:

- How to combine AKIS-relating interventions with territorial and sectoral interventions?
- How to organize a monitoring and advisory program for demonstration sustainable farms?
- What incentives could be introduced to encourage farmers to engage more actively in climate change mitigation efforts?
- How can we foster stronger collaboration among stakeholders (farmers, advisors, researchers, policymakers) to enhance the effectiveness of AKIS interventions?
- How can we improve communication strategies to raise awareness about the importance of climate change mitigation among farmers and stakeholders?

SWOT & Needs Assessment:

- What are the current strengths and weaknesses of existing AKIS interventions in addressing climate change?
- How can we better assess the specific needs of farmers and local communities to ensure AKIS interventions are relevant and effective for climate change mitigation?
- What barriers do farmers face in adopting climate-friendly technologies, and how can AKIS support overcoming these challenges?

Training and Capacity Building

- How to organize a network of demonstration sustainable farms?
- What types of training programs are most needed to equip farmers with the knowledge and skills to implement sustainable practices?

Monitoring and Evaluation

- How can we improve the monitoring and evaluation of AKIS interventions to measure their impact on climate change mitigation?
- Which relevant information and tools are already available and how to benefit from them?
- Are there successful examples of AKIS interventions from other regions or countries that we can learn from in our approach to climate change?
- Which benchmarks are already in place?

Long-Term Vision:

- What long-term goals should AKIS interventions aim for to ensure a sustainable agricultural sector that effectively addresses climate change?



HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- The **collection of "AKIS-in-Practice"** must be expanded through continuous dialogue with partners to provide a broader scope of the different approaches that can contribute to achieving CAP specific objectives relating to climate change and environmental care.
- Joint workshops, informative and capacity building sessions with EU research and innovation projects focusing on the specific topics to share knowledge and to put in use already delivered practical advisory/monitoring tools and guiding documents (e.g. policy briefs, interventions schemes, digital tools). Among the others, for example, some relevant projects are: **TOOLS4CAP**, **SEN4CAP**, **CALLISTO**, **ECO-READY** and other projects, for example from HORIZON-MISS-CLIMA calls.
- **Joint workshops with the CoPs** might be directed to increase familiarity and to co-develop possibly innovative and major focused combinations of AKIS and non-AKIS interventions that can support more effectively capacity enhancement for ecological transitions.

FURTHER SOURCES OF INFORMATION



- What the CAP does for climate change
- Climate change and agriculture in the EU
- Climate change EC webpage





Climate change
mitigation &
Environmental care

GetInspired4AKIS! 8.1

United we stand for the environment! Context-sensitive training of advisors to boost ecological transitions.



Keywords/Tags



Peer-to-peer learning



Demo-farms



Climate change

Potential users



Managing authorities of the CAP strategic Plans



Advisors and advisory organizations



Vocational training bodies



RATIONALE



To support the ecological transitions outlined in the Common Agricultural Policy (CAP), it is essential to enhance the capacities of farm advisors. The CAP aims to address climate change, protect natural resources, and enhance biodiversity in a socially and economically sustainable manner.

Key measures, such as conditionality standards, eco-schemes, and rural development interventions, emphasize the importance of green farming practices.

Farm advisory services play a critical role in guiding farmers through these transitions by:

- Keeping them informed about new research, methods, and technologies for environmentally friendly farming.
- Helping them understand and comply with EU environmental and health regulations.
- Providing information on statutory management requirements and best practices for land management.
- Supporting the adoption of climate-beneficial agricultural practices and modernisation measures.
- As transitions require locally adapted solutions that enhance economic viability and social conditions in rural areas, training should focus on developing advisors who take a systemic and holistic approach, with a deep understanding of agricultural sustainability and the dynamics of modern agri-food systems.



The "Course for Environmental Trainer" addresses the gap of local expertise and professionalization about the environmental and social challenges posed by the Green Deal and the Farm to Fork Strategy. Following the idea of Casa dell'Agricoltura, a local NGO, this has been designed based on a thorough understanding of the local context, awareness of agricultural and environmental issues, and collaboration among key actors in the local Agricultural Knowledge and Innovation System (AKIS). These latter, equipped with relevant transdisciplinary skills, have come together to organize, fund, and implement this course (box 1).

The "Course for Environmental Trainer" is a postgraduate specialization program aimed at training professional advisors who can support farms in their ecological transition through a holistic approach that aligns sustainable farming practices with business and territorial development.

Box 1: Promoters of the course

- Casa dell'Agricoltura is an NGO pursuing cultural and social goals relating to the valorisation of agriculture and of its workers in urban areas.
- Fondazione CARIPLO is a philanthropic entity devoted to combating inequalities and promoting the economic and social growth of the territory.
- University of Milan, Department of Environmental Sciences and Policies and the Department of Agricultural and Environmental Sciences
- CREA - Council for Agricultural Research and Economics.
- Italian National Rural Network, that includes specific actions to disseminate knowledge on the CAP and its objectives.
- ODAF – the provincial order of the agronomists and foresters.
- Fondazione Cascina Cotica, an NGO devoted to favoring the sense of community as a value for social relations.

Specific capacity building goals pursued through this training course are:

- Understanding agricultural issues related to business profitability, agricultural production, and livestock, while also aligning with the necessity of environmental conservation and the associated policies.
- Supporting farms in their transition to sustainability, particularly regarding agricultural spending and the definition of technological and production processes.
- Serving as a point of reference, dialogue, and collaboration with public administration to ensure smoother operations, greater alignment with reality, and more effective outcomes.

The course is free of charge and the participation includes training material, on field visits and lunches.

Most of the trainees are young students and farmers from marginal areas.

The course is completely free for the attendances and admits a maximum of 15 participants.



Participants are selected through a public call for applications and 2/3 of the seats are reserved to recent graduated. The training programme is defined in collaboration with all the supporters that also provide the trainers and infrastructures. Every year the modules and methods are revised to be better aligned to the observed issues and the needs of eh potential trainees.

A scientific committee, composed by their representatives, steers the whole training course and defines selection criteria of candidates and valuations of the trainees.

The training course is structured around topic-related modules (Table 1) and 80 in presence training hours distributed over 5 months, by including classroom (80 hours) and on field (4/5 visits on farms, research centres, universities, ...) lessons, and critical reflection exercises (15 hours).

The lessons are held during the weekends (6 hours on Friday and 4 hours on Saturday), to facilitate access by workers (e.g. advisors, farmers).

The critical reflection exercise consists of a 3-hour discussion between 2 farmers generally with different ideas regarding the topic of each module of the course (e.g. organic and agro-ecological farming). This creates an interesting dialogue among the students.

An evaluation of the students is provided at the end of each teaching module and the course is successfully passed with 75% attendance of the lessons and following a final test.

Table 1: Exemplary training modules

Module	Content
Sustainable economy and Sustainability policies	<ul style="list-style-type: none">• General principles.• Short supply chain markets/Local markets/Supply chain contracts.• Circular economy LCA sustainability certifications.• EU strategies for sustainable development: the Green New Deal, the Farm to Fork strategy, the European Strategy for Biodiversity.• Integration between production and consumers (Systems of sustainable certification, traceability systems, information of consumers)
Ecology and sustainable agriculture	<ul style="list-style-type: none">• Agriculture and climate change.• Conservation and increase of fertility and biodiversity of soils.• Sustainable management of plant protection (parasites, pathogens, weeds).• Use and management of water.• Agroecology.• Regenerative agriculture.• The agroecological approach from theory to practice.• Organic: opportunities and problems in production plants and livestock.• Plant genetics and natural seeds.
Sustainable animal husbandry	<ul style="list-style-type: none">• Sustainable management of livestock (genetics, nutrition, emissions).• Organic animal husbandry.• Management and valorisation of livestock waste.

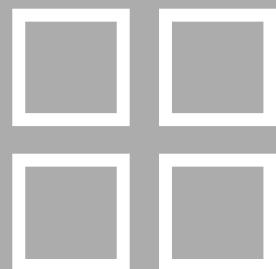
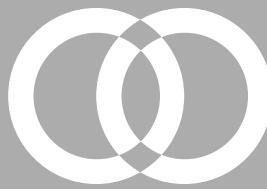
Module	Contents
Precision farming	<ul style="list-style-type: none"> • Precision agriculture and innovation for sustainable use of water resources, pesticide treatments and fertilizers. • Drones, satellite, digitalisation • Availability and use of data.
Rural territory, multifunctionality and ecosystemic services	<ul style="list-style-type: none"> • Territorial planning tools, agri-environmental policies and local development. • Agroforestry system and ecosystem services. • Economic evaluation of ecosystem services. • Value of multifunctionality in agriculture. • Multifunctionality and local development. • Social agriculture.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



This practice can be promoted as training intervention type under the condition of:

- Budget availability to cover organizational (e.g. infrastructures, training materials, on field visits) and training costs (trainers).
- Availability of topic-specific experts as trainers.
- Conduction of timing context analysis and needs assessment of farmers for support over the ecological transitions.
- Establishment of mechanisms for periodic assessment of the performances of trainees.
- Availability of capacities to promote wide access.
- Protocols with local AKIS actors that are relevant during the design, organization and implementation of the course.



BENEFITS



- The course addresses specific needs for professional advisors that regards both the farms and the public administrations.
- Boosting young advisors to acquire specialized competences for ecological transitions.
- Weekend scheduling of the trainings favors participation by workers.
- Modular approach to training allows trainees taking control of their education and assuming greater responsibility for their own learning.
- The promotion by a network of local AKIS actors helps creating an enable environment for new relationships and trust among the participants.
- The engagement of peer-to-peer reflection exercise by farms helps them acquiring major awareness and learnings about the different perspectives on green transitions and respective farm-level implications.

FURTHER SOURCES OF INFORMATION



Casa dell'Agricoltura: <https://casagricoltura.org/formatore-agricolo-ambientale/>



Italy, Lombardia Region



Casa dell'Agricoltura:
Carlo Basilio Bonizzi:
segretario@casagricoltura.org





Climate change
mitigation &
Environmental care

AKIS-in-practice! 8.2

**Signpost advisory programme
to support climate and
sustainability actions on farms**



Keywords/Tags



Advisory



Demo-farms



Peer-to-peer learning



Discussion groups

Potential users



Managing authorities of the CAP
strategic Plans



Farmers and demofarms
Advisors and advisory organizations



Researchers and Universities

RATIONALE



The Agenda 2030 and the Paris Agreement call for transformational shifts toward climate-resilient development. Consistently, the CAP 2023-2027 emphasizes sustainability and climate mitigation to address environmental challenges and maintain biodiversity by promoting climate-smart innovations. Agricultural Knowledge and Innovation Systems (AKIS) play a crucial role in modernizing the agricultural sector while ensuring environmental care and climate change mitigation through collaborative research, innovation, and digitalization.

Key contributions of agricultural advisory and innovation support services include:

- Education: Provide training on sustainable practices and regulatory compliance.
- Tailored Guidance: Offer personalized support based on individual farmer contexts.
- Technology Access: Facilitate adoption of precision farming and renewable energy, along with demonstration projects.
- Sustainability Action Plans: Assist in developing plans aligned with CAP objectives, focusing on nutrient management, water conservation, and biodiversity.
- Monitoring and Benchmarking: Help farmers track emissions and resource use while comparing performance against benchmarks.
- Collaboration: Foster partnerships among farmers, researchers, and stakeholders for sharing best practices.
- Community Engagement: Create platforms for peer learning to enhance sustainability efforts.
- Adaptation Strategies: Provide guidance on adapting to climate impacts.

To follow-up with the Agenda 2030 and the Paris Agreement along with the CAP goals, Ireland has declared a Climate and Biodiversity Emergency and is pursuing a Climate Action Plan aimed at achieving net-zero carbon emissions by 2050, with a 51% reduction by 2030.

TEAGASC supports these efforts with a Climate Action Strategy 2022-2030, aiming to empower farm families to reduce greenhouse gas emissions by 25% while maintaining profitability. This strategy is based on three interconnected pillars:

1. Signpost Advisory Programme.
2. Sustainability Digital Platform.
3. Virtual National Centre for Agri-food Climate Research and Innovation.

The resources devoted to the Teagasc Climate Action Strategy are funded by the Government.

SOLUTION



The Signpost programme is a multi-annual campaign to lead climate action by all Irish farmers, and achieve early progress in reducing gaseous emissions from Irish agriculture while also improving water quality, maintaining (and in some cases improving) biodiversity, reducing costs and creating more profitable and sustainable farming enterprises. Teagasc plays a crucial role in leading innovative research on various agricultural practices, including animal management, land use, and energy efficiency. Its aim is to develop effective knowledge-transfer interventions that facilitate the adoption of new technologies and practices among farmers, while also enhancing communication between farmers and stakeholders. This includes prioritizing tailored advisory services focused on low-carbon farming.

In 2022, Teagasc launched the Signpost Advisory Programme to support climate and sustainability efforts on farms, outlining a roadmap with key milestones for 2023-2032.

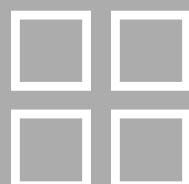
The Signpost Programme is currently supported by over sixty partner and supporting organisations, and provides a national anchor point for networking and training for the many actors across the Irish AKIS.

This programme aims to empower farm families to adopt technologies and production systems that will reduce greenhouse gas emissions by 25% by 2030 while ensuring farm profitability. It is free and available to all farmers, utilizing a network of Signpost demonstration farms for enhanced advisory and training support.

Specific Objectives:

1. Support the transition to sustainable farming systems.
2. Aid the agricultural sector in reducing emissions in line with national policies.
3. Avoid unintended consequences of emission reduction efforts while improving water quality and biodiversity.
4. Promote practices that enhance farm profitability and sustainability.
5. Build national capacity among farmers and their supporters to implement necessary changes.
6. Serve as a trusted knowledge source, facilitating collaboration among programme partners.

The Signpost Programme is backed by over sixty partner organizations, providing a central hub for networking and training within the Irish Agricultural Knowledge and Innovation System (AKIS).





Signpost Programme is based on two pillars:

- The network of 120 Signpost demonstration farms that are amongst the first to adopt climate mitigation and adaptation technologies, supported by their advisors and they are central to farmer-to-farmer learning, sharing their experiences with other farmers through farm walks, events, articles, videos, media etc. Beyond these farms, the target for the programme is to register 10,000 farmers each year with 50,000 participating in the programme between 2023 and 2030.
- The Signpost Advisory Programme, that includes a plurality of services, advisory methods and tools aimed at supporting farmers to make a tailored Action Plan and implement it through a range of advisory supports, including both group-based and individual follow-up and advice. Twenty-one signpost climate advisors are in place countrywide, and their mission is to help farmers to contribute to the emissions target reduction set for their industry. A team of Signpost advisors has been committed and it is listed on the programme website.

The steps to access and implement the programme are:

- Farmers register for the programme and are subject to a baseline assessment, which is accessible through the Sustainability Digital Platform, of the current actions being implemented in view to be provided by the total emissions figure to reach by the end of the programme support (3 years).
- An Action Plan for the farm is developed in conjunction with an advisor.
- Participation in the programme is for 3 years.

To implement this programme, Teagasc devoted a significant amount of resources, in terms of funding and staff, by including 30 advisors across the country. Moreover, about 62 partners collaborate to the successful realization of this program and this is likely to enable and consolidate relations within the AKIS.

The support is provided free of charge for all farms on a three-years period and services and tools provided under the framework of the Signpost advisory programme are vary, by including:

- Workshops an short training courses, focused on climate actions, including mitigation and adaptation measures.
- Assessment of current climate actions of associated farms.
- A farm specific Signpost Action Plan.
- One-to-one Climate Action in-group advice.
- Support in interpreting our farm's GHG emissions and carbon footprint, and in benchmarking farm's performance against industry targets.
- Farm walks and seminars.
- Thematic discussion groups.
- Support in the implementation of farm's Nutrient Management Plan.
- Digital newsletters, updates and text messages.

Farmers have also access to a comprehensive list of advisory tools regarding a vary of topics (e.g. Nutrient Management Planning, forestry, biodiversity, Self-Assessment Tools for Reducing GHG and others).



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Establishment of the advisory plan and tools.
- Availability of resources, in terms of budget and professional pluralistic capacities by advisors. As well, a good geographic coverage of the territory is a must.
- Capacity and resources to deliver pluralistic and attractive services to adhering farms.
- Back-office by researchers, industrial enterprises, ICT statistics and program development and other expertise that is needed to deliver a wide range of advisory services, including digital tools and DSS.
- Back-office on about administrative procedures, communication and ICT for the organization of the events (e.g. in-situ workshops and discussion groups) and release of dissemination materials (e.g. newsletters, video).
- Continuous learning and updates by the advisors along with networking and alignment on advisory contents, methods and tools.
- Definition of guidelines and procedures for advisory provision on demand.
- Trusted relationship with farmers and, possibly, a network of demofarms.

BENEFITS



Specific benefits highlighted for this practice are:

- Empowering farmers on a country-level climate change mitigation pathway.
- Provision of a wide range of advisory services for free leading to more conscious climate action by farming and entrepreneurship models.
- Continuous monitoring, data series development and assessment of farms sustainability state of play.
- Creation of an enabling environment for the development interactions and professional/business relationships among a plurality of AKIS actors, possibly leading to more innovative farming systems.
- Relying on the ongoing advisory support services currently in place at the current demo farms ensures consistency and good integration into existing advisory programmes.



Box 1: Examples of topics touched by the Signpost advisory Programme:

- Farming for Water EIP.
- Sustainable Tillage Practices.
- GROFarmS - Growing Resilient Organic Farming Systems.
- Climate adaptation in tillage.
- Update on feed additives to reduce methane emission.
- Digitalisation of advisory services: vital to support sustainable agriculture.
- Combining targeted measures and EIP funding to deliver water quality improvements.
- Managing Soil Health.
- Protecting Farmland Pollinators.
- Ecologically Significant Habitats on Farmland.
- Nitrates and anaerobic digestion.
- The opportunities of climate action.

FURTHER SOURCES OF INFORMATION



- Webpage that includes lots of practical publications on the programme.
- Explanation of the Signpost programme.
- <https://www.teagasc.ie/environment/climate-change--air-quality/the-signpost-series-webinars/>.
- The Signpost Series as a podcast.



Ireland



Mark Gibson:

Mark.Gibson@teagasc.ie

Watch this AKIS-in-Practice!





Climate change
mitigation &
Environmental care

AKIS-in-practice! 8.3

**Addressing knowledge gaps in
environmental and climate
protection: Training integration
in Poland's CAP SP**



Keywords/Tags



Climate change action



Training



Environmental protection

Potential users



Managing authorities.



AKIS Coordination Bodies.



RATIONALE



The specific objectives on climate change and environmental care within the Common Agricultural Policy (CAP) are central to addressing the dual challenges of mitigating climate impacts and protecting natural resources in Europe's agricultural sector. Agriculture is a significant source of greenhouse gas emissions, and at the same time, it faces increasing risks from extreme weather and environmental degradation. To meet these objectives, the CAP promotes sustainable farming practices such as agroecology, carbon farming, and biodiversity conservation.

AKIS interventions play a key role in enabling the shift towards more sustainable agriculture by ensuring that farmers are not only aware of these practices but are also supported in their implementation. In this sense, the AKIS framework can encourage the adoption of practical climate-resilient solutions fostering the collaboration between researchers, advisory services, farmers, and digital innovation hubs and favoring the increased knowledge on practices.

The Polish CAP Strategic Plan identified a weakness in the limited knowledge and skills among farmers regarding sustainable agricultural practices and climate adaptation. This knowledge gap could hinder the effective implementation of environmental and climate protection intervention. Moreover, adopting green technologies and resource-efficient practices, such as precision farming, renewable energy, and improved water management systems might have a significant impact in the sustainability of farm practices. However, to capitalize on these opportunities, it is essential that farmers are equipped with the necessary skills and knowledge to implement them effectively. Training ensures that investments in environmental and climate protection are not just about acquiring equipment, but about using it efficiently to achieve long-term sustainability, contributing to broader objectives like reducing greenhouse gas emissions, enhancing biodiversity, and supporting the EU Green Deal, ultimately fostering a more resilient and sustainable agricultural sector.

SOLUTION



The inclusion of training in the Polish CAP Strategic Plan's intervention I.10.4 - "Investments contributing to environmental and climate protection", aims to help farms to improve knowledge about technical standards to reduce environmental pressures and adapt to climate change, minimizing its negative effects. Key areas include reducing the use of pesticides and fertilizers, cutting greenhouse gas emissions, enhancing soil carbon sequestration, and promoting biodiversity. The intervention strengthens Poland's implementation of environmental and climate protection schemes under both CAP Pillars I and II. Modern equipment and digital solutions will help farmers implement these measures more effectively, with a focus on climate adaptation, sustainable resource management, and biodiversity conservation.

IN PRACTICE



Under the Polish CAP Strategic Plan has been published a call for applications for the intervention I.10.4 Investments contributing to environmental and climate protection that provides a mandatory training conducted by provincial agricultural advisory centres in the field of "Sustainable management of natural resources such as water, soil, air, climate" before the date of submission of the application for contribution or undertakes to complete it before the date of submission of the application for payment. The beneficiaries are:

- **A farmer:** a natural person, a legal person, an organizational unit without legal personality, partners of a civil partnership conducting agricultural activities within a civil partnership,
- **A group of farmers:** that consists of at least three farmers who are natural persons who jointly apply for aid in order to carry out a collective investment for their farms, if they have concluded a written agreement of a group of farmers, the duration of which may not be shorter than 7 years from the date of submission of the application for aid.

The aid is granted for an operation covering investments concerning:

1. Construction of new:
 - a. Tanks for storing liquid natural fertilizers.
 - b. Plates for collecting and storing solid natural fertilizers.
2. Reconstruction or purchase of tanks or reconstruction of the plates referred to in point 1.
3. Construction or reconstruction of other structures used for agricultural production.
4. Purchase of machinery or equipment used for agricultural production.
5. Construction, purchase or installation of technical infrastructure or equipment directly affecting the conditions for conducting agricultural activity.

The aid will be granted if the farmer meets, among others, a mandatory training conducted by provincial agricultural advisory centres in the field of "Sustainable management of natural resources such as water, soil, air, climate" before the date of submission of the application for aid or undertakes to complete it before the date of submission of the application for payment.

Box 1 : Provincial Agricultural Advisory Centres

The Provincial Agricultural Advisory Centres (Ośrodki Doradztwa Rolniczego, or ODRs) are regional institutions responsible for providing agricultural advice, education, and support to farmers. They operate under the supervision of the Ministry of Agriculture and Rural Development, offering various services to enhance the productivity, sustainability, and competitiveness of farms across the country. These centers are integral to implementing the Agricultural Knowledge and Innovation System (AKIS), facilitating the transfer of knowledge about innovative technologies, sustainable practices, and environmental protection.

A specific attachment of the call is dedicated to a Declaration of commitment to undergo training conducted by provincial agricultural advisory centers in the field of "Sustainable management of natural resources such as water, soil, air, climate" in the context of implementing intervention I.10.4 PS CAP for 2023-2027.

Box 2 : Conditions of eligibility

The complete list of conditions of eligibility provide the following conditions:

1. The owner must be of a farm with an agricultural area of no more than 300 ha.
2. Conducts agricultural activity in the field of plant or animal production on the farm and this activity is not conducted exclusively for scientific and research purposes - the above conditions must be met at least from the date of submission of the application for aid.
3. Is at least 18 years old on the date of submission of the application for assistance – in the case of a natural person or a partner in a civil partnership who is a natural person.
4. Has an identification number in the producer register, assigned in accordance with the provisions on the national system of producer registration, farm register and register of payment applications.
5. Has completed training conducted by provincial agricultural advisory centres in the field of "Sustainable management of natural resources such as water, soil, air, climate" in the context of implementing the CAP PS intervention for 2023–2027 "Investments contributing to environmental and climate protection" before the date of submission of the application for aid or undertakes to complete it before the date of submission of the application for payment.



The training is organized by the Agricultural Advisory Centre and it is usually organized after gathering a group of people. The training lasts two days where the first day of training is carried out in the form of a webinar, the second day of training is a trip to a farm (Table 1).

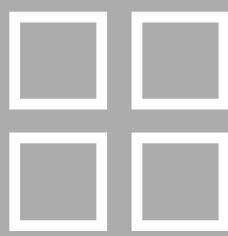
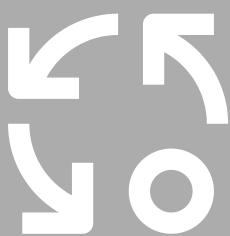
Table 1: Example of a Training program on SUSTAINABLE MANAGEMENT OF NATURAL RESOURCES in the context of implementing the CAP PS Intervention for 2023-2027 "Investments contributing to environmental and climate protection" Framework training program

	Issues to discuss	Number of hours of classes	Working method
First day of training			
1	<p>Water Block</p> <p>1. Rational water management on the farm (water retention, agrotechnics in improving water management, water use efficiency, water retention, drought resistance).</p> <p>2. Investments aimed at improving water management:</p> <ul style="list-style-type: none"> - collection, storage and management of rainwater, - water recirculation, - economical water management. <p>3. What PS CAP interventions can be used in this area (pillar I and II).</p>	2 hrs	webinar
2	<p>Soil Block</p> <p>Investments aimed at:</p> <p>a) reducing the use of plant protection products:</p> <ul style="list-style-type: none"> - precise use of plant protection products (e.g. sensor sprayers, recirculation sprayers), - mechanical or biological control of weeds or pests (e.g. hoes, devices for mechanical destruction of pests); <p>b) increasing soil sequestration and biodiversity:</p> <ul style="list-style-type: none"> - strip or no-tillage soil cultivation, - soil protection (e.g. mulching, catch crop seeders), - maintaining field woodlots, agroforestry systems and permanent grasslands; <p>c) soil cultivation techniques, aggregation of machines.</p> <p>What PS CAP interventions can be used in this area (pillar I and II).</p>	3 hrs	webinar



3	Air Block 1. Poland's commitments to reduce air pollution. 2. Investments aimed at reducing pollutant emissions: - storage of natural fertilizers or silage, - air purification systems from livestock buildings, - low-emission keeping of farm animals (e.g. herd management systems, floor cleaning robots), - reduction of the consumption of mineral nitrogen fertilizers through their more efficient use, soil application techniques for natural fertilizers, fertilizer application using digital solutions. 3. What PS CAP interventions can be used in this area (Pillar I and II).	3 hrs	webinar	
4	Climate Block 1. The impact of climate change on agriculture, Poland's commitments regarding the reduction of greenhouse gas emissions from agriculture. Investments aimed at adaptation to unfavourable weather conditions: a) in animal production: - ventilation and air-conditioning systems for animals, - watering places for animals, b) in crop production: - increasing soil water retention through no-till cultivation systems, - strengthening ecosystem services through turfing, woodlots, - increasing micro-retention through rainwater management, - anti-hail nets. 3. What PS CAP interventions can be used in this area (Pillar I and II).	3 hrs	webinar	
Second day of training				
	Familiarizing the final recipients with more than one environmental and climate technology used on the farm within different thematic blocks (water, air, soil, climate). Discussing (and, if possible, presenting its operation) the way a given machine/investment/technology works and its impact on selected elements of the natural environment (soil, water, air, climate). Explaining, by a representative of the visited farm, the practical aspects/benefits of using this technology.	up to 4 hours	visit to the farm/farms	

Source: Pomeranian Agricultural Advisory Centre in Lubań



PRACTICAL IMPLICATIONS FOR REPLICABILITY



The implementation of the mandatory training on sustainable management of natural resources should take into account some practical implication:

- **Establishment of Mandatory Training Protocols:** Establish clear guidelines for the mandatory training sessions that farmers must complete before applying for support. This should include the content on sustainable resource management and the role of agricultural advisory centers (or other educational bodies) in delivering this training.
- **Collaboration Protocols with Advisory Centers:** Collaboration with Provincial/regional Agricultural Advisory Centers can be useful to facilitate training and support for farmers.
- **Criteria for Farmer Eligibility:** Define and communicate specific eligibility criteria for individual farmers and groups of farmers applying for the contribution. Ensure that the requirements for legal status, collective agreements (at least three farmers), and the minimum duration of these agreements (7 years) are clearly outlined to avoid confusion during applications.
- **Monitoring Compliance with Training:** Develop a monitoring system to verify that applicants have completed the required training. This may include certificates of completion from training sessions, ensuring that only those with proper training access the funding.

BENEFITS



- Creating synergies between different CAP SP interventions.
- Fostering climate change and environmental care skills in farmers.
- Simple way of checking the criterion.



FURTHER SOURCES OF INFORMATION



Call for the intervention related to Investments contributing to environmental and climate protection
Training program of the Pomeranian Agricultural Advisory Centre in Lubań



Poland



Ewa Grodzka:
ewa.grodzka@minrol.gov.pl



Theme 9

Support to generational renewal

Keywords/Tags

-  Young farmers
-  Direct payments
-  Complementary income support
-  Sustainability
-  Rural Development



RATIONALE



Young people play a vital role in shaping the future of agriculture and rural areas in the EU. However, the aging farmer population presents a significant challenge, as the proportion of in 2005, 7.3 % of EU farm managers under the age of 35 years old (a ceiling taken in order to enable comparisons) declined from 7.3% in 2005 to 6.5% in 2020. To address these issues, a comprehensive approach is needed, particularly in tackling the knowledge divide across different regions. Generational renewal goes beyond merely reducing the average age of farmers; it also involves understanding the needs and aspirations of rural youth and creating an environment that fosters attachment to rural areas. Achieving this requires not only encouraging participation in diverse networks and communities, empowering the next generation to adapt to challenges and seize new opportunities, but also addressing significant barriers, such as access to land and capital, that hinder young people from entering the farming sector.

In previous programming periods, CAP generational-renewal measures improved farm business performance, resilience, and secure transfers between generations. However, these measures emphasized enhancing the socio-economic sustainability of businesses after young farmers established their operations, rather than facilitating farm succession, and were less effective for off-family farm transfers.

The CAP 2023-2027 establishes a strengthened and more comprehensive support framework for young farmers, promoting employment, growth, and local development to attract young people to rural areas, improve working and living conditions, and reduce the exodus of rural youth.

Interventions for young farmers include:

- Direct Payments: EU countries must allocate at least 3% of their direct payments budget to support young farmers. This support can take the form of income support, investment assistance, or start-up aid. Additionally, EU countries can establish Complementary Income Support for Young Farmers (CISYF), which offers enhanced income support to newly established young farmers eligible for basic income support.
- Rural Development: (i) Support for the installation of young farmers, new farmers, and rural business start-ups; (ii) Cooperation schemes in the context of farm succession.

Beyond CAP funding, EU countries are also required to assess how national policies—such as tax relief schemes, farmers' pension programs, loan initiatives, and regulations on land leasing, purchasing, and inheritance—interact with CAP interventions. This ensures that national and CAP measures are aligned and mutually reinforcing, creating a cohesive framework that effectively addresses the needs of young farmers.

Box 1: Young farmer definition

The Regulation (EU) 2021/2115 on CAP Strategic Plans sets the minimum necessary common elements defining the criteria to qualify as “young farmer” at EU level. This definition includes the requirements for all relevant interventions under income support and rural development. This ensures consistency when EU countries address the objective of generational renewal in their CAP Strategic Plans.

Firstly, a young farmer must be a “farmer” as per the definition stipulated in Article 3(1) to Regulation (EU) 2021/2115. EU countries must take into consideration the following mandatory elements when drawing up their definition of a young farmer as stipulated in Article 4(6) to Regulation (EU) 2021/2115:

- A young farmer can be maximum 35-40 years old (EU countries are to set the exact upper age limit).
- A young farmer must be a 'head of the holding' (i.e. must have an effective control over the holding, and EU countries must detail the specifications).
- A young farmer must have appropriate training and/or skills (EU countries must detail the specifications).



HOW CAN THE STRENGTHENING AKIS STRATEGIES CONTRIBUTE TO ACHIEVING GENERATIONAL RENEWAL?



Agricultural Knowledge and Innovation Systems (AKIS) play a crucial role in modernizing the agricultural sector while contributing to generational renewal in agriculture.

AKIS interventions should be seen as a body of accompanying measures providing comprehensive support for young farmers. These measures range from building proper technical and entrepreneurial skills to enhancing functional and innovative capacities that boost not only the competitiveness of the agricultural sector but also drive its ecological transition. Furthermore, these interventions should facilitate young farmers' integration into a system of qualified relationships and horizontal networks among economic, territorial, and sectoral actors, fostering potential collaborations for entrepreneurial and territorial value chains.

Among the others some effective interventions might be the followings (list not exhaustive):

Generational renewal projects

These include project plan for installation of young farmers that must include other forms of support, by:

- Combining support for installation of young farmers with mentorship by older/experienced farmers and support for early retirement.
- Combining the support for installation of young farmers with training on global management and an advisory programme of 3 years.
- Combining the support for installation of young farmers with vouchers for the use of substitution services.

Cooperation for innovation

- Encourage the adhesion of young farmers in Operational Groups.
- Promote the installation of start-ups.

Training, discussion groups, peer-to-peer reviews, cross-visits and other forms of knowledge sharing

- Training programmes that engage young farmers in networks, discussion, groups, and other interactive peer-to-peer learning and networking experiences, by including more experienced farmers.
- Exchange programmes for young farmers.
- Study visits and participation to seminars and demofarms events.
- Mentorship and Knowledge Transfer: Advisory services foster mentorship relationships between experienced farmers and younger generations, facilitating the transfer of valuable insights, best practices, and local knowledge.
- Training on business farm management, marketing, sustainable farming practices, technology in agriculture, Crop and Livestock Management, soil and water management, Regulatory Compliance, and other key topics.
- Training on accessing CAP funding, grants, and incentives for sustainable practices and public goods.

Advisory and innovation support services:

- Specific advisory programs and tools for young farmers.
- Vouchers Coaching/Tutoring services.

Information access and sharing:

- Information on databases and platforms to match demand and offer of farms and of lands.



The practices presented in this "Compendium" showcase three different and interesting approaches that leverage effectively the potential of AKIS interventions to support generational renewal in agriculture.

The case of the call for EIP-OGs set up by young farmers (IE) is clearly designed to provide a unique opportunity for young farmers to engage in collaborative innovation pathways that specifically address key issues related to their installation on farms, such as succession, skills development, and access to land and capital. This initiative also fosters new relational dynamics with other actors and peers, helping to build an important social network.

The case of the intergenerational knowledge transfer intervention (SE) is well designed to ensure the transfer of knowledge between generations and facilitate apprenticeships for young farmers. This is based on a structured mentorship program that is supported alongside contributions to their establishment on farms.

The last case (ES) involves the provision of a comprehensive training program that, through a mix of methods (e.g., study visits, seminars, workshops) and mentorship support, ensures thorough capacity building for young farmers.

FOOD FOR THINKING



Questions for opening the discussion and reflect on how to better direct AKIS interventions towards a skills development of young farmers, new entrants in agriculture and start-ups are:

Delivery:

- How to better organize coordination of national educational policies and schemes with CAP training?
- How to structure a call for Generational renewal projects applications?

SWOT & Needs Assessment:

- What specific skills do young farmers and new entrants feel are most critical for their success in today's agricultural landscape?

Training and Capacity Building

- How to establish (and advertise) a catalogue of relevant training courses, Mentorship programs, for a smooth access by potential users?
- How to facilitate the access study visits?

Monitoring and Evaluation

- How to structure and advertise a repository of demand and offer of farms/lands?

Advisory and innovation support services:

- How to facilitate the access to specialized high quality advisory programs, coaching/tutoring services for young farmers?

HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



- The **collection of "AKIS-in-Practice"** must be expanded through continuous dialogue with partners to provide a broader scope of the different approaches that can contribute to achieving CAP specific objectives relating to generational renewal.
- **Workshops, informative and capacity building sessions within the CoPs** can be used to share and discuss on the effectiveness of approaches already put in practice and practical implications. These events might be directed to co-develop/adapt possibly innovative combinations of AKIS interventions with the CAP and national support to young farmers.
- Workshops on the **EU research and innovation projects** focusing on the specific topics to share knowledge and to put in use already delivered practical advisory/monitoring tools and guiding documents (e.g. policy briefs, interventions schemes, digital tools). Among the others, for example, some relevant projects are: Ruralization, COCOREADO, and other projects.

FURTHER SOURCES OF INFORMATION



- EC website.
- Preliminary study support for the EC on “The impact of the common agricultural policy on generational renewal, local development and jobs in rural areas”.





Support to
generational
renewal

Get-Inspired4AKIS! 9.1

**The CULTIVA program.
Empowering Young Farmers
through Practical Training and
Sustainable Innovation**



Keywords/Tags



Peer-to-peer



Study visits



Young farmers



Training



Potential users



Managing Authorities



AKIS Coordination Bodies



Advisors



Farmers



Training institutions



RATIONALE



Rural areas across Spain are experiencing an aging population, with fewer young people choosing to take up farming as a profession. The agricultural sector faces additional hurdles, such as the need to modernize farming practices to address environmental sustainability, climate change, and market competitiveness. To secure the future of agriculture, it is vital to support the next generation of farmers by providing them with access to modern techniques, innovation, and knowledge-sharing platforms.

In this perspective, the AKIS strategy can contribute developing a system capacity which help young farmers dealing with the increasingly complex challenges of the agricultural, agri-food, and forestry sectors through engaging in more appropriate holistic approaches to business management. Beyond strengthening knowledge and skills, it is essential to create spaces for knowledge exchange that foster the sharing of practices and experiences among farmers. These spaces encourage mutual learning through practical exercises, group collaboration, and the co-solving of real-world problems in a dynamic environment. Such peer-to-peer learning, supported by informal interactions and shared experiences, becomes critical for addressing current agricultural challenges such as climate change, biodiversity loss, resource management, and the evolving role of agriculture in society. However, to be truly effective and transformative, these exchange platforms must operate at a multi-actor scale, including research centers, universities, producer organizations, advisory services, innovation support services, local institutions, and individual entrepreneurs, all of whom contribute with distinct yet adaptable roles over time.



The CULTIVA Programme is financed by the Spanish Ministry of Agriculture, Fisheries, and Food (MAPA) to support, since 2023, young farmers by structured training programs that include, among the others, practical on-farm visits across Spain.

These visits are designed to expose young farmers to best practices, innovations, and cutting-edge technologies being implemented by experienced farmers who have embraced modern and sustainable agricultural methods. The goal is to transfer knowledge that addresses both production efficiency and environmental sustainability, by supporting young farmers acquiring adaptive capacities to modern challenges such as climate change, resource scarcity, and market volatility.

The visits cover a wide range of agricultural practices, including:

- **Sustainable farming techniques:** Participants learn methods such as organic farming, agroecological practices, and precision agriculture, aimed at reducing environmental impact.
- **Water and soil management:** Demonstrating efficient irrigation systems and soil conservation techniques to optimize resource use and enhance resilience to climate change.
- **Digital farming tools:** Introducing the use of technologies like GPS-based farming, data management, and smart farming tools to improve production outcomes.
- **Diversification and marketing strategies:** Helping young farmers understand how to diversify their products and access new markets, particularly focusing on high-quality, niche, or organic products that meet growing consumer demand.

The CULTIVA training program provides participants with real-world, practical knowledge that goes beyond theoretical understanding, making it easier for them to apply what they learn to respective farms, through fostering a culture of continuous improvement and adaptation, that is essential to run ecological transition.

PROGRAMA CULTIVA

¿Qué es?
El Programa CULTIVA es un nuevo recurso formativo impulsado y financiado por el Ministerio de Agricultura, Pesca y Alimentación (MAPA) en colaboración con entidades de ámbito nacional.

¿Para qué sirve?
Su objetivo es ofrecer a los jóvenes agricultores y ganaderos acceso a formación práctica.

¿Cómo se desarrolla?
A través de estancias formativas en explotaciones modelo de acogida repartidas por todo el territorio nacional.

¿Quiénes participan?

- Entidades gestoras**
Identifican las explotaciones modelo y coordinan las estancias.
- Explotaciones modelo**
Acogen y forman a los jóvenes en sus instalaciones.
- Jóvenes agricultores y ganaderos**
Alumnos participantes en las estancias formativas.



So far, the call for applications to the CULTIVA program have been launched by MAPA on yearly basis and are opened to young farmers (box 2) interested in improving their farming practices and expanding their skills. Participants apply through MAPA's online platform, where they specify their interests and the agricultural sectors they wish to explore. Once selected, they are matched with hosting farms that align with their learning goals. The hosting farms are carefully selected based on their expertise in specific topics of sustainable agriculture, such as sustainable agriculture, organic farming, modernized livestock management, and the use of advanced technologies in crop production.

The steps involved in the CULTIVA Programme are as follows: Publication of the call and start of the application period for the entities in order to organize the CULTIVA program.

1. Publication of the catalogue of training courses on the website of "Jovenes rurales" of MAPA.
2. Application period for young farmers.
3. Allocation of grants and places on training placements.
4. Start of the training courses.

The visits are tailored to meet the needs of the participants, who may range from 1 to 5 at the same hosting farm, and they are routed on 5 up 14 training days, that are preferably consecutive.

Particularly:

Short-term visits (5 days): might be ideal for farmers looking for an introduction to new techniques or those seeking to address a specific challenge in their own farms, such as learning about organic certification or precision irrigation.

Longer stays (up to 14 days): these visits can provide a more in-depth experience, where participants can immerse themselves in the daily operations of the farm and gain comprehensive knowledge of farm management strategies.

During the stays, an average of at least 7 hours/day of training will be given, including on-farm training and complementary technical visits to other organisations, entities, associations, cooperatives and other farms in the area. In this way, participants are engaged in hands-on activities, such as preparing and maintaining organic soil, using digital tools for crop monitoring, managing water resources efficiently, or handling livestock in humane and sustainable ways. They also have opportunities for in-depth discussions with the hosting farmers, who act as mentors, by offering personalized advice and insights into overcoming both common and unique challenges in the agricultural sector.

Beyond practical learning, CULTIVA fosters networking and peer learning among young farmers. By connecting participants with successful, established farmers and with other young farmers, the program creates a platform for exchanging ideas, collaborating on solutions, and building a support network that extends beyond the training visits.

Box 1 : Beneficiary Organizations

Eligible entities for the CULTIVA program include general agricultural professional organizations at the national level, as well as nonprofit entities, associations, and organizations representing agricultural and livestock sectors in Spain that meet some specific requirements:

- **Legal Status:** Entities must have legal personality, meaning they are formally recognized as legal entities.
- **National Scope:** They must operate at a supra-autonomous level, as stated in their statutes, indicating a broad geographic reach across multiple regions in Spain.
- **Statutory Objectives:** The organizations should explicitly include professional development, training, and qualification improvement among their statutory goals.
- **Compliance:** Beneficiaries must not fall under any of the specific prohibitions that are outlined by the national law.

Box 2 : Requirements for participants

To be eligible for the CULTIVA program, applicants must meet the following key criteria:

- **Age:** Applicants must be classified as "young farmers," which generally means they are under the age of 41. In case of more than 41 years or older: the farmer has to be set up as an owner on or after 1 January 2019 when he/she was under 41 years old.
- **Farming Activity:** They must be actively engaged in farming, either as owners or managers of a farm. This ensures that the participants are in a position to directly implement the knowledge and practices they acquire through the program. The farm must be a SME.
- **Recent Entry into Farming:** Preference is given to individuals who have recently started their farming careers, typically within the last five years, to encourage the development of a new generation of farmers.

Box 3 : Assessment criteria

- + 6 points: if the young farmer settled between 2019 and 2024.
- + 4 points: if the young farmer settled between 2014 and 2018.
- + 2 points: if the young farmer in 2013 or earlier.
- + 1 point: if the young farmer is a woman farmer or livestock farmer.
- + 4 points: if the young farmer has never participated in the CULTIVA Programme.
- + 2 points: if the young farmer has participated in 1 to 3 stays in any of the five previous editions of the CULTIVA Programme.

The program encourages the establishment of model host farms that serve as training sites for young farmers. These host farms are selected based on their innovative practices and commitment to sustainable agriculture, offering young farmers valuable insights into modern farming techniques and operational excellence.

CULTIVA supports various subsidizable actions aimed at promoting professional training and skill enhancement. These may include:

- Organizing educational visits to model farms.
- Developing training materials and resources for participants.
- Facilitating workshops and seminars that cover sustainable practices, technology use, and management strategies.

To ensure effective training experiences, stay plans are created for each participant. These plans outline the objectives of the visits, including the specific learning outcomes expected from the training. They also include logistics such as the duration of the stay, accommodations, and a detailed schedule of activities at the host farm. By clearly defining these elements, CULTIVA ensures that participants receive maximum benefit from their training experiences, facilitating the transfer of knowledge and skills that can be applied in their own agricultural practices.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



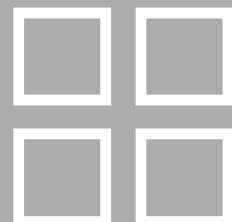
The CULTIVA program is highly replicable in other regions or countries facing similar challenges with aging rural populations, lack of skilled young farmers, and the need for modern agricultural practices. Several key factors contribute to its replicability:

Tailored Learning Experiences: CULTIVA's success lies in the ability to customize the learning experiences based on the specific needs of each participant. A replicable version of the program would require a similar matching process, ensuring that young farmers are paired with host farms that align with their interests, production type, and learning goals. This level of customization ensures the training is relevant and effective.

Logistical and Financial Support: Providing financial assistance for travel, accommodation, and the costs associated with the training visit is essential for ensuring that young farmers, who may have limited financial resources, can participate.

Mentorship and Continued Support: An essential component of CULTIVA is the mentoring relationships formed between young farmers and experienced hosts. To ensure long-term success, replicating the program should include follow-up mechanisms, where participants can seek further advice or support from their mentors after the training. This helps to solidify the lessons learned and ensures that the knowledge transfer has a lasting impact.

By creating a framework that focuses on practical, on-site learning, strong mentorship, and governmental support, CULTIVA provides a blueprint for similar programs aimed at empowering young farmers, enhancing agricultural sustainability, and fostering innovation in the rural sector.



BENEFITS



- Hands-on Training: Practical experience in modern farming techniques.
- Knowledge Exchange: Direct learning from experienced farmers.
- Sustainability Promotion: Focus on eco-friendly agricultural practices.
- Access to Innovation: Exposure to advanced technologies and methods.
- Networking Opportunities: Building connections with peers and mentors.
- Professional Growth: Enhanced skills and competitiveness for young farmers.
- Sector Resilience: Contribution to the long-term sustainability of agriculture in Spain.

FURTHER SOURCES OF INFORMATION



Real Decreto 425/2021, de 15 de junio

Documentation of CULTIVA program



Spain



Programa CULTIVA
bzn-jovenes@mapa.es





Support to
generational
renewal

AKIS-in-practice! 9.2

Inspiring the Next Generation: Engaging Youth through the Rural4Learning Project



Keywords/Tags

 Secondary school
integration

 Peer-to-peer learning

 Study visits



Potential users



Managing Authorities



AKIS Coordination Bodies



Advisory services providers



ISS



Farmers



CAP Network



RATIONALE



Knowledge transfer and innovation are essential for the sustainability of the agricultural, agrifood, and forestry sectors, and remain a priority for the growth of rural areas in a rapidly changing world. With agriculture facing challenges such as climate change, resource scarcity, and technological advancements, equipping the next generation with relevant training ensures they can adopt innovative and sustainable practices. This education not only prepares young people to become skilled farmers/advisors but also instills a sense of responsibility for environmental stewardship and food security. By empowering youth with agricultural knowledge, we also encourage entrepreneurship, driving economic growth and revitalizing rural communities. Thus, it is essential to bridge the knowledge divide between different geographic areas and strengthen networks that act as cognitive multipliers. These networks can ensure equitable and collective learning, facilitate the exchange of knowledge and expertise, and support both formal and informal methods of knowledge transmission. In this sense, agricultural institutions and universities can play a crucial role in providing such competences and knowledge.



As part of the National Rural Network, the Italian Ministry of Agriculture, Food Sovereignty and Forestry promoted the project "Rural4Learning. Cultivate your passion for the land". The aim was to educate the students of Italian agricultural institutes and universities on experiences, knowledge and good practices of rural development. At the same time, the project offers to Italian Regional Managing Authorities a replicable model, through the intervention dedicated to the Communication of the CAP Strategic Plan, to transform rural development good practices into a tool for sustainable growth. The collaborative project model uses a format that combines e-learning lessons with researchers, sector experts and university lecturers with a week-long field experience that stimulates networking between public administrations, the education system and farms. Rural4Learning also fosters peer-to-peer exchange, allowing participants to learn from one another's experiences in different rural settings. The involvement of successful local farmers and entrepreneurs provides inspiration and mentorship, while practical placements in rural enterprises offer real-world experience. The program concludes with a project competition, encouraging participants to present business ideas or projects that could contribute to the rural economy.

The Rural4Learning project comprises two tracks: 4University and 4School.

- **Rural4University** targets university students in their third year of a Bachelor's degree and first year of a Master's degree, with the primary goal of providing in-depth training and information on sustainability and innovation. The program aims to raise awareness of best business practices and successful experiences supported by the CAP Strategic Plan, offering students practical insights and knowledge tailored to these critical areas.
- **Rural4School** provides a training and communication pathway on rural development policy, designed for teachers and students of Agricultural Technical Institutes, and recognized as part of the **Alternanza Scuola Lavoro** (school-work alternation program). The initiative aims to strengthen the connection between Agricultural Institutes, local territories, and farms, while also guiding students toward university education and future employment opportunities.

In 2023, the initiative evolved into "**Open Farms: Rural Connections**", which aims to engage new generations not only at the individual level but also as integral parts of a broader ecosystem that connects businesses, rural areas, and territories. Specifically, it offers students at Agricultural Institutes a 'mini-learning' course designed to facilitate the exchange of knowledge and experiences across generations. This approach fosters collaboration and strengthens the ties between education and agricultural practices.

During the programming period 2014-2022, Rural4Learning initiatives played a crucial role in promoting discussions about rural development among diverse stakeholders and systems. Specifically, Rural4Agrari (2014-2016) involved 33 agricultural institutes and 1,600 students; Rural4Università (2017-2018) engaged 17 universities across Italy with 1,500 students and was replicated by various regions in 2019-2020. Rural4University in 2021 and Rural Worlds in 2022 included 24 universities, 800 students, and over 50 sustainable and innovative farms (source: Lattanzio, 2023). This initiative also promoted dialogue on rural development among diverse stakeholders, supported peer-to-peer knowledge transfer, and actively contributed to selecting, analyzing, and compiling best practices for the new CAP. This engagement facilitated a focus on the Strategic Plan for the CAP 2023-2027, emphasizing the ecological and digital transitions while enhancing all links in the agri-food supply chain by nurturing innovative ideas, proposals, and solutions from the teams involved.

Box 1 : Alternanza scuola-lavoro program (school-work alternation program)

Alternanza Scuola-Lavoro (now known as PCTO - Pathways for Transversal Skills and Orientation) is a mandatory part of the educational curriculum for high school students in Italy.

Specifically, it requires:

- 210 hours for students in vocational schools.
- 150 hours for technical institute students.
- 90 hours for students in high schools (licei).

The PCTO aims to provide practical work experience, and it is part of the students' final assessment. It involves collaboration between schools and external organizations, including companies and non-profits, and plays a key role in preparing students for the workforce by fostering soft skills, critical thinking, and hands-on experience.

IN PRACTICE



Open Farms 2023 - Rural Connections is a project promoted by the Italian National Rural Network, with the collaboration of CREA, financed with funds from the Technical Assistance measure of 2014-2022 RDP and joined by several Italian regions and universities.

The activities of the 2023 Open Farms – Rural Connections initiative are divided into the following phases:

I. Online training, dissemination and research (48h)

Training

Context and topics: Common Agricultural Policy (CAP) for the period 2023-2027. CAP National Strategic Plan (NSP). Ecological regime, Common organisation of agricultural markets (CMO), agro-climatic-environmental measures.

Outputs: 1 training course structured in 3 teaching modules, 1 final test to check learning.

Target audience: university students (bachelor, master, doctorate or master) from the project partner universities.

Dissemination

Context and topics: CAP Strategic Plan: Sustainability, quality, innovation, cooperation.

Outputs: Part 1: 1 workshop aimed at university students, preparatory to the construction of the dissemination event (virtual classroom, 60'). Mini-learning for knowledge transfer to secondary school students (university or virtual classroom, 120').

Part 2: 1 teaching workshop also aimed at preparing slides, video-interviews and a dissemination kit, 1 science dissemination event aimed at professionals and the public.

Target audience: students and project partners.

Research

Context and topics: CAP, PSP. Sustainability, quality, innovation, cooperation

Themes: sustainability, quality, innovation, policies

Outputs: 1 public call addressed to farms, 1 training workshop, 2 thematic cafés with farms, with hearings, focus groups and group work, aimed at listening, analysing and evaluating farm cases.

Beneficiaries: 100 participants selected from the participants in phase 1.

It was also possible to join individual training units (e.g. online training).

II. Field Action namely Hackathon Camp (48h)

Context and topics: CAP SP: Sustainability, quality, innovation, cooperation.

Output: a field course, structured in 3 study visits (specialised farms - plant and animal production, mixed), study and analysis of practical cases, team research of ideas and solutions and development of project proposals.

Target group: 48 motivated students, selected from those who took part in the first two phases, 3 stakeholders and 3 farms (case studies) selected in phase 2.

Program of the final phase of the Hackathon Camp 2024

DAY 1 - AGRICULTURE OF SHARING

h 12.00 | Participants' registration and welcome

h 13.30 l Networking lunch

h 14.30 l INAUGURAL CEREMONY - Introduction to the Camp

h 17.30 | Study tour

h 18.30 | DYNAMICS OF INTERACTION WITH FARMERS: CONTADINNERS - Sharing of products and experiences

h 21. 00| Dinner

DAY 2 - HACKATHON LAUNCH AND STUDY VISIT

HACKATHON LAUNCH - Working group formation and team building

h 10. 00 l STUDY VISIT on farm 1

h 13.00 | Tasting of the farms' products

h 14.30 l STUDY VISIT on farm 2

h 18.00 | Return to the hotel

h 20.00 | Dinner at the hotel 3 - GROUP WORKSHOPS AND IDEAS WORKSHOP

DAY 3

h 09. 00| METHODOLOGICAL TOOLS - Tutors' Pitch

h 10.00 | Team work and brainstorming - Study and analysis of company cases

h 13.00 | Lunch

h 14.00 | WORKSHOP OF IDEAS - Technical-scientific and creative workshops - Innovation and support tools for farm problem solving - Start-up and design thinking

h 16.00 | Production of papers

h 18.00 | Guided tour of the city hosting the location

h 20. 00 l Dinner

h 21.30 | Focus group with the participants - CULTURAL FOOD AND DISSEMINATION IN THE FIELD

DAY 4

h 09.00| CULTURAL FOOD - Co-design to generate opportunities for companies

h 10.00 | DISSEMINATION IN THE FIELD - Exchange of ideas and sharing of results with farms

h 13.00 | Lunch

h 14.00 | Closing of the workshop

Box 2 : Contadinner

Contadinner is an innovative initiative developed by Vazapp aimed at revitalizing the agricultural landscape in Apuglia Region, Italy, but then it has been exporting outside the country. The project organizes a series of dinners in rural settings, where young farmers gather to discuss their challenges and share experiences in a collaborative environment. The name "Contadinner" combines "contadino" (farmer) and "dinner," highlighting its focus on engaging farmers in meaningful conversations about their work and community.

It became a format of interaction used during the camp of Rural4Learning.

Originally, it took place in the home of a farmer, who was asked to invite their neighbors. This setting creates an informal atmosphere that immediately fosters trust. The meetings are conducted in a circle; there is no one assigned to teach or give orders. The gathering begins with participants introducing themselves in pairs to alleviate any discomfort about speaking in front of the group, allowing them instead to make eye contact. Each person then presents their partner to the entire group.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



To ensure the replicability of the Open Farms initiative, several key elements must be considered:

- **Formalized agreements:** Establishing formal agreements between CAP Network, regional Managing Authorities and Universities is essential for standardizing the collaboration across different regions. This creates a consistent framework, ensuring both educational institutions and local authorities are aligned in their goals and commitments, facilitating long-term cooperation and cross-regional fertilization of student's skills.
- **Budget allocation:** A dedicated budget from CAP SP Technical Assistance interventions (or other national/regional funds) is necessary for both the training and fieldwork phases.
- **Scalable training model:** The program's e-learning modules, which combine theoretical lessons, practical case studies, and testing, can easily be adapted for different regions/Member States or educational institutions. This model can be adjusted to reflect local agricultural practices and challenges, making it applicable in various contexts.



BENEFITS



- Youth engagement by providing educational opportunities and practical experience.
- Skill development tailored to the needs of the agricultural and rural sectors.
- Promotion of sustainable agricultural practices, encouraging participants to adopt new technologies and methods that can enhance productivity while minimizing environmental impact.
- Creation of networking opportunities among youth, local businesses, educational institutions, and agricultural organizations.

FURTHER SOURCES OF INFORMATION



Rural4learning website: <https://www.rural4learning.eu/?redirect=0>

RuralWorlds Handbook

Catalogue of good practices of Italian NRN activities

Open farms video



Italy



**Council for agricultural
research and economics**
Paola Lionetti:
p.lionetti@masaf.gov.it

Watch this AKIS-in-Practice!





Support to
generational
renewal

AKIS-in-practice! 9.3

Bridging Generations for Sustainable Farming: Slovenia's Intergenerational Knowledge Transfer Initiative



Keywords/Tags



Peer-to-peer



Training



Study visits



Young farmers

Potential users



Managing Authorities



AKIS Coordination Bodies



Advisors



Farmers



Training institutions



RATIONALE



The agricultural sector in Slovenia, as in many other European countries, faces significant challenges in ensuring the sustainability of farming due to an aging population of farmers. One of the key obstacles is the generational renewal in agriculture, as younger generations often lack the practical experience needed to manage farms successfully. While formal education provides foundational knowledge, it frequently falls short of equipping young farmers with the hands-on skills necessary for the day-to-day operation of farms.

Moreover, experienced farmers possess invaluable tacit knowledge related to local environmental conditions, traditional farming methods, and market relationships, which are not easily acquired through textbooks. Without a structured system for transferring this knowledge, there is a risk of losing key agricultural practices that are vital for maintaining sustainable, efficient, and productive farms.



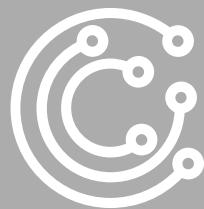
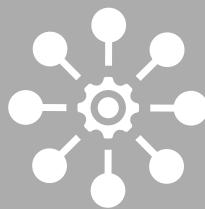
SOLUTION



The Slovenian Managing Authority, under the CAP Strategic Plan 2023-2027 has developed the Intergenerational Knowledge Transfer intervention that is directly addressed to facilitate the transition of agricultural knowledge between generations. In practice, this intervention offers financial and structural support to encourage experienced farmers to mentor younger successors. The initiative provides an opportunity for young farmers, particularly those entering the sector through family succession, to receive direct mentorship from senior farmers who have been operating their farms for at least a decade.

The solution is multifaceted:

- **Financial Incentives:** Experienced farmers receive financial compensation to act as mentors ensuring that they are motivated to invest time and energy into teaching practical farming techniques. This structured mentorship also focuses on navigating modern challenges such as farm administration, marketing strategies, and compliance with European Union (EU) regulations.
- **Structured Knowledge Transfer:** The program goes beyond informal mentorship by creating a framework where specific knowledge is passed down in a systematic way. Senior farmers demonstrate practical skills, such as soil management, crop rotation, and livestock care, while also helping younger farmers develop business strategies and implement sustainable farming practices.
- **Business Development Support:** The younger generation benefits not only from practical farm management knowledge but also from guidance on how to develop viable, long-term business plans. This aspect ensures that they are prepared to run profitable farms while staying in tune with environmental sustainability goals.





The intervention is operationalized through public calls for tenders directed to experienced farmers who meet the following specific criteria:

- Be the holder of his/her farm for at least 10 years before the ownership transfer.
- Be employed on his/her farm for at least 7 years.
- Experience in submitting summary applications and implementing CAP interventions.
- Permanent residence in the Republic of Slovenia at the time of submitting the application to the public call.

Once selected, mentors receive a payment over a three-year period, designed to compensate them for their time and efforts. The payment is disbursed annually, based on the realized transfer of knowledge and submitted report realized transfer knowledge and submitted report of the knowledge transfer process.

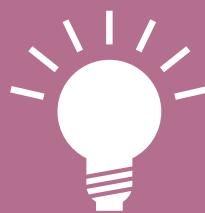
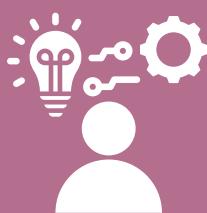
The younger farmers are selected through a parallel process, ensuring that the mentors are committed to pursuing farming as a full-time occupation. Knowledge and experience transfer are to be conducted in accordance with a program for the implementation of knowledge and experience transfer activities, which is submitted by the applicant, when they apply for the public call.

The activities described in the plan must:

- Be derived from interventions the farm is partaking in according to the submitted call for application, including practical demonstrations and safety instructions, such as various IACS based interventions.
- Include marketing activities.
- Include supportive activities in connection with the implementation of the young farmer's business plan.
- Include practical tips for solving specific problems and administrative activities within the framework of agricultural activities.
- Contribute to the social inclusion and connectedness of both generations.

Throughout the mentorship period, regular meetings, workshops, and on-farm demonstrations are organized. Young farmers and mentors must attend at least one counseling session of the Public Agricultural Advisory Service at the young farmer's farm during the period of knowledge transfer process.

These events allow for both formal training (such as presentations on sustainable farming technologies) and informal exchanges, where mentors and mentees can discuss real-world challenges and collaboratively develop solutions. It is considered an adequate transfer of specific knowledge and experience to the young farmer at least 15 hours per month for a total of 324 hours per year.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



Replicating Slovenia's intergenerational knowledge transfer model requires careful attention to both structural and financial elements. Critical steps include:

- **Adequate Budget Allocation:** A sufficient budget is vital for covering the costs of mentor stipends, training materials, and program management. Slovenia allocated approximately €1.9 million to this initiative. The funding must be sufficient to incentivize senior farmers to participate actively while also ensuring that young farmers receive the resources, they need to implement new practices.
- **Monitoring and Evaluation:** Regular assessments, both qualitative and quantitative, ensure that the program is meeting its goals. These evaluations also help to identify areas where additional support or adjustments might be necessary.
- **Use of mixed methods:** By promoting both formal (through structured workshops) and informal (on-the-job mentoring) learning, this approach ensures that the program can cater to the diverse needs of different agricultural sectors.

BENEFITS



- Strengthens generational renewal in agriculture by equipping younger farmers with the necessary practical skills.
- Ensures continuity of agricultural knowledge, enhancing farm management practices.
- Encourages innovation and sustainability within the farming sector, benefiting rural economies.
- Strengthening of resilient communities in rural areas by fostering collaboration between generations.



FURTHER SOURCES OF INFORMATION



1st public call for intervention Intergenerational transfer of knowledge from the Strategic Plan of the Common Agricultural Policy 2023-2027 for the year 2023

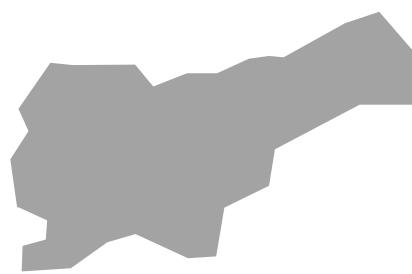


Slovenia



Marija Brodnik Lodewijk, Ministry for Agriculture, Forestry and Food – responsible for intervention Intergenerational transfer of knowledge:
marija.brodnik-Lodewijk@gov.si

Watch this AKIS-in-Practice!





Support to
generational
renewal

AKIS-in-practice! 9.4

Fostering Generational Renewal in Farming through EIP-AGRI Operational Groups”



Keywords/Tags

 Young farmers

 Operational Groups

 Generational renewal

Potential users

 Managing Authorities

 AKIS Coordination Bodies

 Operational Groups

 CAP Network



RATIONALE



Generational renewal in farming is one of the most pressing challenges faced by the agricultural sector in Ireland. The aging farming population poses a significant threat to the long-term sustainability and competitiveness of the sector. The extremely low proportion of young farmers leads to concerns about innovation, productivity, and the ability to meet the environmental and economic challenges that modern agriculture faces. Without a strong influx of younger generations, Irish agriculture risks stagnating, failing to adopt new technologies, and falling behind in meeting sustainability goals. The European Union's CAP also emphasizes generational renewal as key to maintaining a vibrant and resilient agricultural sector. On this regard, it is worth noting that young farmers, with a strong inclination toward investment and technology, are well-positioned to drive sector modernization. Engaging them in diverse rural networks facilitates knowledge exchange, collaboration, and innovation. Evidence shows that when training and advisory services accompany access to capital grants, installation aid, or Young Farmer (YF) supplements, the impact on intergenerational knowledge transfer is clearly positive; while the continuous advice and business planning throughout the installation process of YF, in the past, demonstrated an added value.

For this reason, Ireland has committed to addressing this challenge through the new CAP and additional national initiatives. The "Our Shared Future" Programme for Government underscores this commitment by supporting young farmers. Similarly, the Food Vision 2030 strategy, led by stakeholders in the agri-food sector, emphasizes the importance of generational renewal. It outlines several actions, such as sustaining existing levels of support, enhancing land mobility and succession planning, and promoting education and career diversity in the agri-food sector.

SOLUTION



By applying an overall strategic but well targeted approach to modernization through innovations dealing with the different topics of the CAP, the managing authority of the CAP SP of Ireland (namely, DAFM - Irish Department of Agriculture, Food and the Marine) promotes the setting up of EIP-Agri OGs that specifically aim at addressing each of the specific objectives of the CAP, including the 7th “Generational renewal”.

In this specific case, a call for proposals by EIP-Agri OGs was launched having the goal of increasing the attractiveness of farming for young people by providing them with the tools, knowledge, and support systems necessary to succeed.

IN PRACTICE



The call for EIP-OGs specifically calls for solutions addressing crucial issues relating to the young farmers installation and the generational renewal in Irish agriculture. Proposals are selected based on their relevance and impact to meet:

- **Farm succession planning:** helping older farmers pass on their businesses to younger generations.
- **Business skills development:** equipping young farmers with financial management, market access, and strategic planning skills.
- **Sustainability initiatives:** encouraging younger farmers to adopt sustainable farming practices and technologies that meet environmental targets.
- **Access to land and capital:** overcoming barriers that prevent young people from entering farming, such as high land prices and difficulties in securing financing.

The selection of the EIP-OGs passes through the following 3 phases:

Phase 1: open call for the submission of initial proposals and their review by an evaluation committee.

Phase 2: Applicants who pass the first stage are invited to submit a more articulated and detailed project proposal. This includes outlining administrative arrangements, identifying Operational Group partners, setting objectives, and specifying timelines and costs. The costs associated with preparing these detailed plans may be supported by this intervention, with proposals being evaluated by an expert panel.

Phase 3: Successful Phase 2 candidates will proceed to full project implementation, with funding provided for the associated implementation costs.

Successful projects have been based on an implementation period of between 3 and 5 years.

Proposed Selection Criteria for the European Innovation Partnership (EIP) Operational Groups		
The promotion of generational renewal on Irish Farms:		
Criterion	Components	Marks
Quality of the Proposal	Technical, managerial, and scientific aspects as well as value for money.	350
Relevance and Impact	Clear relevance to the identified CSP priorities, clear presence of innovation, and benefits and wider applicability in addressing approaches to promote generational renewal on Irish Farms.	350
Quality of the Operational Group	Relevant qualifications and experience, contribution proposed, and representative nature.	300

Source: *Guidelines for first phase applicants (2024)*

All applicants must meet a minimum score of 60% across each of the criteria to be considered for selection to Phase 2. Projects progressing to full implementation may receive up to €650,000 in funding, with the number of selected projects depending on the quality of the submissions.

The Irish CAP Network plays a crucial role in supporting the development of EIP proposals by providing resources and guidance for applicants. Through a webinar recording, it offers detailed information on Phase 1 requirements, including assistance options, tips for proposal drafting, steps to form an Operational Group, and the project selection process. Prior to Phase 2, the CAP Network will further support selected projects with guidance on requirements like project content, necessary documentation, and funding access. An evaluation committee will then assess proposals, focusing on feasibility, innovation, and practical implementation.

PRACTICAL IMPLICATIONS FOR REPLICABILITY



The replicability of this practice is due to:

- The permanent support from CAP Network.
- Sufficient budget allocation to the specific topic.
- Well defined application templates and guidelines for potential beneficiaries.



BENEFITS



The implementation of EIP-AGRI Operational Groups in Ireland has several benefits that extend beyond generational renewal:

- Improved collaboration between young farmers and research institutions, the initiative helps drive the adoption of new technologies and sustainable practices, which is essential for future agricultural competitiveness.
- Community development: The involvement of younger generations in farming ensures the vitality of rural communities and helps prevent rural depopulation, a common issue in many parts of Ireland and across Europe.
- Long-term Impact: possibilities to incentivize young farmers staying in rural areas and inverting the ageing population process.

FURTHER SOURCES OF INFORMATION



Fourth Competitive Call for Proposals under the CAP Strategic Plan 2023-2027 - Guidelines for first phase applicants.



Ireland



GenerationalRenewalEIP@agriculture.gov.ie



Theme 10

Improve the position of farmers in the food chain

Keywords/Tags



Value chain



F2F



Trading practices



Market



Consumer



Farmer



RATIONALE



The EU's food value chains are diverse and dynamic, designed to meet consumer expectations while enabling producers to add value.

The Common Agricultural Policy (CAP), through the Farm to Fork (F2F) strategy, specifically addresses power imbalances and promotes the inclusion of vulnerable participants in the EU food system by emphasizing the role of farmers in value chains (Specific Objective 3). This is achieved by promoting cooperation, supporting market-oriented production models, encouraging research and innovation, improving market transparency, and tackling unfair trading practices (UTPs).

On this regard, the Directive (EU) 2019/633 of the European Parliament and of the Council established fair trading practices in the agricultural and food supply chain, by highlighting some key points (box 1).

Box 1: Directive (EU) 2019/633 of the European Parliament and of the Council

- Scope: It applies to a wide range of operators in the agricultural and food supply chain, including producers, processors, and retailers, ensuring a level playing field.
- Unfair Trading Practices (UTPs): The directive focuses on preventing unfair trading practices that disproportionately affect small and medium-sized enterprises (SMEs), particularly farmers. This includes practices such as late payments, unilateral contract changes, and other exploitative behaviors.
- Protection of Farmers: By addressing UTPs, the directive seeks to strengthen the position of farmers in the supply chain, enabling them to negotiate fairer terms and receive more equitable compensation for their products.
- Encouraging Cooperation: The directive promotes cooperation among farmers and other supply chain actors, aiming to enhance their bargaining power and overall market position.
- Sustainability and Equity: By fostering fairer trading conditions, the directive contributes to the broader goals of sustainability and equity within the EU food system.
- Implementation: EU Member States are required to transpose the directive into national law, establishing legal frameworks that protect against unfair practices in their respective agricultural sectors.

Reporting Mechanisms: The directive requires Member States to establish national authorities responsible for monitoring compliance with the rules and handling complaints related to UTPs.

CAP reforms have strengthened the market orientation of agricultural production and improved the competitiveness of European producers. This has led to innovations along the supply chain, including product, process, and organizational changes driven by emerging technologies and evolving consumer demand. However, despite the EU agri-food sector's competitive edge in global markets and its leadership in variety and quality, farmers are less experiencing growth in their share of added value within the supply chain.

In fact, significant power imbalances persist, particularly disadvantaging producers who struggle to negotiate fair prices set by processors and distributors.

This issue is prevalent throughout the agri-food sector but varies in intensity and impact on the primary sector and across different supply chains and their stages, due to several factors: the type of product, its connections to the local territory, and the geographical scope of the value chains—whether local or more extensive (supra-regional or supranational). Additionally, dynamics with other territories and supply chains, including non-agricultural sectors like tourism, also play a role. Furthermore, relationships within value chains are increasingly shaped by access to natural resources and the effects of climate change.

In this context, the multitude of initiatives rethinking production chains from the perspective of food systems and the attachment of identity to territories has increased awareness of the crucial roles and functions of farmers in ensuring healthy and nutritious food. This has led to greater sensitivity regarding the compensation and income that farmers deserve for their resilience and enhanced competitiveness within the food production value chain. In this regard, it may be beneficial to draw on the results and tools from various R&I projects focused on food policies (e.g., the Food 2030 Project Family).

As it was highlighted by the EC the challenges and weaknesses of agrifood systems in Europe include:

- Power imbalance along the different stages of the value chains, mainly due to: (1) bargaining power asymmetries; (2) limited downstream expansion; (3) asymmetric price transmission along the chains; (4) high concentration of power in a few large players in processing, distribution, and retail that account significant rates on sales; (5) input market consolidation raises concerns about prices, innovation, and choices for farmers, leading to declining value share in the food supply chain due to rising costs and market power imbalances.

- Responsiveness to changing consumer preferences, mainly due to: (1) major sensitivity to nutritional quality and security of food; (2) major market orientation and attunement to consumer expectations (e.g. Tasty and affordable, High quality and healthy, climate and environmentally friendly, ethically produced); (3) health challenges relating to over-nutrition and obesity; (4) internal market changes based on evolving consumption patterns that create opportunities for improving farm economics, particularly related to the bio-economy and green and circular economies; (5) variety on how agriculture responds to consumer needs due to the different value chain pressures along the different stages.
- Low Concentration compared to other sectors, including rapidly evolving upstream input markets, hindering efficiency and bargaining power: (1) fragmentation of the primary sector combined with insufficient vertical integration within the primary sector and limiting control over the supply chain; (2) insufficient cooperation, still largely caused by lack of trust and perceptions of competition among farmers, insufficient awareness of the benefits of producer organizations (POs), individualisms over production and investment decisions, historical and cultural factors; (3) low structural changes in farming sectors against the faster evolutions of others.

Besides, positive developments in power balancing along supply chains are emerging from the connections between short value chains and zero-kilometer markets. Key benefits include:

1. **Direct Market Access:** Farmers can negotiate better prices and retain more value by selling directly to consumers, reducing reliance on intermediaries.
2. **Enhanced Bargaining Power:** Direct communication with consumers provides insights into preferences, informing production decisions.
3. **Stronger Relationships:** Closer ties between farmers and consumers foster trust and loyalty, leading to more stable demand and better market conditions.
4. **Transparency and Fair Pricing:** Improved understanding of market dynamics enables farmers to advocate for fairer prices and conditions.
5. **Community Support:** Local sourcing in short value chains generates community support, enhancing farmers' influence in decision-making processes.
6. **Adaptability and Resilience:** Farmers can quickly respond to changes in consumer preferences and market conditions, allowing for effective adaptation and diversification.
7. **Sustainable Practices:** Participation in short value chains motivates farmers to adopt sustainable practices, boosting their reputation and marketability as consumers increasingly value environmental and ethical considerations.

All these aspects highlight the fact that agricultural value chains in Europe are characterized by increasing complexity, which needs to be addressed more effectively by rebalancing the power of farmers at different stages. Pursuing this specific CAP objective must include a system-oriented approach that considers the multitude of interconnected socio-economic and environmental dynamics. This encompasses internal relationships within supply chains at various stages, as well as external relationships with territories and other supply chains, along with their respective internal power dynamics and modes of cooperation (e.g., with non-agricultural sectors). Additionally, connections to natural resources and climate change impact farmers' access to biological resources, while demographic changes drive shifts in the local labor market and consumer demands



HOW CAN STRENGTHENING AKIS STRATEGIES CONTRIBUTE TO ACHIEVING A BETTER POSITIONING OF FARMERS IN THE VALUE CHAIN?



The AKIS approach can more effectively navigate the growing complexity and dynamism of agricultural value chains by introducing a holistic vision for their balanced, resilient, and sustainable development. This should bring creating an enabling environment that empowers farmers at all stages of the value chain, through increasing major sensitivity and collective awareness along with developing more appropriate capacities towards more equitable income generation. In general, it may be very appropriate to mainstream AKIS interventions within the initiatives of territorial partnerships and governance entities that focus on the development and transformation of local systems. Examples include local action groups (LAGs), food districts, bio-districts, integrated supply chain initiatives, and former producer organizations. Moreover, requiring a more integrated and comprehensive project design that combines productive and non-productive investments with AKIS-related interventions is likely to lead to more market-oriented approaches and equitable development of supply chains.

More specific ways to collectively empower farmers, enhancing their productivity, market access, and overall position in the agricultural value chain include:

Training

- Enhancing capacities of farmers on negotiation skills, market dynamics, and sustainable practices to improve bargaining power and align with consumer demand for eco-friendly products.
- Enhancing capacities of farmers on business models that connect producers directly to consumers.
- Providing training in financial literacy, compliance with food safety regulations, and entrepreneurship to support farmers' transition to commercial farming.

Cooperation for innovation:

- Strengthening the cooperation for innovation interventions by producer organizations, to address problems of the specific value chain and enabling collective bargaining and joint ventures for processing and distribution.
- Encourage collaborative research to develop products that meet consumer expectations and build networks for sharing successful practices.
- Combining local development initiative and territorial/farm identity with more sectorial and value chain-oriented interventions leading to major closeness to consumers and quality food.
- Promoting the inclusion of consumers within OGs.
- Promoting the development of protocols and business models that are tailored upon the specific local value chains.
- Promoting cooperation for innovative governance and partnership models that connect consumers and producers along sustainable oriented supply chains.

Advisory and innovation support services:

- Offer tailored advice on vertical integration, fair pricing mechanisms, and market intelligence to help farmers adjust production and enhance their negotiating power.
- Provide guidance on branding and marketing to highlight quality and ethical practices.

Information access and sharing:

- Improve farmers' understanding of market dynamics, aiding risk management and resilience against environmental changes.
- Disseminate data on consumer preferences and market trends to empower farmers in decision-making and enhance productivity.
- Promote transparency in pricing and share success stories to build trust and responsiveness among stakeholders.

FIRST INSIGHTS FROM PRACTICES



The practices presented in this "Compendium" showcase some interesting and replicable approaches that effectively leverage the potential of AKIS interventions to contribute enhancing farmers' positions within the value chains in different ways.

The first approach includes integrated strategies, such as those seen in the integrated supply chain projects in Italy, which promote a well-organized combination of various CAP productive and non-productive interventions alongside AKIS-related efforts. These strategies foster vertical integration and concentration along the supply chain, based on a collaborative mindset across value chains and human capacities development, where the value and contributions of farmers are better recognized and enhanced to strengthen the overall innovativeness, effectiveness, and efficiency of the supply chain.

Another approach, also Italian, involves strengthening the position of farmers within the supply chain as part of a collaborative process, pursued more directly through EIP-Agri (Operational Groups) and with a focus on streamlining an effective interactive innovation model for the modernization of the specific supply chain.

Finally, the Dutch case presents a more focused approach aimed at addressing a fundamental issue of power imbalance for farmers within the value chains, specifically asymmetric price transmission along the chains. This is achieved through the establishment of a public service for information, reporting, and consultation about good and on unfair practices relating to farmers' bargaining power.

FOOD FOR THINKING



In this perspective, we could raise a few questions (not exhaustive) to help us reflect on how to better direct AKIS interventions towards the achievement of objective 3 of the CAP:

- How to organize an extension service on unfair trading practices and ensure prompt monitoring and information for farmers.
- How to better intercept, by AKIS visioning and interventions, food systems at the very last stages of agrifood value chains?
- Which roles and functions can advisors play and by which specific competences and skills?
- Which advisory expertise and tools are already in place to support farmers dealing with bargaining powers within the supply chains?
- How to plan integrated approaches and AKIS mainstreaming along the supply chains?



HOW TO FOLLOW-UP WITH THE RESULTS OF COLLECTION OF AKIS-IN-PRACTICE!



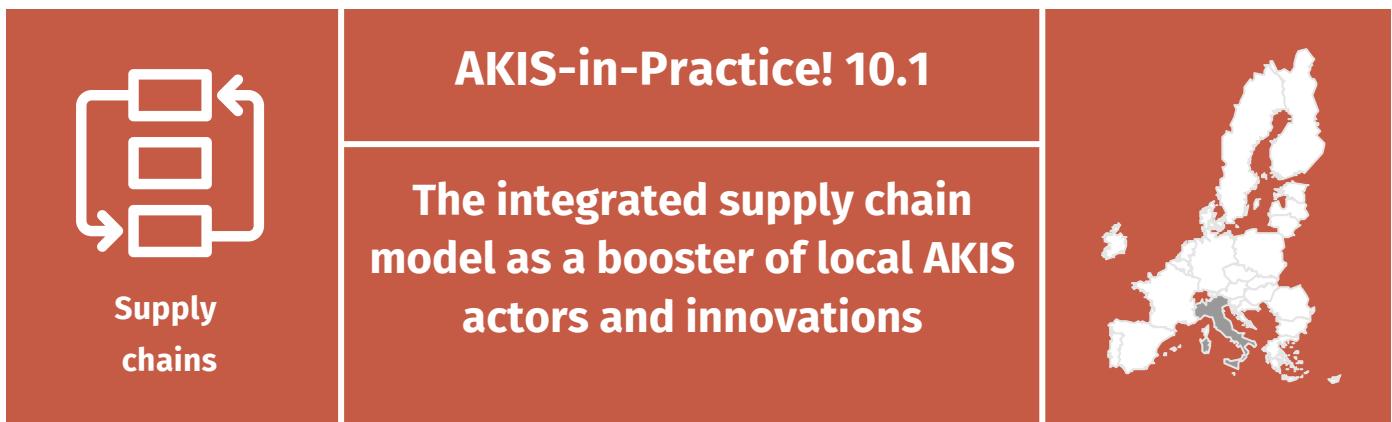
- The **collection of "AKIS-in-Practice"** must be expanded through continuous dialogue with partners to provide a broader scope of the different approaches that can contribute to achieving CAP Objective 3.
- A specific **networking** activity with other EU research and innovation projects that are focused on topics relating to the better position of farmers/producers within the value chain should bring to increase awareness and share knowledge and to put in use of already delivered practical tools and guiding documents (e.g. policy briefs, interventions schemes). Among the others, for example, some relevant projects are: SKIN, agroBRIDGES and the other SISTERS HORIZON projects, Corenet, SMARTCHAIN, FUSILLI and all the Food 2030 Project Family,
- **Joint workshops with the CoP** might be directed to increase familiarity and to co-develop possibly innovative and major focused combinations of AKIS and non-AKIS interventions that can help achieve more effectively objective 3 of the CAP.

FURTHER SOURCES OF INFORMATION



- EC (2018) Policy brief CAP objective 3 – Improve imbalances in the food chain.
- EC (2018) Full report: Improving market outcomes – enhancing the position of farmers in the supply chain.
- OECD/FAO (2016), OECD-FAO Guidance for Responsible Agricultural Supply Chains, OECD Publishing, Paris. <http://dx.doi.org/10.1787/9789264251052-en>
- AgriResearch factsheet on sustainable, circular and innovative value chains.
- EC website section on Food supply and food security.
- EC website section on Food supply and security dashboard.





Keywords/Tags

-  Advisors
-  Supply chain
-  Quality production
-  Farmers positioning
-  Interaction

Potential users

-  Managing authorities of the CAP strategic Plans
-  Advisors and innovation support services providers
-  Farmers and other operators along the supply chains
-  Consumers



RATIONALE



The CAP 2023-2027 aims to improve farmers' position in the value chain as part of its broader goals of promoting a smart, resilient, and diversified agricultural sector. Despite the EU agri-food sector's competitive edge in global markets and its leadership in variety and quality, farmers are less experiencing growth in their share of added value within the supply chain.

Key problems of the farmers' position in the value chains include:

1. Limited Market Power: Farmers struggle to capitalize on opportunities to enhance their market power due to low integration and asymmetric price transmission throughout the supply chain.
2. Low Concentration: The agricultural sector remains less concentrated than other sectors, including rapidly evolving upstream input markets, hindering efficiency and bargaining power.
3. Changing Consumer Demands: Increasingly discerning consumers expect higher quality, health-conscious products, and sustainability, necessitating better communication and cooperation between consumers and producers.

In Italy, the number of actors and their positioning and competitiveness along the segments of the different agri-food supply chains vary significantly. The system is not competitive, as market structures at various stages between consumers and farms deviate significantly from perfect competition. This structure generally weakens farmers' bargaining power with both input and service suppliers and buyers of their products.

To address these issues, the CAP programmes traditionally endorse strategies that encourage farmers to strengthen cooperation along the supply chains, to focus on higher value-added segments through diversification, certified quality production, and local supply chains. Additionally, CAP strategies include enhancing value chain synergies, improving trading relationships, increasing transparency in market information, and promoting futures markets for commodities.

SOLUTION



Since the programming period 2000-2006, funding the integrated supply chain projects (ISCP) was successful to achieve goals that under the CAP 2023-2027 regards OS3 and represent a model of intervention that Italy has been experimenting with to favour aggregation processes in the agri-food sector. In this sense, an ISCP aims to create or boost the main agri-food supply chains and the forestry chain by favouring the emergence of systemic relations between actors of different nature and proposes more complex and articulated solutions to sectoral or territorial problems. Therefore, it needs to be a complex and integrated project (business plan) that includes different types of CAP SP interventions aimed at systematizing public intervention by calibrating it for the needs of the specific local value chain.

From the various experiences in Italy, the main purposes attributed to the ISCPs are the following: i) promotion of the integrated approach along the specific value chain, ii) experimentation and reinforcement of collaborative practices, iii) improvement of the offer of local collective assets, consolidation of networks and creation of socio-economic capital, iv) creation of conditions for a fairer re-distribution of the added value among the different segments of the agri-food supply chains and v) improvement of work quality. Other specific objectives connected to the primary purposes of the development of a regional production sector are added to the general objectives: i) increase of added value in all the sector's segments, ii) growth of competitiveness and iii) orientation towards the supply chains' market.

In general, this model of intervention has a sectorial dimension and are defined around business development plans (namely the ISCP) that include AKIS or other system-types interventions, like training, cooperation for innovation and advise along with investments on modernization and quality schemes, and typical structural-types interventions: other forms of productive and unproductive investments, diversification, setting up of young farmers, forestry investments, small operators and rural tourism, other forms of cooperation, etc.

The model of the ISCP foresees that a project must respect certain basic principles:

- **Bottom-up approach:** the integrated project starts from the requirements of a group of actors who, identified the specific needs, outlines a sectorial or territorial intervention strategy.
- **Inter-branch:** the integrated project is a complex project that attempts to involve all those who participate in a production process or who live and operate in a specific territory, creating specific synergies and influencing economic and social relationships.
- **Coordinated use of several intervention instruments:** the integrated project must allow access to several CAP intervention and eventually to other public policy instruments, in order to support all the interventions deemed useful for the purposes of the planned strategy.
- **Presence of a specific development strategy:** integration between several subjects needs to be supported by a specific strategy that outlines peculiarities and justifies the actions undertaken within the project.
- **Creation of a more or less structured partnership:** whose members are representative of the interests of the sectors and territories involved. The partnership must have precise responsibility and ensure realisation of the project.



A supply chain project proposes a sectorial intervention strategy and at the same time collects the different individual requests imputable to the development objectives of the supply chain.

The elements that configure an ISCP and that must be clearly stated by the applications are:

- Multiplicity of objectives of the different partners and for the entire supply chain to be integrated into an overall sectorial intervention strategy.
- Clear and consistent combination of the different types of interventions at the service of the project strategy and pursued objectives.
- Aggregation of financial resources around a project idea and their clearly distribution to each partner consistently with the individual commitments to interventions.
- Integration between the operators all along the supply chain, namely, from farm to fork.
- Co-ordinated actions, aimed at returning economic benefits to all partners.
- Use of different skills and professionalism necessary to design and implement actions.

On this respect each applicant ISCP must be based on a cooperation agreement of the partners that stands for the formal contract and blinds them to implement all the interventions and tasks foreseen by the project. This includes the following information:

- List of partners, roles and responsibilities.
- Identification of the Lead Partner and assignment of the tasks: application, coordination, organisation and monitoring, financial reference for the managing authority and reporting.
- Producers are clearly committed to supplying the processing/marketing entities with a minimum percentage of their farm production. While, processors and retailers must commit to utilise in the processing/marketing plants the agreed minimum fixed amounts.
- Duration of the agreement, which must be longer than that foreseen for the implementation of the supply chain project, definition of possible penalties in the event of non-compliance with the commitments made by partners and operational modalities in the event of takeover/integration of partners.
- Identification of a productions traceability system.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Managing authorities launch calls for applications for this type of integrated intervention.
- Once selected, public funding is assigned to the project leader that is the legal represent of the partnership.
- Partnerships are normally set up by a legal cooperation agreement which juridical form is due to national laws.
- Funds are paid to the project leader and then reversed to the partners based on the rules established by the cooperation agreement.
- The reservation of CAP funds to this model of intervention is normally based on a context and SWOT analysis that let emerge the needs and opportunities of the specific supply chains to address. However, less directionality might be put in use to enable more grass-roots ideas and approaches.
- Common procedures (administrative, financial) and templates for project description and reporting must be clearly defined by the public calls for application.

BENEFITS



- Enlargement of business models' perspectives, improved capacities of global farm management based on the combined use of multiple types of interventions and a major orientation to market opportunities.
- Targeted AKIS funding to contribute to OS3 of the CAP by tailoring sectoral interventions on the specificities of the different supply chains and rural areas.
- Creation of an enabling environment for innovations and local systems'/supply chains' transitions, bridging the gaps between research and production.
- Empowerment of farms and their better positioning along the supply chains.
- The partnership helps going beyond the technical-economic economic capacity and the productive dimension of individual actors of the specific supply chain.
- Creation of trust and strengthened interconnections within the AKIS.
- Enhancement of a collective culture of innovation along the supply chains and of local systems, based on changes in the entrepreneurial behaviors and strengthen innovative/adaptive capabilities.
- Creation of inter-sectorial connections.
- Development of innovations support services capacities and experiential learning that are specifically focused on the integration and better positioning of farmers along the supply chains.



FURTHER SOURCES OF INFORMATION



- Database of the ISCP in Italy.
- Analysis of the cooperation models of the supply value chains in Italy.
- Publication on the results of the ISCP in Region Tuscany.
- Article on the issues and implication of ISCP in Italy.
- Guidelines for the implementation of ISCP.
- Independent evaluations of the ISCP in Italy.



Italy, Regions: Abruzzo, Marche, Friuli-Venezia Giulia, Emilia-Romagna, Lazio, Sardegna, Basilicata, Toscana, Lombardia, Veneto



NRN:

Serena.tarangioli@crea.gov.it and
Francesco.lcciardo@crea.gov.it





Supply
chains

AKIS-in-Practice! 10.2

**Boosting cooperation for
innovation along the supply
chains: the Role of EIP-Agri
Operational Groups in Emilia-
Romagna**



Keywords/Tags



Advisors



Supply chain



Quality production



Farmers positioning



Interaction



Operational groups

Potential users



Managing authorities of the CAP
strategic Plans



Operational groups



Farmers



Operational groups



RATIONALE



The CAP 2023-2027 aims to improve farmers' position in the value chain as part of its broader goals of promoting a smart, resilient, and diversified agricultural sector. Despite the EU agri-food sector's competitive edge in global markets and its leadership in variety and quality, farmers are less experiencing growth in their share of added value within the supply chain.

The Emilia Romagna region represents an innovation ecosystem with a high potential, which agri-food supply chain is characterized by:

- A numerical predominance of agricultural producers.
- Significant importance of production phases, including agriculture, forestry, fishing, and the food and beverage industry that account for more than half of the total value of the supply chain.
- Average added value is unevenly distributed, with a notable imbalance in market power between agricultural enterprises and subsequent phases, exacerbated by supply fragmentation.

- Bargaining power is shifted towards service segments, especially logistics and catering, with the largest power held by large-scale distribution (GDO) in certain supply chains.
- A strong culture of association and cooperation.
- Difficulty in stimulating investments among agricultural enterprises not involved in supply chain aggregations or cooperatives.
- Changing Consumer Demands that expect higher quality, health-conscious products, and sustainability, necessitating better communication and cooperation between consumers and producers.

During the 2014-2020 rural development programming period, Emilia-Romagna invested 4.6% of total Rural Development Program (RDP) spending, the highest in Italy for innovation. Over 200 operational groups and 50 pilot projects were established to strengthen connections between the production sector and research, facilitating the implementation of innovative solutions. This initiative aimed to enhance productivity, protect biodiversity, improve environmental performance, and ensure food quality and safety.

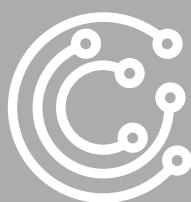
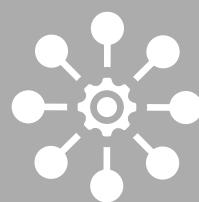
This pathway is continued by the rural development program 2023-2027 that emphasizes the importance of agricultural quality, innovation, and relationships among supply chain actors. These elements must be integrated to support the competitiveness and sustainability of production sectors involved in agricultural raw materials. The goals include ensuring fair remuneration for producers, enhancing supply chains, improving professional relationships, and promoting cohesive, efficient, and sustainable production systems economically, environmentally, and socially.

SOLUTION



Through the calls for applications for EIP-Agri operational groups, Emilia-Romagna Region establishes specific financial allocation, the innovation themes and selection criteria for proposals that will consistently contribute to the achievement of the CAP's SO3 "Improving farmers' position in the value chain".

This implies that the results of the OGs selected under SO3 will contribute, together with those being selected to 'Enhance market orientation and increase farm competitiveness' (SO2), to the achievement of the CAP's general objective of 'Increasing the competitiveness of the agricultural and forestry sector'.

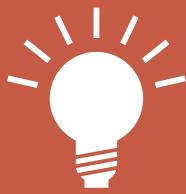




The proposals of EIP-Agri cooperation for innovation projects must clearly indicate that they contribute to the SO3 and accordingly, they apply for one or more innovation themes that are listed by the call for applications. This list is established on the basis of the needs' assessment carried out by the Emilia Romagna region. For example, in box 1 there's a list of innovation themes that was defined by the call for applications launched by the Emilia-Romagna Region for year 2024. Other themes might be identified by the region for the further calls for applications.

Box 1: Innovation themes of EIP-Agri operational groups (call for applications year 2024)

- Traceability, certification and interoperability for products Made in Emilia Romagna Region and similar.
- Integrated ecosystems for the provision of value-added services.
- Market analysis and new ways of marketing agricultural products.
- Development of new varieties and product types, verification of varietal adaptability, genetic improvement schemes for quality production, enhancement of agrobiodiversity.
- Optimisation of animal feed and livestock management.
- Development of new digital applications for the management of agricultural and agri-food production processes.
- Application of remote sensing data to precision agriculture.
- Application of artificial intelligence principles and tools to agricultural production data.
- Integral mechanisation and robotics for agriculture.
- Farm and supply chain monitoring and benchmarking, both technical and economic.
- Development of organisational support and services in the supply chain.
- Applications of 4.0 technologies in product innovation in specific sectors.
- Enhancing the authenticity of raw materials and improving the quality and safety of plant and animal production (including animal welfare).
- Transfer and customisation of digitisation models between sectors and within supply chains.
- Organisational innovation, process innovation, new quality systems in agricultural, agro-industrial and forestry systems, supply chains.
- Standardisation and shared interfaces for data exchange and integration between services.



None less, among the others, some consistent eligibility and selection criteria are established by the call for applications to better shape and reward the proposals to provide an effective contribution to the SO3 (table 1).

Table 1: Eligibility and rewarding criteria

Eligibility criteria
<ul style="list-style-type: none">• OGs must be composed at least by two different types of entities.• An OG must include at least one research entity.• The project must include actions and effects at least for one more of the stages of the pertinent supply chain, beyond production/breeding, among: processing, transformation, marketing
Rewarding criteria
<ul style="list-style-type: none">• Number of stages of the pertinent supply chain covered by the project, beyond production/breeding (processing, transformation, marketing).• Inclusion of advisory providers.• Inclusion of training bodies.• Inclusion of farms from more marginal rural areas.• Beneficiary sector: plants and vegetables or livestock.• Coverage of more than one of OS3 themes of innovation.• Inclusion of a major number of farms.• Inclusion of actions targeting environmental sustainability, in line with the innovation themes envisaged by the administration for the OGs falling under the CAP specific objectives of climate change mitigation and environmental care.• Inclusion of actions targeting ethics and social sustainability (consumer health, employee health and safety, social inclusion).



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Criteria, points and rewards attributable during the selection of the proposals must be clearly stated by the call for application.
- Application templates for the projects' proposals must be well defined to guide a clear and consistent indication of the information needed for the evaluation of each criterion of eligibility, selection and rewarding.
- Indicator plans, monitoring and paying systems must be set consistently.

BENEFITS



- Early identification of the general innovation theme and SO/OG under which the EIP-Agri cooperation for innovation project falls.
- Clearer tracking of the contribution of AKIS -types interventions to SO3 and the GO1.



FURTHER SOURCES OF INFORMATION



- Call for applications of EIP-Agri operational groups.



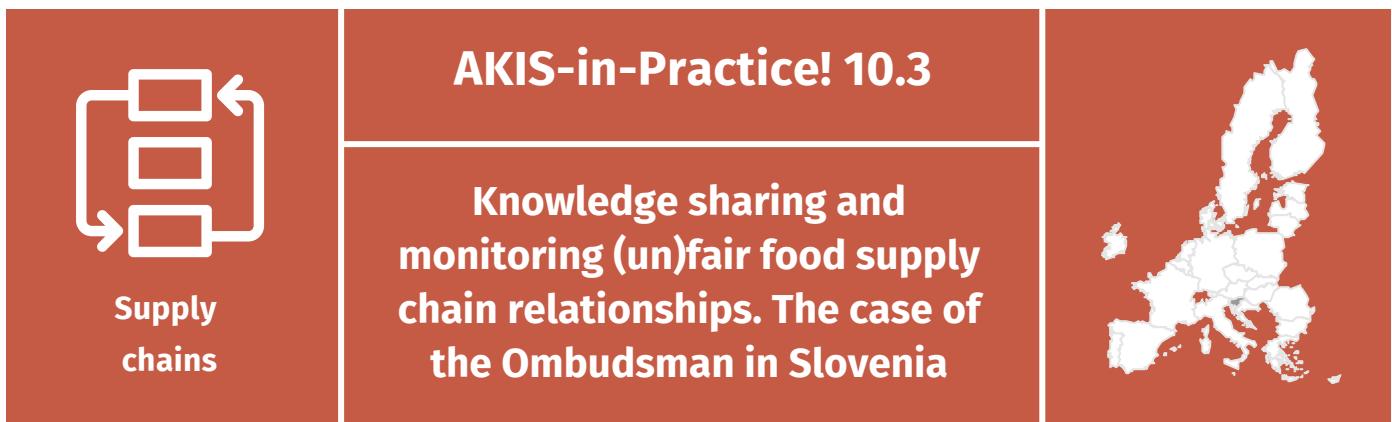
Italy, Emilia Romagna Region



Patrizia Alberti:
patrizia.alberti@regione.emilia-romagna.it

Watch this AKIS-in-Practice!





Keywords/Tags

-  Supply chian
-  AKIS
-  Quality
-  Farmers positioning

Potential users

-  Managing authorities of the CAP strategic Plans
-  Farmers and other operators along the supply chains
-  Advisors and innovation support services providers
-  Consumers



RATIONALE



The CAP 2023-2027 aims to improve farmers' position in the value chain as part of its broader goals of promoting a smart, resilient, and diversified agricultural sector. Despite the EU agri-food sector's competitive edge in global markets and its leadership in variety and quality, farmers are less experiencing growth in their share of added value within the supply chain.

Among the others the farmers are struggled by limited market power very often due to asymmetric price transmission and unfair trading practices throughout the supply chain.

To address these issues, the CAP programmes traditionally endorse strategies enhancing value chain synergies, improving trading relationships, increasing transparency in market information, and promoting futures markets for commodities.

Ultimately, the Directive (EU) 2019/633 aiming at establishing fair trading practices in the agricultural and food supply chain, through strengthening the position of farmers in the supply chain and enabling them to negotiate fairer terms and receive more equitable compensation for their products. Particularly, the Directive focuses on preventing unfair trading practices (UTPs) that disproportionately affect small and medium-sized enterprises (SMEs), particularly farmers, by requiring Member States to establish national authorities responsible for monitoring compliance with the rules and handling complaints related to UTPs. Additionally, the Directive promotes cooperation among farmers and other supply chain actors, aiming to enhance their bargaining power and overall market positioning.

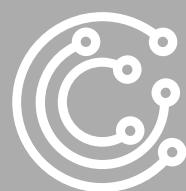
In response to the Directive, the Republic of Slovenia has appointed the Competition Protection Agency as the enforcement authority. This agency is responsible for implementing measures to protect the identities of complainants, members, and suppliers, as well as safeguarding any sensitive information that could harm their interests if disclosed.

With specific reference to the Republic of Slovenia, the CAP SP foresees interventions for cooperation and knowledge transfer within cooperatives, producer groups, and inter-branch organizations. These interventions are primarily aimed at modernizing or constructing new facilities for preparing agricultural products for the market and distribution, which will help achieve the goals of better organization and operation of supply chains in the Republic of Slovenia. In particular, the focus is on enhancing the competitiveness and market orientation of primary producers as the first link in this chain, as well as increasing organized buying and selling. This approach brings numerous advantages to all actors in these chains, especially regarding the distribution of production and market-price risks, the creation of economies of scale, and the provision of a sufficient, varied, and off-season supply of products for the market.

SOLUTION



In the Republic of Slovenia, the Ministry of Agriculture, Forestry and Food has established the office of the Food Supply Chain Relationships Ombudsman to promote fair relationships among stakeholders in the food value chain. This entity encourages the development of equitable relationships in their business activities, facilitates knowledge transfer, shares best practices, and engages in discussions with value chain stakeholders. It focuses on ensuring economic stability and development in line with fair profit margin principles. Additionally, it advocates for compliance with national legislation (Slovenian Agriculture Act), which includes a ban on mandatory rebates in supplier invoices and adherence to payment deadlines. The expectations include lower retail food prices for end users and fair prices for food producers and processors.





The Food Supply Chain Relationships Ombudsman monitors actions by stakeholders in the food supply chain, publishes examples of good business practice on its website, and informs the public thereof in accordance with the regulations governing the protection of personal data and the protection of business secrets. Moreover, it notifies the Slovenian Competition Protection Agency of any illicit practices in the food supply chain.

In particular, the tasks of the Ombudsman include:

- Raising awareness among food purchasers in the value chain regarding the legislative provisions and ethical principles that apply to the purchase of food.
- Raising awareness among producers and processors as intermediaries in the food chain about the legislative frameworks governing the sale and purchase of food, as well as the rights of food sellers in the value chain.
- Establishing a mechanism for identifying and addressing the late payment culture.
- Establishing a mechanism for monitoring market activities, particularly contracts and unfair practices within the food value chain.
- Promoting examples of good practice in the food value chain.
- Drawing the attention of relevant institutions to irregularities.

Among the others, the activities are organized as it follows:

- A table of discussion on the topic "Fair Relationships in the Food Supply Chain."
- Meetings with the largest food purchasers on the topic "How to Prevent Inappropriate Actions by Stakeholders in the Food Value Chain."
- Meetings with the largest food producers and processors on the topic "My Statutory Rights in Contractual Relations with Trading Partners."
- A presentation of the Ombudsman's work at one or more trade fairs.
- Consultation with agrarian economists and further exploration of the topic "Developing Fair Relations in the Food Value Chain."
- Individual meetings with stakeholders regarding identified contractual irregularities and non-compliance with legislation.

Main target groups of the Ombudsman include stakeholders from production, processing, distribution, and wholesale and retail sale to final consumers.

These stakeholders interact with the in various ways that include direct meetings, e-mails and anonymously posts by the internet website.



PRACTICAL IMPLICATIONS FOR REPLICABILITY



- Establishing/According standards and criteria for identifying bad and good practices along with possible penalties for illicit practices.
- Setting up a team at government level with dedicated human and financial resources.
- Conduct information and sensitization campaign(s) at the benefit of all the stakeholders of the value chains, including consumers.
- Conduct information and extension/advisory campaign(s) on good practices.
- Conduct training of trainers/advisors to increase capacities for supporting farmers and the other actors complying with rules all along the supply chains.
- Collect good and bad practices for knowledge sharing.

BENEFITS



- Monitoring and control over good and illicit practices.
- More generalized awareness and sensitivity about unfair trading practices and, possibly, effects on farmers and less empowered stages of the value chains.
- Increased trustiness by the farmers in joining cooperative initiatives along the supply chains.
- Fair practices and better positioning of the farmers along the supply chains.



FURTHER SOURCES OF INFORMATION



- Website of the Ombudsman.



Slovenia



**Slovenian Ministry of Agriculture,
Forestry and Food:**
Igor Hrovatič
igor.hrovatic@gov.si



Annex: Methodological note

How is the Compendium co-developed by key AKIS actors?

The methodology for the collection, developing, sharing and discussing the contents of the Compendium is based on MA principles highlighted in D1.1 in view to address specific needs and expectations of key AKIS actors of change, through providing insightful meanings for the overall capacity development path applied by the TAJs.

In fact, the Compendium, is meant to be the result of a collaborative work of reflection and systematization of learnings by the AKIS coordination bodies and other key AKIS actors, about the respective experiences and practices relating to the AKIS strategies.

The procedure to identify the themes, topics and practices has been largely described in D1.3 and it is synthesised in the following table 7

Table 5 – Co-development of D1.4

Period	Description (n. of events)
November 2022	1 Kick off meeting: identification of some Themes/Topics
July – September 2023	1 Opening of the survey 2023
September 2023	3 focus groups within partners to collect practices
October 2023	1 Validation of the CNA 2023
January – July 2024	7 Updates & Discussions on AKIS-in-Practice! development (WP1 monthly recurrent meetings)
January – August 2024	8 Updates & Discussions on AKIS-in-Practice! development (monthly executive board meetings)
September 2024	3 Thematic focus groups with partners on: (1) Climate change action and Environmental care; (2) Support to generational renewal; (3) Improve the position of farmers in the food chain.

For the purpose of the Compendium 2025, with the view to fully achieve a meaningful co-development of practices, in the light of the demonstrated diverse capacities to actively contribute to the development of the practices, it was decided to differentiate the roles and functions by the following:

- ✓ Setting up of a **core development group**, which members are primarily the WP contributors and other partners. This will be the duty to search, collect and draft the practices, along with actively contribute to the realization of the events aimed at sharing and discussing them (e.g. WP2, WP3, WP4, WP5). The core development group will meet on bimonthly basis.
- ✓ Setting up of the **steering group of the practices**, which members are about 10 AKIS coordination bodies to be identified every year. The duty of this group is to steer the selection and draft of the practices and to provide insights on potential to feed other WPs activities. This group will meet every three months.

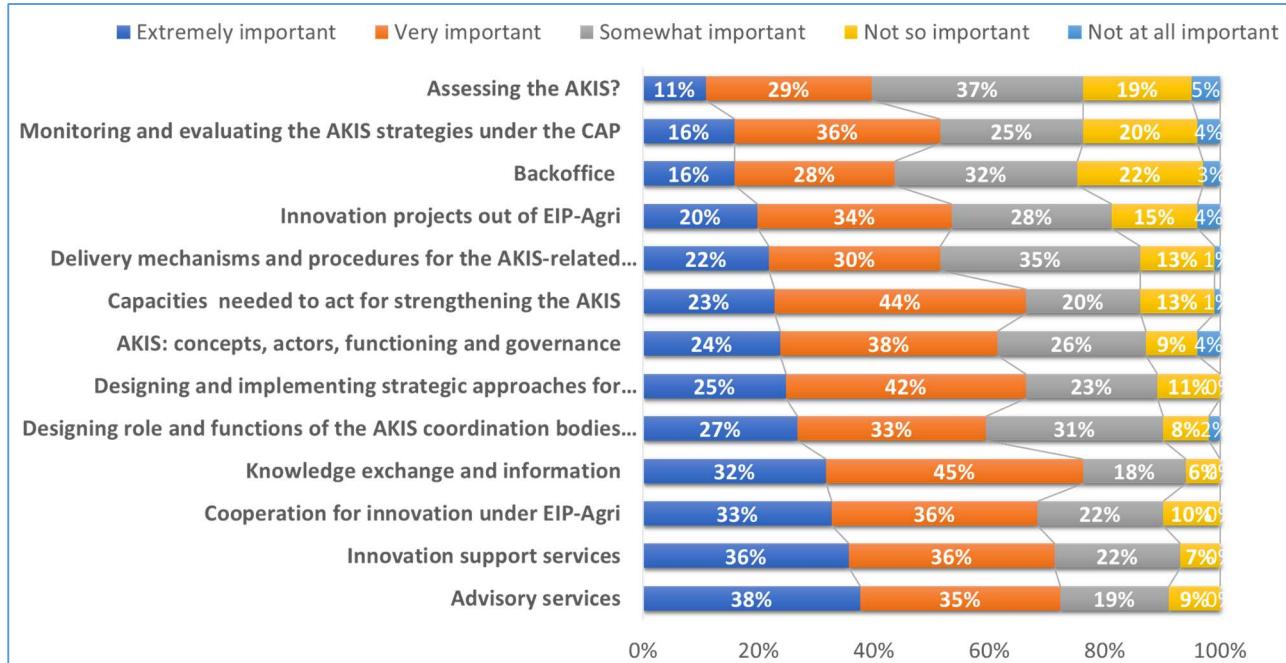
So that, the overall methodology approach includes the following main steps:

1. Define the themes/topics: Clearly articulation of the themes/topic of the Compendium, using the CNA results.
2. Collect Information: Task the core development group with actively searching for and gathering practices. This may involve reaching out to various AKIS stakeholders to identify successful and innovative practices organizing focus groups or collecting the practices from other WPs events.
3. Draft Practices: the core group write and standardize the documentation of practices using a predetermined template, ensuring consistency and clarity.
4. Discussion and Reflection: organizing sharing events with modernAKIS network members and, more in general, AKIS stakeholders.

Identification of key topical areas of relevance

The CNA was launched, in coordination with T2.2, in early July 2024 and it was validated by the AKIS coordination bodies and other actors during the general assembly of the AKIS coordination bodies (November 2023). The results are showed in figures 3 and 4.

Figure 5: Prioritization of topics relating to AKIS strategy (n. 105 answers; % total)

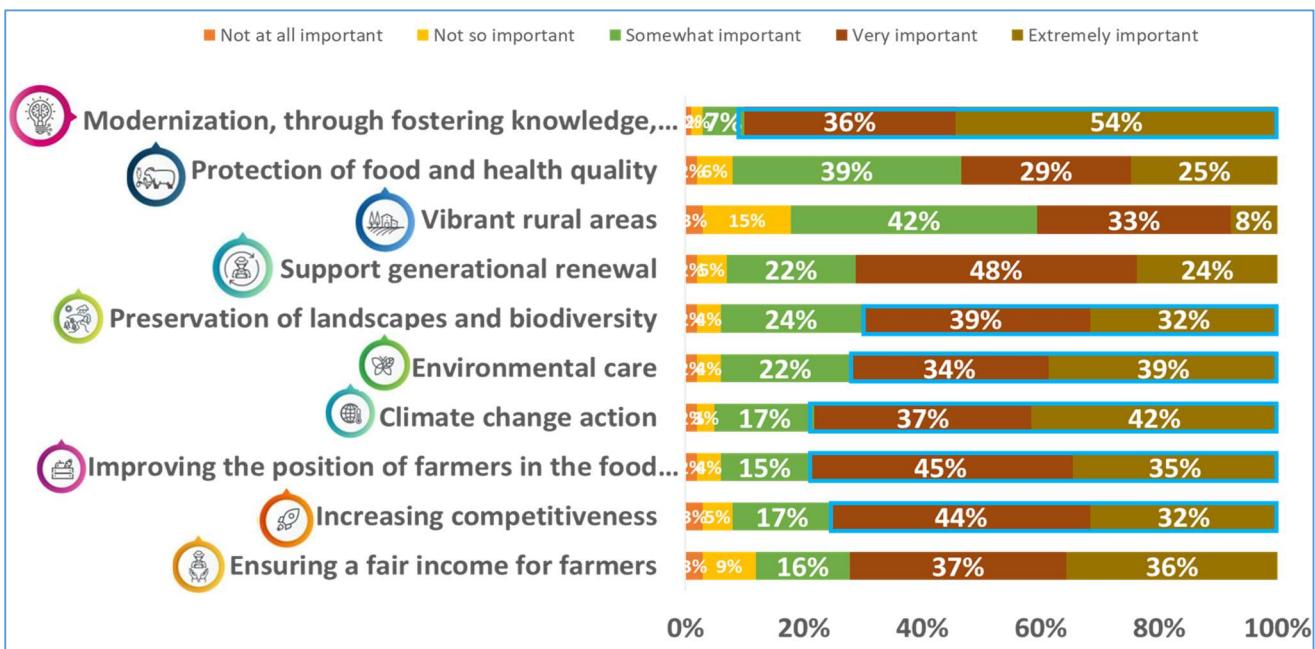


Based on the validation of the CNA, in December 2023, the partners met to finalize a learning agenda for the year 2024.



Figure 6: Prioritization of topics: contribution of AKIS strategy to CAP objectives (n. 105 answers; % total)

Figure 6: Structure of the Compendium



Boundaries of this first Compendium

Given that this Compendium is practice-base, the development of this D1.4 encountered some limitations that will be, very possibly, outdone over the following years, particularly:

- The actual early stage of implementation of the AKIS strategies of the CAP Strategic Plans made difficult collecting already-in-place and well-defined practices on relevant but new topics, such as the role and the functions of the AKIS coordination bodies and the organization of the back-office.
- Difficulties/Time boundaries of partners/AKIS coordination bodies to draft the practices. This weakness will be hopefully dealt by differentiating their roles and duties to be aligned more with respective capacities and preferences.