



Practice abstracts – batch 1

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List of Abbreviations

AKIS	Agricultural Knowledge and Innovation System
CoDIE	Co-Design Innovation Experiment
CoP	Community of Practice
CSA	Climate Smart Advisor
CSC	Climate Smart Coach
MLE	Monitoring, Learning and Evaluation
NC	National Coordinator
PA	Practice Abstract
TL	Thematic Leader
WP	Work Package
WPL	Work Package Leader

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Table of Contents

1	Abstract	8
2	Introduction	9
3	Approach to Practice Abstracts Development	10
3.1	Purpose and strategic role of Practice Abstracts	10
3.2	Early preparation and planning	10
3.3	Roles, responsibilities and expected contributions	11
3.4	Support tools and internal coordination.....	12
4	Thematic Organisation for the first 100 Practice Abstracts	13
4.1	Advisory Methods and Peer Learning	13
4.2	Climate Smart Farming Practices and Tools.....	13
4.3	Training and Capacity Building.....	14
4.4	Innovation and Multi-Actor Engagement	14
4.5	Embedding Climate Action into AKIS	14
4.6	Monitoring, Learning and Evaluation (ME&L).....	14
4.7	Other Cross-cutting Topics	14

5	Monitoring Framework and Analytical Approach	16
5.1	Monitoring of drafting progress	16
5.2	Analytical dimensions used for the first batch	16
5.3	Criteria used in the analysis	17
6	Main findings from the first batch	18
6.1	Distribution across thematic clusters	18
6.2	Contribution by project role & thematic cluster	19
6.2.1	Comparison of expected and actual contributions	21
6.3	Contribution by country (and role)	21
7	Lessons learned and implications for future batches	24
8	Annexes	26
8.1	Website mockup	26
8.2	List of all Practice Abstracts	27
8.3	Advisory Methods & Peer Learning	31
8.4	Climate Smart Farming Practices and Tools	78
8.5	Training and Capacity Building	147
8.6	Innovation and Multi-Actor Engagement	187
8.7	Embedding Climate Action into AKIS	220
8.8	Monitoring, Learning and Evaluation (ME&L)	243
8.9	Other Cross-cutting Topics	275

List of Tables and Figures

Table 1 Overview of expected contributions per role	11
Table 2 Comparison of expected and actual contributions	21
Table 3 Contribution by country	22
Table 4 Lessons learned and next steps, overview	25
Table 5 List of all Practice Abstracts per thematic clusters	30
Figure 1 Thematic clusters overview	15
Figure 2 Distribution per thematic clusters	18
Figure 3 Contribution per project role	20
Figure 4 Contribution per project role cross-referenced with thematic clusters	20
Figure 5 Contribution by country, cross-referenced with project role	23
Figure 6 Website mock-up - Practice Abstract page example	26

1 Abstract

This deliverable presents the first batch of 83 Practice Abstracts (PAs) developed within ClimateSmartAdvisors as part of the project's effort to translate emerging knowledge, experiences and good practices into concise, practice-oriented outputs for end users. The batch was prepared through a structured process led by BIOS, with contributions from Climate Smart Coaches (CSCs), Work Package Leaders (WPLs), Thematic Leaders (TLs), National Coordinators (NCs) and other project partners. The deliverable explains the methodology used to prepare, monitor, review and analyse the PAs, including the role distribution, thematic clustering framework, and the tools used to support drafting and quality control.

The first batch confirms broad thematic and geographical coverage across the consortium. All seven thematic clusters are represented, with the strongest concentration in Climate Smart Farming Practices & Tools, followed by Advisory Methods and Peer Learning. Contributions were led primarily by CSCs and WPLs, while additional input also came from TLs and other WP contributors. The analysis presented in this deliverable also highlights differences in contribution levels across project roles, thematic areas and countries, providing a useful evidence base for improving balance in future batches.

In addition to describing the process and presenting the key findings from batch 1, the deliverable is accompanied by annexes that include the full set of PAs prepared in this round. In this way, the document serves both as a methodological and analytical report and as a gateway to the complete portfolio of PAs generated so far. It also identifies lessons learned from batch 1 and outlines implications for batches 2 and 3, including the need for stronger mobilisation in underrepresented areas, earlier registration of future abstracts, and stronger links with dissemination outputs and exploitation pathways, particularly through the Farming for Climate platform.

2 Introduction

In ClimateSmartAdvisors, advisors are recognised as being in a key position in developing and sharing climate smart (CS) innovations and good practices between peers and with farmers. Therefore, ClimateSmartAdvisors works on improving the opportunities, knowledge, and skills of agricultural advisors to support farmers in the implementation of climate change mitigation and adaption actions across Europe. The project aims to boost the role of agricultural advisors and advisory service providers (ASP) across by strengthening their capacity in providing targeted advice on climate mitigation and adaptation approaches, and by sharing solutions for impactful advisory methods. By boosting the role of the EU agricultural advisory community, we aim to contribute to an acceleration of the adoption of climate smart farming (CSF) practices by the wider farming community within and across EU Agricultural Knowledge and Innovation Systems (AKISs).

This deliverable belongs to **WP8**, which focuses on dissemination, communication and exploitation support within ClimateSmartAdvisors. In this context, Deliverable 8.7 documents the preparation of the first batch of PAs and provides both a methodological and analytical overview of the process. Its objective is not only to present the first 100 PAs as a concrete project output, but also to explain how they were developed, organised, reviewed and assessed as part of a broader strategy to turn project knowledge into accessible and practice-oriented material for advisors and other target groups.

The deliverable is structured into several main parts. Following this introduction, it explains the overall approach to PA development, including the rationale, planning process, contribution logic and support tools provided to authors. It then describes the thematic clustering framework used to organise the first batch, followed by the monitoring framework and analytical approach applied to assess the portfolio. The core of the deliverable presents the main findings from the first batch, including analysis by thematic cluster, project role and country, as well as reflections on their practical relevance for advisors and other target groups. The final part of the document summarises key lessons learned and outlines implications for future batches.

In addition to the main report, the annexes include the full set of PAs developed under batch 1, thereby complementing the methodological and analytical sections with the complete practice-oriented output portfolio produced in this round. As such, the deliverable should be read both as a report on the process and results of batch 1 and as an entry point to the full PA portfolio generated so far.

The results presented in this deliverable are closely connected to other ongoing actions in the project. In the short term, the first batch of PAs contributes directly to dissemination and knowledge sharing through the EU CAP Network and the project website. In the medium term, it also supports the development of more structured knowledge resources linked to thematic activities, Communities of Practice (CoPs) and WP outputs. Looking ahead, future batches are expected to connect more strongly with exploitation-oriented activities, particularly through the Farming for Climate platform and other key project results that will support the uptake, reuse and long-term visibility of ClimateSmartAdvisors outputs.

3 Approach to Practice Abstracts Development

3.1 Purpose and strategic role of Practice Abstracts

The development of PAs within ClimateSmartAdvisors was conceived as a structured and proactive process aimed at translating emerging project knowledge, experiences and good practices into concise, practice-oriented outputs for end users. In line with the project's advisory focus, the first batch of PAs was primarily intended for agricultural advisors, although several abstracts were also relevant for farmers, researchers, teachers and other actors involved in AKISs. The objective was to capture project results generated across WPs, thematic activities and CoPs at an early stage and transform them into accessible materials with practical value.

The initial target for the first batch was **100 PAs**. However, following drafting, review and quality assurance, the final batch was consolidated to **83 PAs** to ensure a consistently high standard across all submitted abstracts. This reflects a deliberate decision to prioritise quality, clarity and practical relevance over reaching the numerical target at the expense of the overall standard of the portfolio. The first batch therefore still provides an important overview of the project's early results and establishes a structured repository of practice-oriented knowledge, while the remaining number is expected to be compensated in the following rounds as project results continue to mature. In this way, the project remains on track towards its overall objective of delivering **300 PAs** across all batches.

At this stage, the emphasis of the first batch was primarily on dissemination and knowledge sharing. At the same time, the process was designed with future exploitation activities in mind, as subsequent PA batches are expected to connect more directly with uptake and reuse pathways. This is particularly relevant in view of the planned storage and reuse of selected PAs through the project website, the Farming for Climate platform and the EU CAP Network. Together, these channels will support not only the wider visibility of project outputs, but also their longer-term accessibility, uptake and practical use.

3.2 Early preparation and planning

Preparation of the first PA batch began well in advance of submission with the intention of integrating PA development into the ongoing implementation of the project rather than treating it as a one-off reporting task. The overall strategy, structure, and expected contributions were discussed at Management Team meetings involving WPLs, while the Editorial Team (including project coordinator and BIOS team) elaborated on the more detailed specifications. This early preparation helped to establish a shared understanding of the purpose of the PAs, the expected quality level and the contribution logic across the consortium.

To support authors in producing high-quality abstracts, two Q&A sessions dedicated to this purpose were organised for project partners. These sessions clarified the requirements, explained the drafting process and provided an opportunity to ask questions about structure, content and quality expectations. In addition, an interactive online workshop was organized (as part of the General Assembly) to provide more direct support to partners in shaping their contributions. This workshop helped authors to identify suitable PA topics, consider their target audiences and define the key messages and practical relevance of their abstracts. Through this combination of strategic planning,

guidance, and interactive support, partners were informed early on and encouraged to view PA development as an integral part of project knowledge capture and dissemination.

The first batch of 100 PAs was planned in line with the project's wider commitment to producing 300 PAs in total, organised in three batches of 100. The timeline for batch one included sharing guidelines, templates, and monitoring tools with all partners in October 2025. This was followed by the registration and submission of PAs by 2 January 2026, with some flexibility and extensions allowing most PAs to be uploaded by the end of January and beginning of February. Proofreading and several rounds of revisions were carried out during the following period, with the first 100 PAs due to be submitted to the EU CAP Network portal in March 2026. In parallel, preparations were made to present these outputs in a more user-friendly format on the project website, which was planned for April or early May 2026.

3.3 Roles, responsibilities and expected contributions

Responsibility for producing the first batch of PAs was shared among the project's main knowledge-generating structures to ensure balanced participation and broad thematic coverage. This approach was designed to fairly distribute the workload and reflect the various ways in which results and practical insights were being generated across the project at this stage.

Particular attention was given to outputs from the CoPs, with CSCs expected to capture and articulate the practical learning generated through CoP processes. This was considered especially important as CoPs are a key mechanism through which the project engages with practice, tests approaches, and gathers insights from the field. Meanwhile, TLs were encouraged to convert the key messages and outcomes of thematic networking activities, including online thematic knowledge sessions and discussions held during the General Assembly in Almería, into PAs. WPLs and co-leaders were also assigned a clear role in producing abstracts linked to the results and activities of their respective WPs, particularly where significant knowledge had already been generated during this implementation phase. NCs were not assigned a fixed quota but were encouraged to contribute where relevant. Importantly, they were also expected to support CSCs in the drafting process when needed.

Although the overall distribution followed a clearly defined contribution logic, a certain degree of flexibility was allowed for cases where partners had fewer mature results to share in this project phase. Nevertheless, the targets were designed to strike a balance across roles and consortium structures while remaining within the scope of available activities and outputs. BIOS played a central role in coordinating and monitoring this process, both prior to and during implementation.

A summary of the expected contributions for the first batch is provided in Table 1.

Stakeholder group	Role in PA preparation	Expected contribution
Work Package Leaders and co-leaders	Draft PAs related to WP results and activities	At least 5 per WP, expected total 36
Thematic Leaders	Prepare PAs linked to thematic areas and thematic knowledge sessions, including outputs from the General Assembly in Almería	2 per TL, expected total 24
Climate Smart Coaches	Draft at least 1 PA per Community of Practice (CoP)	Expected total 40
National Coordinators	Support CSCs in the drafting process and contribute additional PAs where relevant	Complementary and supporting role

Table 1 Overview of expected contributions per role

3.4 Support tools and internal coordination

To ensure consistency and make the authors' work easier, BIOS prepared a set of practical tools and guidance materials to support the PA development process. These included comprehensive written guidelines and document templates, as well as a shared monitoring table to register and track all proposed abstracts. The guidelines covered the main elements required for drafting and submission, including the expected structure of the abstract, mandatory and optional sections, thematic clustering, practical writing instructions and key dos and don'ts for producing a high-quality PA. In this way, authors were provided with technical instructions and a clearer understanding of the purpose and expected quality of the final outputs.

Templates were prepared for all seven thematic clusters to help authors organise their contributions more coherently within the project's thematic framework and position them more clearly. At the same time, a shared registration and monitoring table was created to provide an overview of all planned and submitted PAs, their status, and their progress through the drafting and review process. This table served as a central management tool for both authors and coordinators, enabling the registration of PA topics and the systematic monitoring of completion, follow-up, and revision requirements. All supporting materials were stored on SharePoint to ensure consortium-wide access.

In addition to providing written guidance and templates, BIOS and project coordination team ensured follow-up support through direct communication with partners. This included reminder emails, clarification messages and assistance for authors who needed further guidance. The review and revision process was also managed in a structured way, enabling comments and required improvements to be communicated to authors and tracked centrally. Thanks to this combination of clear instructions, practical templates, interactive support, shared monitoring and regular follow-up, the project was able to establish a coherent methodology for producing the first batch of PAs in a coordinated and quality-controlled manner.

4 Thematic Organisation for the first 100 Practice Abstracts

To ensure the PA portfolio was organised coherently, the first batch of 100 PAs was structured according to a predefined thematic clustering framework. This approach addressed both practical and strategic requirements of the project. Given the overall target of 300 PAs to be published in three batches, it was important from the outset to avoid storing and presenting these materials as an unstructured list. A thematic structure was therefore established to support consistency, facilitate navigation, and enhance the collection's long-term usability.

The clustering framework serves several complementary purposes. Firstly, it provides a clear basis for organising and storing PAs, making the collection easier to manage internally. Secondly, it supports future dissemination by enabling filtering, searchability and thematic browsing on the project website and through other knowledge-sharing channels, including the Farming for Climate platform. Thirdly, it enables the consortium to monitor thematic coverage over time, assess over- or underrepresentation of certain areas and identify where additional efforts may be needed in future PA batches. Thus, thematic clustering serves not only as an organisational tool, but also as a means of supporting the strategic balance, visibility, and future reuse of the project's practice-oriented outputs.

BIOS defined the thematic clusters in cooperation with the project coordinator, based on the main result areas, activities and knowledge domains covered by ClimateSmartAdvisors. The proposed structure was then presented to the Management Team and approved without any changes being made. This ensured that the clustering framework reflected the project's overall architecture, and it was accepted across the consortium as an appropriate basis for classifying PAs. To maintain consistency in the analysis and presentation of the portfolio, each PA was assigned to one primary thematic cluster only. Overlaps between clusters were not incorporated into the classification system, even where a PA may have had relevance for more than one thematic cluster. This approach was chosen to support clearer reporting and the comparability and aggregation of results.

The seven thematic clusters used for the first batch of PAs are presented below.

4.1 Advisory Methods and Peer Learning

This cluster covers PAs related to the role of advisors, advisory approaches and peer learning CoPs, participatory advisory formats, practical examples of advisor engagement, and approaches that strengthen interaction, exchange and mutual learning among advisors and other actors. The cluster is particularly relevant for outputs that help advisors improve the way they facilitate learning, dialogue and practice change. See Annexes [here](#).

4.2 Climate Smart Farming Practices and Tools

This cluster includes PAs focused on concrete climate-smart farming practices, technical solutions and practical tools that can support climate mitigation and adaptation at farm level. It covers topics such as emission reduction, circular farming approaches, operational tools for advisory work, and mechanisms that support uptake of climate-smart solutions. The cluster captures the more directly practice-oriented and technical dimension of the project's outputs. See Annexes [here](#).

4.3 Training and Capacity Building

This cluster brings together PAs related to training approaches, educational materials and competence development for advisors and other relevant actors. It includes train-the-trainer resources, soft skills development, methods and materials for teaching and learning, and content that supports capacity building for climate and digital transitions. The cluster is particularly important for strengthening the knowledge base and professional capabilities needed to implement climate-smart advisory work effectively. See Annexes [here](#).

4.4 Innovation and Multi-Actor Engagement

This cluster focuses on collaborative and innovation-oriented approaches that involve multiple actors in the development, testing and uptake of knowledge and solutions. It includes content related to innovation brokerage, multi-actor interaction, connections between practice, research and policy, and formats that help actors work together around shared challenges. PAs in this cluster highlight the importance of co-creation, interaction and collaborative problem-solving within AKISs. See Annexes [here](#).

4.5 Embedding Climate Action into AKIS

This cluster includes PAs that address the wider integration of climate action into AKIS. It covers approaches related to institutional development, governance models, actor engagement, strategic embedding and strengthening the enabling environment for climate-smart advisory work. The cluster is relevant for outputs that move beyond individual practices and contribute to more systemic change in advisory structures and support mechanisms. See Annexes [here](#).

4.6 Monitoring, Learning and Evaluation (ME&L)

This cluster covers PAs related to methods and approaches for assessing progress, capturing learning and supporting reflective improvement within the project and beyond. It includes capacity assessment, monitoring tools, learning-oriented frameworks and evaluation approaches that can help actors better understand progress and adapt their work accordingly. This cluster plays an important role in linking implementation with reflection, evidence and continuous improvement. See Annexes [here](#).

4.7 Other Cross-cutting Topics

The final cluster was reserved for relevant PAs that did not fit clearly within the other six thematic areas but still offered practical value for the project's target groups. This category makes it possible to include cross-cutting or hybrid topics without forcing them into an unsuitable thematic area, while still maintaining the overall logic of the classification system. See Annexes [here](#).



Figure 1 Thematic clusters overview

5 Monitoring Framework and Analytical Approach

5.1 Monitoring of drafting progress

To support the coordinated development of the first batch of PAs, BIOS set up a shared monitoring system to enable continuous tracking of contributions and follow-up throughout the drafting and review process. A registration and monitoring table was prepared in advance with predefined PA numbers and shared with project partners, along with the relevant templates and guidance materials. Authors were responsible for entering core information relating to their PAs, including the thematic cluster, title, author details, organisation, country, project role, additional notes and finalisation status.

BIOS then monitored progress centrally based on this common overview, checking for missing or incomplete entries and following up with partners where needed. This included sending reminders, answering queries, and ensuring that requested revisions were implemented. In parallel, more detailed comments and suggested changes were provided directly in the draft Word documents stored on SharePoint, using track changes where appropriate. Therefore, the review process combined progress monitoring through the shared table with document-level revision of the texts themselves.

The monitoring and review process involved several layers of quality control. Overall coordination was provided by BIOS, while additional input was given by the project coordinator, ILVO, and Teagasc in its review role. This enabled editorial, technical, and quality-related aspects of the drafts to be addressed in a structured way, ensuring a more consistent level of quality across the first PA batch.

5.2 Analytical dimensions used for the first batch

In addition to supporting drafting and revision, the monitoring framework provided the basis for analysing the first batch of 100 PAs. The analysis was designed to assess not only the volume of outputs produced, but also the balance and practical orientation of the portfolio across the consortium. See more details in [Chapter 6](#) of this document.

1. The first analytical dimension concerned the distribution of PAs across **the seven thematic clusters**. This made it possible to assess thematic coverage and identify areas where contributions were more strongly represented or where additional effort may be needed in future batches.
2. The second dimension focused on the distribution of contributions by **project role**, allowing comparison between the expected contribution logic and the actual spread of participation across WPLs, TLs, CSCs and other contributors.
3. A third dimension considered the **geographical distribution** of PAs by country, providing insight into the breadth of engagement across the consortium.
4. In addition, the first batch was analysed in terms of its **practical relevance for target groups**, with particular attention to advisors as the project's primary end users. This lens helped assess the extent to which the resulting portfolio already provides material that can support advisory practice directly, while also identifying PAs that are more relevant for farmers, researchers, teachers or broader AKIS actors.

Together, these dimensions created a structured basis for reviewing the first batch and informing the preparation of subsequent PA rounds.

5.3 Criteria used in the analysis

To ensure consistency in the assessment, a number of common criteria were applied throughout the analysis. In line with the project's agreed classification framework, each PA was assigned to one primary thematic cluster only. The country and contributor role associated with each PA were taken from the information registered in the shared monitoring table, enabling comparable analysis across organisational and geographical categories.

The relevance assessment for advisors was based on the extent to which a PA could support advisory work. This included PAs providing useful methods, approaches, tools, recommendations or insights that advisors could apply directly or promote in their work to encourage the uptake of good practices among farmers and other stakeholders. Although this initial selection was still primarily dissemination-oriented, this criterion enabled us to identify those PAs that already demonstrate significant practical value for advisory services.

Where relevant, the analysis also considered whether additional dissemination and communication materials had been developed around the PAs, such as audiovisual content or other supporting materials created within the project. While this was not used as a separate classification category, its importance as a supporting element in strengthening the accessibility, visibility and future uptake of the PA portfolio was recognised.

6 Main findings from the first batch

6.1 Distribution across thematic clusters

The first batch of PAs covers all seven thematic clusters, confirming the project's broad thematic coverage across its main knowledge areas. At the same time, the distribution shows a stronger concentration in some areas than in others, as would be expected in an initial batch reflecting the maturity of the results generated so far.

The largest proportion of PAs falls under the category of Climate Smart Farming Practices & Tools, at 24.1% (20 abstracts). This highlights the practical focus of the batch, emphasising concrete farming practices, technical approaches, and applied tools. The next most represented clusters are Advisory Methods and Peer Learning and Training and Capacity Building, with 14 abstracts each (16.9%), reflecting the project's strong focus on advisory work, Communities of Practice, and capacity-building processes.

A significant proportion of the portfolio also falls under the following categories: Monitoring, Learning & Evaluation (MLE) with 12 PAs (14.5%), and Innovation & Multi-Actor Engagement with 11 PAs (13.3%). This demonstrates that the batch encompasses not only technical content, but also training-related, collaborative, and learning-oriented outputs. Lower representation was observed in Embedding Climate Action into AKIS with 7 abstracts (8.4%) and Other Cross-Cutting Topics with 5 PAs (6.0%), suggesting that these areas may require additional attention in future PA batches.

Overall, the thematic distribution confirms that the first batch is firmly grounded in the project's practical and advisory dimensions, while providing comprehensive coverage of all key thematic areas. The clustering framework is useful not only for organising the PA portfolio, but also for identifying thematic strengths and areas that may require greater mobilisation in future rounds.

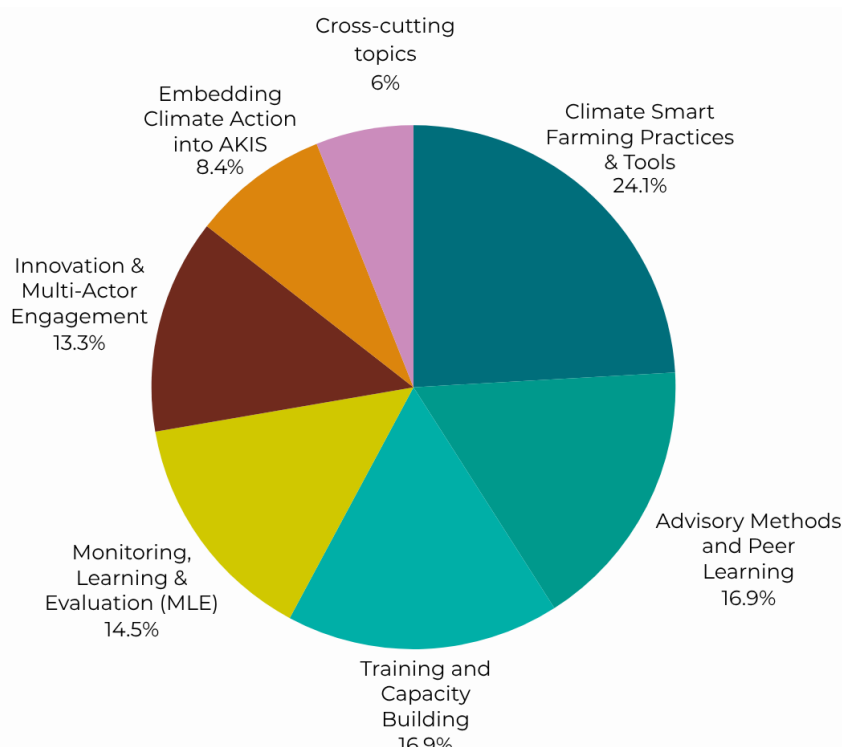


Figure 2 Distribution per thematic clusters

6.2 Contribution by project role & thematic cluster

The analysis of the first batch of PAs shows that contributions were led primarily by WPLs and CSCs, confirming that the portfolio was shaped mainly by outputs emerging from the project's work package activities and from Communities of Practice. WPLs contributed 27 PAs (32.5%), while CSCs contributed 25 PAs (30.1%). Together, these two groups account for 52 of the 83 analysed PAs, or 62.7% of the batch.

CSC-authored PAs were concentrated primarily in **Advisory Methods and Peer Learning**, with 9 PAs (36.0%), and **Climate Smart Farming Practices & Tools**, with 8 PAs (32.0%). Together, these two clusters account for 17 out of 25 CSC-authored PAs, or 68.0% of the total CSC contribution. A further 5 PAs (20.0%) were classified under **Training and Capacity Building**, while the remaining 3 PAs (12.0%) were distributed across **Other cross-cutting topics, Embedding Climate Action into AKIS, and Innovation & Multi-Actor Engagement**, with one PA in each category. This confirms that CSC contributions were strongly concentrated in advisory-relevant and practice-oriented areas, particularly those linked to peer learning, Communities of Practice, and field-level solutions.

WPL-authored PAs were concentrated primarily in Innovation & Multi-Actor Engagement, with 9 PAs (33.3%). This was followed by Embedding Climate Action into AKIS and Monitoring, Learning & Evaluation (MLE), with 5 PAs each (18.5%). A further 3 PAs (11.1%) were classified under Training and Capacity Building, while Other cross-cutting topics also accounted for 3 PAs (11.1%), and Advisory Methods and Peer Learning for 2 PAs (7.4%). This shows that WPL contributions were particularly strong in clusters linked to innovation processes, systemic approaches, project learning, and the wider embedding of climate action into advisory and AKIS structures, complementing the more field- and practice-based contribution pattern observed among CSCs.

A further **17** PAs (20.5%) were registered under **Other**. This category consists largely of additional WP contributors, as 15 of these 17 entries were submitted by WP members or co-leads rather than by formally designated WPLs. This indicates that PA development was not limited to the main author groups originally targeted but also involved a broader range of project contributors.

TLs contributed 11 PAs (13.3%), covering 7 thematic areas of the project. The strongest representation was observed in Energy Management, Grassland Management, Soil Health and Biodiversity, and Additives for Reducing Methane Emissions, each with 2 PAs, while Water Management, Crop Management, and Biogas Production were represented with 1 PA each. Cross-referencing thematic areas with the PA clustering framework shows that TL contributions were concentrated mainly in Climate Smart Farming Practices & Tools, with 8 PAs (72.7%), followed by Advisory Methods and Peer Learning, with 2 PAs (18.2%), and Innovation & Multi-Actor Engagement, with 1 PA (9.1%). This confirms that TL-authored PAs were focused primarily on translating thematic knowledge into concrete practice-oriented outputs, with more limited but still visible contributions to advisory and innovation-related dimensions.

More limited contributions were registered under **Climate Smart Advisor (CSA)** with 2 PAs (2.4%) and **NCs** with 1 PA (1.2%). The low number of NC contributions is consistent with their mainly supportive role in the PA process rather than a fixed drafting quota.

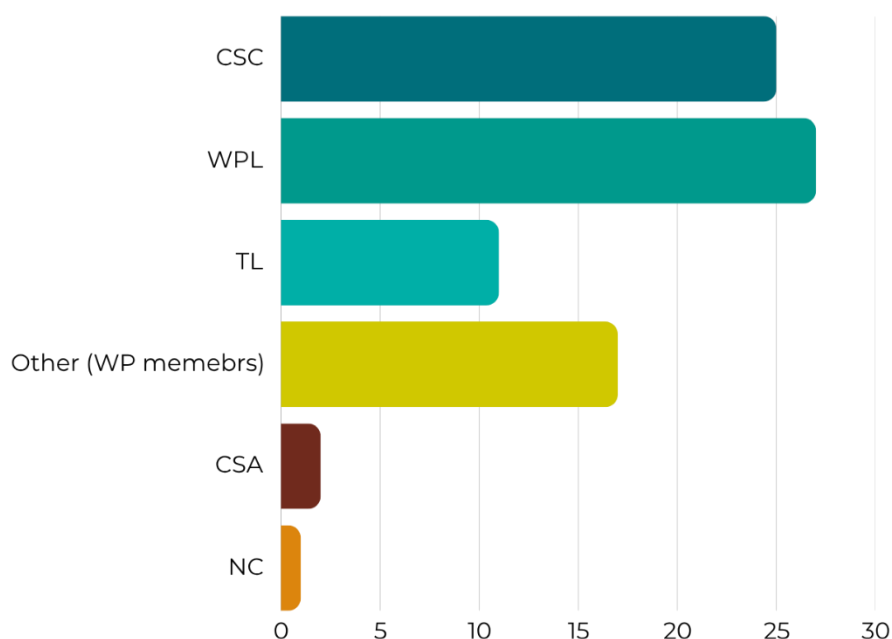


Figure 3 Contribution per project role

Overall, the role-based distribution confirms that the first batch reflects the intended emphasis on CoP outputs and WP results, while also showing that contributions extended beyond the initially defined core author groups. At the same time, the analysis provides a useful basis for comparing actual contributions with expected targets and for improving consistency of role attribution in the next PA rounds.

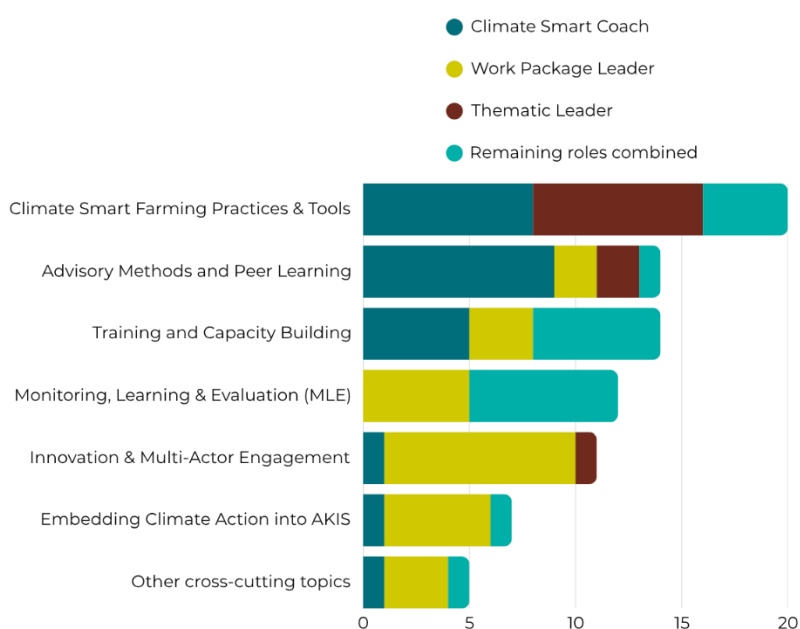


Figure 4 Contribution per project role cross-referenced with thematic clusters

6.2.1 Comparison of expected and actual contributions

The initial target for the first batch of Practice Abstracts was **100 PAs**. However, following the review and quality assurance process, the final submission was consolidated to **83 PAs** in order to ensure a higher overall quality and stronger practical value of the batch. This reduction reflects a deliberate decision to prioritise well-developed and sufficiently mature outputs over reaching the numerical target at the expense of quality. As project results continue to mature, it is expected that the number of Practice Abstracts will be compensated in the following rounds, so that the project can still achieve its overall objective of 300 Practice Abstracts across all batches.

When compared with the initial contribution targets set for the first batch of PAs, the final distribution presents a mixed but still overall positive picture. When WPLs are considered together with co-leads and WP members contributing under the “Other” category, their combined contribution reached 42 PAs, exceeding the expected target of 36 by 6 abstracts. This corresponds to an achievement rate of 116.7%, indicating particularly strong engagement from the work package structure.

CSCs contributed 25 PAs, compared to an expected 40, reaching 62.5% of the target. While this is below the initial expectation, CSC-authored PAs still account for a substantial share of the batch and confirm the important role of Communities of Practice in generating practice-oriented content. At the same time, the reduced CSC contribution is reflected in the fact that some CoPs were not represented in the final set, namely those from Bulgaria, Croatia, Estonia and Sweden.

TLs contributed 11 PAs, compared to an expected 24, corresponding to 45.8% of the target. This indicates that thematic contributions were present but clearly lower than originally planned in this first round. In thematic terms, the reduced TL contribution is also reflected in the absence of several thematic areas from the final set, namely Agroforestry and Relation to Landscape, Manure Storage and Spreading, Rewarding Mechanisms, Forage Production, and Herd Management. This number is expected to increase in the next batches, following more thematic network webinars and activities by TLs.

No fixed numerical target was established for NCs and Climate Smart Advisors, whose role in the process was complementary. Their submissions should therefore be regarded as additional contributions rather than as performance against a formal quota.

Project role	Expected contribution	Final result	Difference	Achievement rate
Climate Smart Coach	40	25	-15	82.5%
Work Package Leaders and co-leads	36	42	+6	116.7%
Thematic Leaders	24	11	-13	45.8%
National Coordinators	no fixed target	1	-	-
Climate Smart Advisors	no fixed target	2	-	-

Table 2 Comparison of expected and actual contributions

6.3 Contribution by country (and role)

The first batch of PAs demonstrates a wide geographical spread across the consortium. Based on the available registration data, the **83 PAs** were linked to **25 countries**. Since **two PAs were jointly attributed to the United Kingdom and the Netherlands**, the country-level analysis reflects **85 country appearances**. **Belgium** had the strongest representation with **11 appearances (12.9%)**, followed by **France** with **10 (11.8%)** and **Spain** with **9 (10.6%)**. **Ireland** and **the Netherlands** each

accounted for **6 appearances (7.1%)**, while **Germany** and **Italy** contributed **5 each (5.9%)**. **Austria, Finland, Serbia and the United Kingdom** were each represented by **3 appearances (3.5%)**. All other countries were represented by one or two appearances, confirming that PA development was geographically widespread, even if contributions were concentrated in a limited number of countries.

Country	Number of PAs submitted
Belgium	11
France	10
Spain	9
Ireland	6
Netherlands	6
Germany	5
Italy	5
Austria	3
Finland	3
Serbia	3
United Kingdom	3
Czechia	2
Greece	2
Hungary	2
Lithuania	2
Portugal	2
Scotland	2
Slovakia	2
Croatia	1
Denmark	1
Latvia	1
Luxembourg	1
Poland	1
Romania	1
Slovenia	1

Table 3 Contribution by country

A closer look at the role composition shows that countries contributed through different project structures. France combined contributions from several roles, with 4 TL-authored, 3 Other, 2 CSC-authored, and 1 WPL-authored PA. Belgium was strongly driven by the WP structure, with 9 WPL-authored abstracts, complemented by 1 CSC-authored and 1 Climate Smart Advisor contribution. Spain showed a balanced profile between WPLs (5) and CSCs (4), while the Netherlands combined 5 WPL-authored PAs, including the two jointly attributed UK-Netherlands entries, and 1 CSC-authored PA. Germany displayed a relatively even spread across roles, with 2 Other, 2 TL-authored, and 1 CSC-authored contribution.

Several countries were represented primarily through one dominant role. The United Kingdom was represented mainly through 2 WPL-linked abstracts, both jointly attributed to the United Kingdom and the Netherlands, and 1 CSC-authored PA. Ireland was driven mainly by WPLs (3), supported by 2 Other and 1 CSC contribution. Italy combined 2 CSC, 2 TL, and 1 Climate Smart Advisor contribution,

while Serbia was represented through 2 WPL and 1 CSC entry. This variation shows that PA generation was not organised uniformly across countries, but instead reflected the different roles and levels of activity of national partners within the project.

From the perspective of CoPs, the country analysis also confirms a broad spread of CSC-authored PAs across the consortium. CSC contributions were recorded from 17 countries, with the highest number coming from Spain (4), followed by France and Italy (2 each). All other represented countries contributed one CSC-authored PA each, namely Ireland, Serbia, Germany, Slovakia, Austria, Finland, Hungary, the Netherlands, Poland, Lithuania, Latvia, Slovenia, Greece, the United Kingdom, Romania, and Belgium. This demonstrates that CoP-based learning made a substantial contribution to the first batch, although with stronger activity in a limited number of countries than in others.

Overall, the country and role analysis confirms that the first PA batch achieved broad geographical coverage while drawing on different project structures in different national contexts. It also provides a useful basis for identifying where future batches may need stronger mobilisation, either in countries with lower overall participation or in countries where contributions came from only one project role.

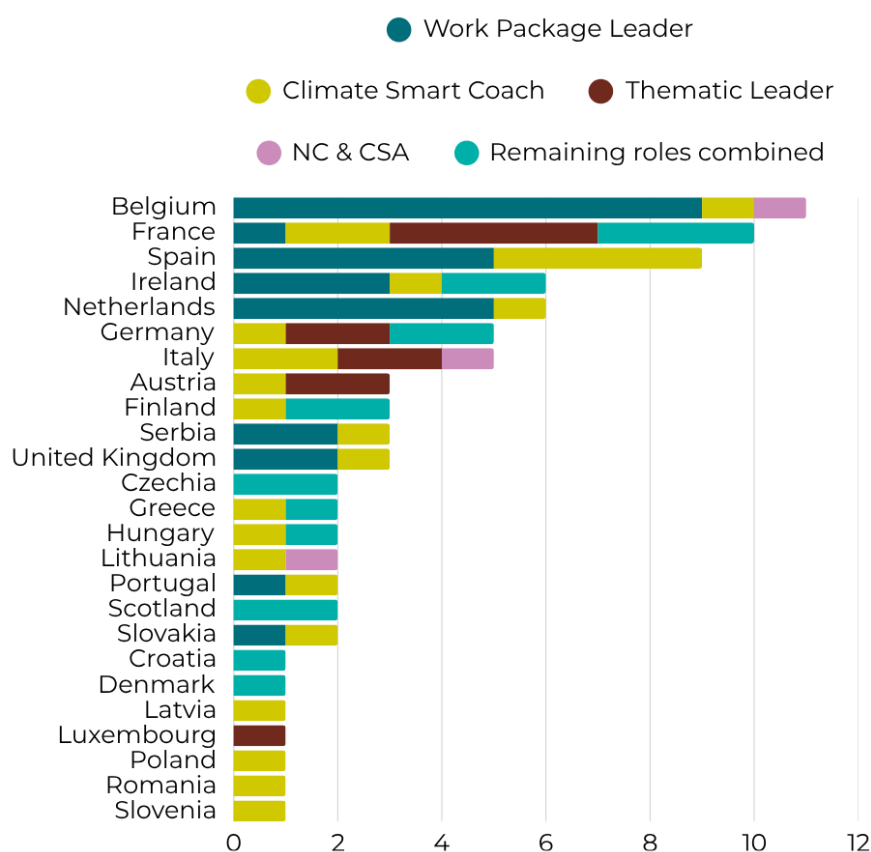


Figure 5 Contribution by country, cross-referenced with project role

7 Lessons learned and implications for future batches

Preparing the first batch of PAs provided a solid foundation for developing the PA portfolio further and was an important learning exercise for the consortium. Several elements of the process were particularly successful. **Early planning** was beneficial as it allowed sufficient time to define the structure, prepare support materials, and engage partners in advance. The **guidelines and templates** facilitated the drafting process and ensured a consistent structure across the contributions. The thematic clustering framework was useful for organising the portfolio and supporting later analysis. **Folders in SharePoint and the shared tracking table** were also effective coordination tools and will be maintained for subsequent batches. Additionally, the several layers of **review process** functioned efficiently and the active involvement of CSCs and WPLs was instrumental in delivering the first batch.

At the same time, however, the first round highlighted several areas that require improvement. Contributions were **uneven across project roles**, with lower-than-expected input from some groups. Some **thematic clusters** and **countries** were also underrepresented in the first batch, indicating the need for more targeted mobilisation in future rounds. Furthermore, a number of PAs required substantial **restructuring or rewriting** during the review process, indicating that some authors had not yet fully grasped what constitutes a strong, practice-oriented PA. The review and **follow-up process** was also time-consuming, especially when drafts required multiple rounds of improvement.

These lessons provide a clear basis for refining the process for batches 2 and 3. **Follow-up** will need to be stronger with **underrepresented roles** and **countries**, and **mobilisation** will be more targeted, especially towards TLs and CSCs in areas where contribution levels were lower. **Registration** of future PAs should begin earlier and be linked more closely to emerging results, allowing more time for drafting, improvement and planning. This will also create more opportunities to connect PAs with relevant dissemination and communication activities. For example, they could be aligned more closely with thematic events, webinars and related project outputs.

Further improvements will also be made to the **support process** itself. The guidelines will be streamlined to make them easier to use and encourage all contributors to read them in full, and additional examples of strong PAs from the first batch will be provided. **Earlier internal deadlines** and **stronger quality control** before the formal review process will reduce the burden of revisions and give reviewers more time to provide feedback. At the same time, future batches will emphasise the exploitation dimension of PA development more clearly, particularly through stronger links with the Farming for Climate platform and the wider reuse of project results through dissemination materials and digital knowledge channels.

Overall, batch 1 demonstrated that the system for preparing, monitoring and reviewing PAs is now in place and functioning well, requiring refinement rather than redesign. The next batches will build on this basis, with the aim of achieving a more balanced distribution of contributions across roles, countries and thematic areas, while also strengthening the strategic value of the PA portfolio for dissemination, uptake and future exploitation.

Area	Lesson from batch 1	Next step for batches 2 and 3
Planning and timing	Early planning was beneficial, but some drafts still arrived late or needed substantial revision	Start PA registration earlier and link it more closely to results as they emerge, so there is more time for drafting, improvement and coordination.

Area	Lesson from batch 1	Next step for batches 2 and 3
		BIOS to suggest topics for some PAs and assign authors.
Guidelines	Guidelines were useful, but some authors did not fully engage with them	Shorten and simplify the guidelines, while keeping the key instructions clear and practical
Templates	Templates supported consistency and worked well	Keep the current templates and refine them only where needed based on batch 1 experience
Author support	Q&A sessions and workshop support were useful	Organise additional Q&A sessions and provide more examples of strong PAs
Monitoring tools	SharePoint folders and the tracking table worked well	Continue using the same tools and maintain central monitoring
Quality control	Review was efficient, but some drafts required major restructuring	Introduce earlier quality control before formal review and set earlier internal deadlines
Review process	Review and follow-up were time intensive	Allow more time for reviewers in future batches and reduce the revision burden through earlier deadlines for submission
Role balance	Contributions were uneven across project roles	Strengthen follow-up with underrepresented groups, especially TLs and less active CSCs
Country balance	Some countries were less active than others	Use the batch 1 analysis to target countries with lower participation more actively in the next rounds
Thematic balance	Some thematic areas were underrepresented	Encourage new PAs in weaker thematic areas to achieve a more balanced portfolio. Make a link with thematic network events (webinars)
Dissemination link	PAs already support dissemination, but links can be stronger	Connect future PAs more systematically with webinars, thematic events and other communication outputs
Exploitation link	Batch 1 was mainly dissemination-oriented	Strengthen the exploitation perspective in future batches, especially through closer links to the Farming for Climate platform and other Key Exploitable Results produced in the meantime.
Overall system	The methodology and workflow functioned well	Maintain the overall system and apply only minor refinements rather than redesigning the process

Table 4 Lessons learned and next steps, overview

8 Annexes

8.1 Website mock-up



Figure 6 Website mock-up - Practice Abstract page example

8.2 List of all Practice Abstracts

No. of PA	Title of the PA
Advisory Methods and Peer Learning	
#16	The “Farmer and their Advisory Journey”: A Tool for Advisors to Reflect on Change in Farming and Their Role as Advisors
#22	Engaging and Motivating Farmers Towards Climate Action Through Advisory Practice
#26	Which is the Role of Learning Advisory Methods at Farm Level?
#28	Setting up an Efficient Advisory Service to Help Farmers Reduce their Carbon Footprint
#29	Building Advisory Capacity for Soil Health - Insights from Slovak Community of Practice
#30	Playful Facilitation to Strengthen Learning and Engagement in Climate Smart Communities of Practice
#37	Collaborative Learning Enhancing the Analytical Capability and Advisory Quality in Soil Health Analysis
#38	QBS-ar: An Effective Method to Assess Soil Biodiversity
#48	Facilitation Methods That Support Advisor Learning: Experience from the Polish Community of Practice
#57	Assessing the Impact of Climate Change on Water Resources and Conservation Strategies: Challenges, Technologies, Opportunities and Policy Interventions
#58	Dealing with Farmers’ Scepticism and Encouraging Engagement with Climate-Smart Practices - Experience from the Belgian CoP
#73	Program to Promote, Support, and Assist with Generational Renewal, New Initiatives, and/or Open Succession in the Primary Sector
#75	Boosting Engagement in Advisory Communities of Practice Through Simple Interactive Digital Tools
#83	Agricultural Fairs - Impacting Peer-to-Peer Discussion
Climate Smart Farming Practice and Tools	
#15	The Contribution of the FarmingForClimate platform to Climate Action by Supporting Farmers and Advisors and Providing Advisory Tools and Guidance Methods
#17	Weeds Control Bingo: Identifying Weeds for Targeted Control
#27	Smart Herd Management with Si@llewa: Improving Sustainability and Profitability in Dairy Farms
#31	Knowing Energy Use on the Farm and at Home: A First Step Towards Greater Efficiency in Energy-Intensive Farming
#32	Self-Sufficient Farm Power Supply with Photovoltaics and Storage: Reducing Energy Costs Through On-Farm Solar Electricity
#33	Emission-reducing Organic Grassland Fertilization using Slit Injection

No. of PA	Title of the PA
#39	Eddy Covariance for Measuring Carbon Sequestration in Agricultural Systems
#40	Developing a Drought-tolerant Crop Rotation with Legumes
#47	Virtual Fences as a Way of Efficient, Climate Adapted and Environmentally Friendly Grazing
#49	How to Ensure Effective Biological Control in Horticultural Greenhouses
#50	Optimising Cover Crop Mixtures: Enhancing Soil Health, Biodiversity, and Nitrogen Management in Western European Arable Farming
#60	Water management: Deficit Irrigation Strategies on Almond Orchards
#61	Reducing Enteric Methane in Ruminants: Ready-to-use Levers
#64	Improving Nitrogen Efficiency in Livestock Farming: Practical Strategies from the Italian Community of Practice
#65	Targeted Irrigation Strategies for Processing Tomatoes and Kiwifruit: Insights from the Italian Community of Practice
#71	Cover Crops in Croatian Conservation Agriculture: Benefits for Soil, Environment, and Farm Profitability
#74	Laboratory of Soil Analysis - Towards Climate Smart Farming
#76	Digital Tools for Climate Smart Agroforestry Advisors
#80	Cover crop over summer : anticipate their sowing to maximize their development
#82	Digestate from Biogas and Agricultural Soils: Key Factors Influencing Soil Quality and Organic Matter
Training and Capacity Building	
#18	Co-designing a Climate-Smart Train-the-Trainer Programme Across EU Partners
#19	How Agricultural Advisors Can Identify Priority Climate Actions in Their Region
#20	Identifying Barriers and Developing Solutions for Climate-Smart Practice Adoption
#21	How to Deliver Impactful Training Events to Support Climate Smart Farming
#23	Determining the Training Needs of Advisors before Delivering a Training
#24	Organising an Effective Community of Practice Training Event Through National and International Networking
#25	Building Climate-Smart Advisory Capacity in Serbia: Enhancing Soil Health and Biodiversity through Regenerative Agriculture Practices
#36	A Practical Guide to Organizing Communities of Practice on Climate Advice in Agriculture
#41	Interactive Knowledge Exchange to Strengthen Climate-Smart Advisory Capacity Across Europe

No. of PA	Title of the PA
#59	Training Programme and Training in GHG Emissions and Carbon Farming
#68	Broadening Advisory Perspectives Beyond Single-Practice Solutions Through a Multidisciplinary Advisory Model
#69	How to Build Technical Capacity and Skills of Advisors through Training Events
#70	Inputs from Slovenian ClimateSmartAdvisors Community of Practice
#81	Strengthening Advisor Participation in Communities of Practice: Lessons from ClimateSmartAdvisors
Innovation and Multi-Actor Engagement	
#1	The Evolving Role of Advisors and Advisory Services in Climate Smart Farming
#2	Gaps and "White Spots" in Climate Farm Advisory Research - Identifying Opportunities for the Future
#3	Co-Design Innovation Experiments: Transitions in Climate Smart Farming
#4	Implementing Transitions in Climate Smart Farming-the Role of Resources and Capabilities
#5	What Does it Mean to "Scale" Climate Smart Farming?
#6	Mapping and Classifying Multi-actor Innovation Projects in ClimateSmartAdvisors to Understand How Advisors Drive Climate-smart Innovations
#7	Empowering Advisors: Maximizing the Potential of Innovation Tools
#8	How Service Blueprints Strengthen Advisory Work
#9	Scenarios - Innovation Tool that can Inspire Advisors in Strategic Thinking
#62	Feed Additives for Methane Reduction in Dairy Farming: Testimonials from Industry-Supported Approaches
#77	Integrate Climate-Friendly and Economic-Driven Actions into a Common Goal - Innovation in Poultry Farms
Monitoring, Learning & Evaluation (ML&E)	
#10	How do (Climate Smart) Advisors see Themselves?
#11	How Much are Climate Smart Advisors Aware of Climate Smart Farming and How They Define it?
#12	What is the Most Important When Advising and What are the Main Successes/Difficulties?
#13	Which Climate Smart Farming Tools do Advisors Know and Use?
#14	Strengthening Advisory Services to Better Support Climate-Smart Farming
#42	Building Blocks of the ClimateSmartAdvisors Theory of Change

No. of PA	Title of the PA
#43	Learning in Large Networks: Developing a Dynamic Learning Agenda for ClimateSmartAdvisors
#44	Balancing Trust and Transformation: A Reflection Matrix for ClimateSmartAdvisors
#45	Integrating Process and Outcome Evaluation in ClimateSmartAdvisors' Communities of Practice
#46	Learning Questions as a Tool to Deepen Learning in Large Networks
#78	Monitoring, Evaluation & Learning: Experiences of using a Community of Practice for Capacity Development of Climate Smart Advisors
#79	CoP Working Principles for Advisory Success: Lessons from the First ClimateSmartAdvisors CoP Wave
Monitoring, Learning & Evaluation (ML&E)	
#51	From Mapping to Action: A 6-step Approach to Embed Climate-smart Advice in AKIS
#52	Spotting barriers and enablers for climate-smart advice with PESTLE
#53	Warm networks, real people: Using Network Analysis to mobilise CS-AKIS actors
#54	Stakeholder Analysis Matrix: Prioritising Engagement for Climate Action
#55	Building and Monitoring a CS-AKIS Communication & Engagement Plan
#56	Using CS-AKIS Meetings as Strategic Interventions to Strengthen National Advisory Systems
#72	Use AKIS Spaces to Connect and Disseminate Real Practices that Promote Climate Action and Efficient Practices
Other cross-cutting topics	
#34	Plan to Action: How to Promote Synergies with Other Projects
#35	Towards a Europe-wide Network for Climate-Smart Agriculture Advisory: Lessons from the ClimateSmartAdvisors Baseline Survey
#63	Involving Industries and Politics in the Methane Journey
#66	From Results to Reach: Effective Dissemination Strategies for Advisors and AKIS Stakeholders
#67	Tailoring Communication to Strengthen Climate-Smart Knowledge Exchange

Table 5 List of all Practice Abstracts per thematic clusters

8.3 Advisory Methods & Peer Learning

This cluster covers PAs related to the role of advisors, advisory approaches and peer learning CoPs, participatory advisory formats, practical examples of advisor engagement, and approaches that strengthen interaction, exchange and mutual learning among advisors and other actors. The cluster is particularly relevant for outputs that help advisors improve the way they facilitate learning, dialogue and practice change.

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PRACTICE ABSTRACT NUMBER #16

TITLE IN ENGLISH

The “Farmer and their Advisory Journey”: A Tool for Advisors to Reflect on Change in Farming and Their Role as Advisors

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe and beyond

AUTHOR’S NAME, SURNAME AND EMAIL ADDRESS *

Florence Bedoin florence.bedoin@idele.fr

Caroline Evrat-Georgel caroline.evrat-georgel@idele.fr

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Lifelong learning of advisors
2. Creative format which promotes peer-learning and team cohesion
3. Step back from a purely technical perspective and consider psychological dimensions of change

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The “Farmer and their Advisory Journey” is a workshop which helps reflect on how change happens on a farm and on how methods and tools can help motivate a farmer for climate action. The method enables advisors to step back from a purely technical perspective and consider psychological dimensions of change (e.g. the need to “celebrate” intermediate achievements). The method can also be used to make policy makers grasp the non-linearity of behavior change and the different enabling factors.

The “Farmer and their Advisory Journey” has proved valuable in diverse settings as a:

- Reflective tool: allowing advisors to reassess their roles and strategies.
- Training aid: helping structure learning around behavior change dynamics.
- Communication device: conveying to policymakers the complexity of change and the limitations of one-off interventions or policy instruments.

Its strength lies in showing that change is a messy, iterative, and emotional process. Rather than prescribing “what works,” the tool invites contextualized thinking. For many users, it also enabled recognition of rarely addressed dimensions of advisory work, such as trust-building, timing, and emotional support.

The workshop is designed for working in groups of about 5 people on a large flipchart with cards. With the first set of cards, the participants move and place the different stages a farmer goes through to reach a change of practice. They can add drawings, arrows, and new cards. The second set of cards depicts advisory activities which can support the farmer on its journey.

The workshop has been designed for the Train the Trainer program of the ClimateSmartAdvisors project, which aims at training advisors in leading a Community of Practice of advisors.

ADDITIONAL INFORMATION

Some challenges remain as the approach requires experienced facilitation and time constraints can limit depth of discussion.

Future developments could include:

- Turning the model into a self-assessment tool for identifying training needs of advisors.
- Developing pathways to help advisors access relevant trainings or shadowing opportunities.
- Identify different type of farmers (the one who doesn’t like to work in groups, the ones who are far from advisors and don’t trust them...) and discuss how the advisory activities can be adapted to them.

The workshop has been replicated and adapted to different contexts and other projects for example at a session of the Carbon Farming Summit (Dublin, 2025); a training of advisors in the Organic Climate Net (France, 2025); a session in a Community of Practice of advisors in

ADVISORY METHODS AND PEER LEARNING

Poland as well as being used in higher education to frame advisory work (Ireland, 2024).

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Cards and facilitation guide for the “farmers and advisory journey” workshop.

URL:

<https://www.farmingforclimate.eu/details/162/The%20farmer's%20and%20advisory%20journey%20towards%20climate-smart%20farming>

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PRACTICE ABSTRACT NUMBER #22

TITLE IN ENGLISH

Engaging and Motivating Farmers Towards Climate Action Through Advisory Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Dublin, Ireland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Carolanne O'Brien, carolanne.obrien@teagasc.ie

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Building trust
2. Farmer engagement
3. Sustained change

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The “Farmer and their Advisory Journey” workshop, developed within the ClimateSmartAdvisors (CSA), was adapted for delivery at the Carbon Farming Summit 2025. In this session, participants engage with a pre-defined representation of a farmer’s journey toward adopting a climate-smart practice, illustrating stages farmers may experience when exploring, testing, and implementing change on the farm.

Engaging farmers in climate action is not only a technical challenge but also a behavioural one. Insights from the Climate Farm Demo conceptual framework highlight that decisions are influenced by factors such as cost, perceived risk to the farm business, social norms, personal values, and trust in both the information provided and the source delivering it.

Building on these insights, participants explored and discussed motivations and enabling factors that can encourage farmers to adopt climate-smart practices. These included financial incentives, control over decisions, trusted advice, social proof, peer learning, cultural factors, visible results, and policy signals.

Participants were invited to map advisory activities along this journey, identifying where and how advisors can influence farmer decision-making and support progress. Examples discussed included providing locally relevant climate information, facilitating peer learning among farmers, coordinating advisory support, and communicating the practical and economic implications of climate-smart practices.

Discussions during the workshop highlighted the importance of recognising diverse farmer motivations and the central role advisors play in supporting climate action. Trust, peer learning, and clear communication of the practical and economic benefits of climate-smart practices were identified as key elements for strengthening engagement. Consistent messaging, credible evidence, and peer examples can support advisory efforts and complement technical tools that help identify suitable climate actions for individual farms.

ADDITIONAL INFORMATION

This workshop approach provides a practical reflection tool for advisors to explore where they can have the greatest impact in supporting farmers along the journey toward adopting climate-smart practices. By mapping advisory activities to different stages of farmer decision-making, advisors can identify opportunities to provide relevant information, facilitate peer learning, and support farmers in assessing and testing new practices.

The adapted format used a pre-defined farmer journey to enable discussion within limited time. In future applications, using the original workshop format, where participants build the farmer journey themselves, may allow for deeper reflection on farmer decision-making processes. However, when time is limited or when the objective is to focus specifically on where advisors can have impact, the adapted format provides a practical and effective alternative.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

The farmer's and advisory journey towards climate-smart farming

URL:

<https://www.farmingforclimate.eu/details/162/The%20farmer's%20and%20advisory%20journey%20towards%20climate-smart%20farming>

Title/Description

Climate Farm Demo Deliverable 1.1 - Conceptual framework for network management and knowledge exchange on Climate Smart Farming

URL:

https://www.climatefarmdemo.eu/wp-content/uploads/2023/10/CFD_D1.1_WP1_Conceptual_framework_for_network_management_and_KE_on_CSF_EV_ILVO_25.07.2023.pdf

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PRACTICE ABSTRACT NUMBER #26

TITLE IN NATIVE LANGUAGE

Welche Rolle hat das Lernen von Beratungsmethodiken auf der Betriebsebene?

TITLE IN ENGLISH

Which is the Role of Learning Advisory Methods at Farm Level?

GEOGRAPHICAL LOCATION (IF RELEVANT)

Mainly Northern Germany (lower Saxony)

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Bolduan, Jana, jana.bolduan@gruenlandzentrum.de

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Direct feedback from farmers
2. Adapting methods to the individual farmer
3. Train advisors in “real life”

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Das Lernen von Beratungsmethoden direkt auf einem landwirtschaftlichen Betrieb spielt eine entscheidende Rolle bei der Stärkung praxisnaher Soft Skills. Dadurch erhalten Berater unmittelbar Feedback von den Praktikern. Hierbei müssen Beratungsmethoden immer an den jeweiligen Betrieb angepasst werden. So lernen Berater Wege, die betrieblichen Möglichkeiten zu berücksichtigen und individuelle Konzepte auszuarbeiten. Betriebsbesuche im Rahmen einer Community of Practice werden daher ausdrücklich empfohlen. In unserer „Dairy CoP“ war dieser Ansatz besonders wertvoll: Berater und Landwirte evaluierten gemeinsam Klimabilanzen und nutzten spezielle Methodiken (z.B. positive Verstärkung, aktives Zuhören), um Stellschrauben auf Milchviehbetrieben zu identifizieren. Außerdem wurden im Rahmen der CoP Maßnahmensteckbriefe (z.B. zu den Themen Tiergesundheit und Fütterung) erarbeitet, welche im Rahmen der Beratung genutzt werden können. Ziel von diesen Methodiken soll sein, den Betrieb nicht zu überlasten und dennoch zu motivieren einen Beitrag zum Klimaschutz zu leisten. Die wirtschaftlichen Aspekte von Klima-Maßnahmen wurden von den besuchten Betrieben besonders hervorgehoben und sollten in Zukunft mehr adressiert werden. Das Training von Beratern im „realen Umfeld“ schafft eine intensive Lernschleife: beobachten, anwenden, anpassen, reflektieren. Daher ist eine enge Zusammenarbeit mit Projekten wie ClimateFarmDemo sehr wertvoll, da sie strukturiertes On-Farm-Lernen und das Einbeziehen verschiedener Kommunikationsebenen über Betriebe und Beratungsteams hinweg ermöglicht.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Learning advisory methods directly on the farm plays a crucial role in strengthening practical, effective soft skills. When advisors are trained on a farm, they receive immediate, context-rich feedback from farmers. This real-life interaction helps them understand that advisory tools and methods must be tailored to each individual farm.

Advisors can learn to adapt their approach in a way that is both realistic and respectful of the farmer's capacities. Connecting farm visits to a local advisory Community of Practice (CoP), as established in the ClimateSmartAdvisors project, are therefore highly recommended.

In our “Dairy CoP” this approach was very valuable: advisors and farmers jointly evaluated climate audits, using specific advisory techniques (for example positive reinforcement and active listening) that help identify feasible points for on-farm improvements. Additionally, as part of the CoP activities, fact sheets (e.g. on topics such as animal health and feeding) were developed, which can be used in advisory work. Those methods ensure that proposed measures do not overload the farmer while still contributing to climate protection. The economic point of view of climate measures was highlighted by the host farmers and should be focused on in the future.

Training advisors in “real environments” create a powerful learning loop: observe, apply, adapt, reflect - this cannot be replicated off-farm. For this reason, close cooperation with projects such as Climate Farm Demo is very valuable, as it enables structured on-farm learning and practical climate action/ communication across farms and advisory teams.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Maßnahmensteckbrief: Pflanzenkohle als Futtermittel Klimaintelligente Landwirtschaft – Factsheets

URL:

https://www.gruenlandzentrum.org/wp-content/uploads/2026/02/Steckbrief_31_Pflanzenkohle_Futtermittel.pdf

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PRACTICE ABSTRACT NUMBER #28

TITLE IN NATIVE LANGUAGE

Mettre en place un service de conseil efficient pour accompagner les éleveurs vers la réduction de leur empreinte carbone.

TITLE IN ENGLISH

Setting up an Efficient Advisory Service to Help Farmers Reduce their Carbon Footprint

GEOGRAPHICAL LOCATION (IF RELEVANT)

France

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Support as many farms as possible in reducing their carbon footprint
2. Optimize the cost of consulting services per ton of CO2 avoided
3. Make a profitable service sustainable for advisory companies

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE *

Les sociétés de conseil en élevage doivent de plus en plus aider les agriculteurs à réduire l'empreinte carbone de leurs exploitations tout en veillant à ce que leurs services de conseil restent efficaces, rentables et durables. Au sein de la communauté de pratique (CoP) ClimateSmartAdvisors animée par ELIANCE en France, les membres ont comparé les services proposés par leurs organisations afin d'identifier un modèle concret pour les services de conseil en matière de carbone dans le secteur de l'élevage.

Cette comparaison a abouti à la mise en place d'un parcours de conseil structuré en cinq étapes. La première étape consiste à préparer l'évaluation par un travail administratif, notamment la collecte de données techniques et économiques sur l'exploitation et leur saisie dans l'outil CAP'2ER. La deuxième étape consiste à réaliser l'évaluation sur place, ce qui comprend la visite, la finalisation de l'évaluation, la présentation des résultats et la discussion des leviers d'amélioration possibles. La troisième étape consiste à élaborer le plan d'action par le biais d'un travail administratif, comprenant notamment des simulations des leviers pertinents discutés avec l'agriculteur. La quatrième étape consiste à mettre en œuvre le plan d'action par le biais de son élaboration conjointe, du choix des leviers, de la définition des objectifs et des indicateurs de suivi, ainsi que de la finalisation des simulations. Dans certains cas, cette étape peut être réalisée à distance. La cinquième étape consiste à assurer le suivi du plan d'action, notamment en contrôlant la mise en œuvre des mesures techniques et la réalisation des objectifs.

Les résultats suggèrent qu'un service de conseil efficace en matière de carbone devrait associer la collecte de données agricoles, l'utilisation de l'outil CAP'2ER, le dialogue, des simulations, l'élaboration de plans d'action et un suivi. Parmi les principales recommandations figurent la collaboration avec les interlocuteurs habituels de l'exploitation pour accéder aux données disponibles avec le consentement de l'agriculteur, le partage des rapports après la visite, l'implication des interlocuteurs habituels de l'exploitation dans le suivi, et le recours à l'expertise appropriée en cas de besoin. Cette approche contribue à garantir la continuité, l'implication des agriculteurs et la mise en œuvre concrète des mesures de réduction des émissions de carbone. Pour en savoir plus, consultez la section « Informations complémentaires ».

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Livestock advisory companies increasingly need to help farmers reduce the carbon footprint of their farms while keeping advisory services efficient, profitable, and sustainable. Within the ClimateSmartAdvisors Community of Practice (CoP) facilitated by ELIANCE in France, members compared services offered by their organisations to identify a practical model for carbon advisory services in livestock farming.

The comparison resulted in a structured five-step advisory pathway. The first step is preparation of the assessment through office work, including collection of technical and economic farm data and entry into the CAP'2ER tool. The second step is conducting the assessment on the farm, including the visit, finalisation of the assessment, presentation of results, and discussion of possible levers for improvement. The third step is preparation of the

action plan through office work, including simulations of relevant levers discussed with the farmer. The fourth step is implementation of the action plan through co-construction of the plan, selection of levers, definition of objectives and monitoring indicators, and finalisation of simulations. In some cases, this step can be done remotely. The fifth step is monitoring of the action plan, including follow-up on implementation of technical levers and objectives.

The findings suggest that an effective carbon advisory service should combine farm data collection, use of the CAP'2ER tool, dialogue, simulations, action planning, and follow-up. Key recommendations include collaborating with farm contacts to access available data with farmer consent, sharing reports after the visit, involving the farm's usual contacts in monitoring, and mobilising the right expertise when needed. This approach helps ensure continuity, farmer engagement, and practical implementation of carbon reduction measures. See more in an additional information section.

ADDITIONAL INFORMATION

The five-step pathway also includes indicative time requirements for each stage: preparation of the assessment (2-4 h), on-farm assessment (around 3 h), preparation of the action plan (1-2 h), implementation of the action plan (2-3 h), and monitoring (variable). Practical recommendations from the comparison include collaborating with the farm's usual contacts to access available data with the farmer's consent, sending the assessment report by email after the farm visit, sharing the final report with the farm's usual advisor, and involving regular farm contacts in follow-up. In some cases, the implementation step can also be carried out remotely, for example by videoconference.

Advisors must raise farmers' awareness of the importance of having access to livestock data to prepare the diagnosis. Without this, carrying out the on-farm assessment will take much longer.

Communication between the advisor conducting the assessment and action plan and the one supporting the farmer is essential. Companies must implement conditions that allow advisors to communicate easily and regularly with each other and to easily share/archive documents related to the farms.

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PRACTICE ABSTRACT NUMBER #29

TITLE IN NATIVE LANGUAGE

Budovanie kapacít poradenských služieb v oblasti zdravia pôdy – poznatky zo slovenskej Komunity praxe

TITLE IN ENGLISH

Building Advisory Capacity for Soil Health - Insights from Slovak Community of Practice

GEOGRAPHICAL LOCATION

Slovakia

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Stronger advisory capacity and confidence
2. Development of farmer-friendly advisory tools
3. Improved collaboration within AKIS

THEMATIC AREA

Soil Health & Biodiversity

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Slovenská Komunita praxe (CoP) s názvom **Zdravie pôdy** ukazuje, že poradenské kapacity v oblasti zdravia pôdy možno výrazne posilniť prostredníctvom štruktúrovaného vzájomného učenia, praktických demonštrácií a úzkej spolupráce medzi poradcami, farmármi, výskumníkmi a tvorcami politik. Poradcovia najviac profitujú vtedy, keď je vzdelávanie priamo prepojené s reálnymi podmienkami na farmách a dlhodobými výsledkami hospodárskej praxe, a nie len s teoretickými prezentáciami.

Formáty ako návštevy farmy, ukážky systémov bezorbového a pásového obrábania pôdy (no-till a strip-till) a otvorené diskusie so skúsenými farmármi, sú kľúčové pre budovanie istoty pri poradenstve v oblasti regeneratívneho a klimaticky inteligentného manažmentu pôdy. Poradcovia oceňovali najmä možnosť vidieť dlhodobé dopady postupov, ako sú medziplodiny, obmedzenie obrábania pôdy, aplikácia kompostu a zníženie vstupov chemických prípravkov, na vodozadržnosť pôdy, jej štruktúru, úrody a ekonomiku hospodárenia.

Dôležitou inováciou, ktorá vzišla z CoP, je spoločná tvorba poradenských nástrojov priateľských k farmárom. Namiesto zložitých manuálov poradcovia spoločne pripravili koncept jednoduchého sprievodcu a interaktívneho rozhodovacieho nástroja typu „vyvracanie mýtov“. Tento prístup pomáha poradcovi reagovať na bežné obavy farmárov (napr. riziká pre úrodu, náklady, meranie uhlíka či zníženie vstupov) na základe faktov a lokálne relevantných dôkazov.

CoP zároveň ukázala, že poradcovia potrebujú kombináciu technických znalostí aj poradenských zručností. V tomto zmysle CoP poskytuje bezpečný priestor na testovanie argumentov, výmenu skúseností a zosúladenie poradenských odporúčaní ešte pred ich aplikáciou v praxi na farmách.

Celkovo prístup CoP ponúka škálovateľný model na posilnenie národného AKIS systému, ktorý premieňa vedecké poznatky a skúsenosti z fariem na praktické a dôveryhodné poradenské služby pre zdravšie pôdy a odolnejšie poľnohospodárske systémy.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The Slovak Community of Practice (CoP) within ClimateSmartAdvisors shows that advisory capacity for soil health can be significantly strengthened through structured peer learning, practical demonstrations, and close cooperation between advisors, farmers, researchers, and policy actors. Advisors benefit most when learning is directly linked to real farm conditions and long-term practice outcomes, rather than theoretical presentations.

Formats such as farm visits, demonstrations of no-till and strip-till systems, and open discussions with experienced farmers are essential for building confidence in advising on regenerative and climate-smart soil management. Advisors particularly valued seeing long-term impacts of practices such as cover crops, reduced tillage, compost application, and lower chemical inputs on water retention, soil structure, yields, and farm economics.

An important innovation emerging from the CoP is the co-creation of farmer-friendly advisory tools. Instead of complex manuals, advisors jointly developed the concept of a simple guideline and an interactive “myth-busting” decision-support tool. This approach helps advisors address common farmer concerns (e.g. yield risks, costs, carbon measurement, or reduced inputs) with fact based locally relevant evidence.

The CoP also demonstrated that advisors need both technical knowledge and advisory skills. In this sense, the CoP provides a safe space for advisors to test messages, exchange experiences, and align advice before working with farmers.

Overall, the CoP approach offers a scalable model for strengthening national AKIS by turning scientific knowledge and farm experience into practical, trusted advisory support for healthier soils and more resilient farming systems.

ADDITIONAL INFORMATION

The implementation of the results generated by the Slovak CoP can be facilitated by several enabling factors. Strong interest among advisors and farmers in practical soil health solutions creates a solid foundation for uptake. Peer-to-peer learning, farm demonstrations, and visible long-term results on demonstration farms help build trust and reduce resistance to change. Cooperation with research institutions and the national AKIS coordination body further strengthens credibility and supports wider dissemination through established advisory networks.

On the other hand, time constraints and farmers' concerns about economic risks, yield stability, and transition costs continue to slow adoption of regenerative practices. In addition, limited availability of simple, locally adapted advisory tools and inconsistent policy incentives can hinder wider implementation at farm level.

To address these challenges, future actions should focus on scaling practical advisory tools developed within the CoP, such as farmer friendly guidelines and interactive myth-busting decision support tool. Increasing the number of farm-based demonstrations, would further support advisors and farmers during transition phases. Closer alignment with policy instruments and incentive schemes is also needed to reinforce advisory messages with economic signals.

For end users - farmers, the key message is to start gradually, test practices on a small scale, and rely on trusted advisory support. Long term experience from farms applying regenerative practices shows that improvements in soil health, resilience, and farm economics are achievable when changes are based on evidence, monitoring, and step-by-step implementation.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Slovak Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/farming-toward-the-soil-health/>

Title/Description

Myth-busting algorithm

URL:

ADVISORY METHODS AND PEER LEARNING

<https://csa-cop.bioeconomy.sk/>

www.climatesmartadvisors.eu

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PRACTICE ABSTRACT NUMBER #30

TITLE IN NATIVE LANGUAGE

Spielerische Moderation zur Stärkung des Lernens und Engagements in Climate Smart Communities of Practice

TITLE IN ENGLISH

Playful Facilitation to Strengthen Learning and Engagement in Climate Smart Communities of Practice

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Increase participant engagement
2. Improve peer-to-peer learning
3. Support innovation and openness to change

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Spielerische Moderation ist eine Beratungsmethode, die einfache Spiele, interaktive Übungen und kreative Werkzeuge einsetzt, um das Lernen, die Reflexion und die Zusammenarbeit CoPs zu unterstützen. Im Rahmen des Projekts CSA hat sich die spielerische Moderation als wirksames Mittel erwiesen, um Landwirte, Berater und andere Interessengruppen für komplexe Themen wie Klimawandel, Nachhaltigkeit und Innovation zu begeistern.

Das Hauptziel der spielerischen Moderation ist es, eine sichere und motivierende Lernumgebung zu schaffen, in der alle Teilnehmer aktiv mitwirken und voneinander lernen. Durch die Einführung spielerischer Elemente – wie Rollenspiele, visuelle Hilfsmittel, Karten, Bewegung oder Geschichtenerzählen – werden die Teilnehmer offener, neugieriger und bereit, Erfahrungen auszutauschen. Dies ist besonders hilfreich, wenn es um Unsicherheit, unterschiedliche Perspektiven oder Widerstände gegen Veränderungen geht.

Das wichtigste Ergebnis ist ein tieferes Lernen und eine stärkere Interaktion. Spielerische Moderation hilft dabei, abstrakte Konzepte (z. B. Klimarisiken, Systemdenken oder Entscheidungsfindung unter Unsicherheit) in praktische und nachvollziehbare Erfahrungen zu übersetzen. In CoPs führt dies zu einer ausgewogeneren Beteiligung, einem stärkeren Peer-Learning und einem erhöhten Vertrauen unter den Mitgliedern. Moderatoren erhalten außerdem bessere Einblicke in die Bedürfnisse, Motivationen und Hindernisse der Teilnehmer.

Das wichtigste Ergebnis ist ein tieferes Lernen und eine stärkere Interaktion. Durch spielerische Moderation lassen sich abstrakte Konzepte (z. B. Klimarisiken, Systemdenken oder Entscheidungsfindung unter Unsicherheit) in praktische und nachvollziehbare Erfahrungen umsetzen. In CoPs führt dies zu einer ausgewogeneren Beteiligung, einem intensiveren Peer-Learning und einem größeren Vertrauen unter den Mitgliedern. Moderatoren erhalten zudem einen besseren Einblick in die Bedürfnisse, Motivationen und Hindernisse der Teilnehmer.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Playful facilitation is an advisory method that uses simple games, interactive exercises and creative tools to support learning, reflection and collaboration in Communities of Practice (CoPs). Within the Climate Smart Advisors project, playful facilitation has proven to be an effective way to engage farmers, advisors and other stakeholders in complex topics such as climate change, sustainability and innovation.

The main objective of playful facilitation is to create a safe and motivating learning environment where all participants actively contribute and learn from each other. By introducing playful elements, such as role play, visual tools, cards, movement or storytelling, participants become more open, curious and willing to share experiences. This is particularly helpful when dealing with uncertainty, diverse perspectives or resistance to change.

The key result is deeper learning and stronger interaction. Playful facilitation helps translate abstract concepts (e.g. climate risks, systems thinking or decision-making under uncertainty)

into practical and relatable experiences. In CoPs, this leads to more balanced participation, stronger peer learning, and increased trust among members. Facilitators also gain better insights into participants' needs, motivations, and barriers.

In practice, playful facilitation can be applied in workshops, CoP meetings, advisory sessions, and training. It does not require expensive materials and can be adapted to different group sizes and contexts. Clear objectives and structured reflection are essential to connect playful experiences with real-life climate-smart practice.

This facilitation is aimed at: advisors, Climate Smart Coaches, facilitators, farmers' groups, innovation brokers and trainers.

ADDITIONAL INFORMATION

Playful facilitation works best when participants feel safe and respected. Facilitators may face initial skepticism from participants unfamiliar with playful methods; therefore, it is important to clearly explain the purpose and learning objectives. Training facilitators in reflection techniques can further strengthen the impact. Future actions could include collecting examples of playful methods adapted to climate-smart advisory contexts.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Playful Facilitation – Method description and practical examples

URL:

<https://www.playability.at/facilitation>

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PRACTICE ABSTRACT NUMBER #37

TITLE IN NATIVE LANGUAGE

Yhteistyöhön perustuva oppiminen parantaa analyttisiä valmiuksia ja neuvonnan laatua maaperän kasvukunnon analysoinnissa

TITLE IN ENGLISH

Collaborative Learning Enhancing the Analytical Capability and Advisory Quality in Soil Health Analysis

GEOGRAPHICAL LOCATION (IF RELEVANT)

Finland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Peer learning for advisor capacity building
2. Confidence building for climate-smart advisors
3. Practical use of analytical tools in climate advice

THEMATIC AREA

Soil health and biodiversity

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Suomen ensimmäisessä CSA-vertaisoppimisryhmässä (CoP-ryhmä) vahvistettiin ilmastoälykkäänviljelyn neuvontaan liittyvää osaamista, maaperän kasvukunnon arvioinnissa. Ryhmä keskittyi maaperän kasvuedellytysten analysointiin ja niitä tukevien työkalujen käyttöönottoon asiantuntijoiden oman kokemuksen ja osaamisen pohjalta. Menetelmää sovellettiin erityisesti NIR-analyysin tulkintaan (Near Infra Red), josta muodostui keskeinen esimerkki siitä, miten yhteisöllinen oppiminen parantaa analytiikan hyödynnettävyyttä ja neuvonnan laatua.

Vertaisoppiminen yhdisti säännölliset tapaamiset, verkkokokoukset ja jatkuvan keskustelun WhatsApp-ryhmässä. Tavoitteena oli luoda matalan kynnyksen ympäristö, jossa asiantuntijat voivat käsitellä tulkintaan liittyviä haasteita, jakaa onnistumisia ja vertailla havaintoja eri tiloilta. Menetelmän ydin oli vaiheittainen eteneminen: ensin perehdyttiin NIR-analyysin periaatteisiin koulutussarjan kautta, minkä jälkeen tulkintaa harjoiteltiin yhdessä käytännön esimerkkien avulla. Koulutuksen jaksottaminen ja opitun toistaminen osoittautuivat tehokkaiksi keinoiksi syventää osaamista ja lisätä tulkintavarmuutta.

Menetelmän vaikuttavuus korostui erityisesti todellisten asiakastapausten käsittelyssä. Asiakastyötä tekevät asiantuntijat saivat ryhmältä tukea tulkintaan, menetelmien vertailuun ja asiakasviestintään, mikä paransi neuvonnan laatua ja viljelijöille tarjottujen suositusten käytännönläheisyyttä. Asiantuntijat, joilla ei ollut vastaavia asiakastöitä, pystyivät puolestaan harjoittelemaan tulkintaa turvallisessa kollegoiden kanssa, lisäämään rutiinia ja syventämään osaamistaan.

Kokonaisuutena menetelmä osoittautui toimivaksi, skaalautuvaksi ja vaikuttavaksi tavaksi vahvistaa maaperäanalytiikan osaamista ja parantaa neuvonnan laatua. Yhteinen oppimisprosessi osoitti, että analytiikan hyödyntäminen tehostuu merkittävästi, kun asiantuntijoilla on käytössään jatkuvaa vertaispalautetta ja yhteistä tulkintatyötä tukeva rakenne.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In the ClimateSmartAdvisors project, Finland's first Community of Practice was established to strengthen climate advisory skills, with a focus on soil health assessment. The group analysed soil growth conditions and applied related assessment tools, drawing on members' expertise. NIR (Near Infra Red) analysis served as the main example of how collaborative learning can enhance analytical capacity and advisory quality.

Peer learning combined regular in-person and online meetings with continuous discussion in a WhatsApp group. The aim was to create a low-threshold environment where experts could address interpretation of challenges, share experiences, and compare observations from different farm contexts. Capacity building through peer-exchange ensures that new skills could be directly applied in daily advisory work, particularly in promoting climate-smart practices.

The method followed a structured, step-by-step approach supported by repetition. Participants were introduced to NIR principles through a training series and then practised interpreting results using real examples. Dividing the training into phases and revisiting key concepts regularly deepened understanding and strengthened analytical confidence.

ADVISORY METHODS AND PEER LEARNING

The approach proved especially effective when NIR interpretation was revisited using real client cases submitted by advisors. Those working directly with farmers received peer feedback to refine interpretations and improve communication, resulting in clearer and more actionable recommendations. Advisors without equivalent client exposure gained guided practice, strengthened routine and maintained technical competence.

Overall, the peer-learning model was an impactful, scalable, and practice-oriented way to strengthen soil analytics expertise and advance climate-smart advisory services. Continuous peer support, shared interpretation practices and collective problem-solving significantly increased the effectiveness of analytical tools in advisory work.

ADDITIONAL INFORMATION

Facilitating elements:

- Logical step-by-step approach combining theoretical and practical training support the intake of new information
- Small expert groups enabled open discussion and trust-based learning.
- Regular interaction and repetition supported long-term skill development.
- Real-life examples and client cases ensured practical relevance.
- Low-threshold communication channels (e.g. WhatsApp) sustained engagement between meetings.

Obstacles:

- The method requires time commitment from experts.
- Skilled facilitation is needed to ensure consistent interpretation and learning outcomes.
- Availability of real client cases may vary between participants.

Future actions / messages:

- The peer-learning model can be replicated for other climate-smart advisory topics.
- Similar CoPs could be established nationally or across countries.
- Analytical tools should always be accompanied by continuous peer support to maximise their advisory value.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors Community of Practice Finland - Development of Advisory Expertise and Tools Related to the Soil Growth Condition

URL:

<https://climatesmartadvisors.eu/cops/development-of-advisory-expertise-and-tools-related-to-the-soil-growth-condition/>

Title/Description

ProSoil - CoP group description

URL:

https://climatesmartadvisors.eu/cops/?e-filter-d82d938-post_tag=finland#coach-henna

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A large, stylized graphic in the background of the header section. It features several concentric, overlapping circular arcs in shades of teal, blue, and yellow, creating a sense of movement and connectivity.

PRACTICE ABSTRACT NUMBER #38

TITLE IN NATIVE LANGUAGE

QBS-ar: un metodo efficace per valutare la biodiversità del suolo

TITLE IN ENGLISH

QBS-ar: An Effective Method to Assess Soil Biodiversity

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Soil biodiversity assessment
2. QBS-ar
3. Ecosystem services of soil

THEMATIC AREA

Soil Health and Biodiversity

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE *

Descrizione

La biodiversità del suolo è indispensabile per la sua funzionalità e affinché il suolo possa espletare i propri servizi ecosistemici. Il metodo QBS-ar, messo a punto dall'Università di Parma e riconosciuto come uno dei più interessanti e efficaci metodi per la valutazione della biodiversità del suolo, è affidabile, semplice, veloce e sufficientemente economico da realizzare. Questo metodo è stato illustrato in modo più dettagliato durante il webinar tematico di ClimateSmartAdvisors dal titolo «Qualità biologica del suolo (QBS) ed efficienza delle piante: metodi e utilità pratica nell'agricoltura sostenibile», tenutosi nel novembre 2025.

In campo si preleva un campione di suolo, secondo un protocollo chiaro e preciso. In seguito si porta in campione in laboratorio, e una persona adeguatamente formata può abbastanza facilmente realizzare l'osservazione per la valutazione del QBS-ar. Il metodo è ripetibile, produce risultati confrontabili tra siti diversi e nel tempo, così da poter verificare l'effetto di diversi ambienti o metodi di gestione sulla biodiversità del suolo, nello spazio (diversi siti) o nel tempo (diversi anni, o in conseguenza di diversi sistemi agronomici).

Comprendere l'effetto delle strategie di gestione del suolo sulla sua biodiversità è fondamentale per una gestione sostenibile del suolo. La quantità e la qualità della resa dipendono strettamente dalla presenza di un terreno accogliente, dove le radici possano crescere e svilupparsi efficacemente, consentendo così alle piante di dare il massimo.

Consulenti e ricercatori coinvolti in attività per valorizzazione di pratiche agricole sostenibili. Aziende che desiderano conoscere e comunicare la ricchezza di vita nei suoli.

Vantaggi:

- Metodo semplice, veloce, affidabile e economico per la misurazione della biodiversità del suolo.
- Fornisce informazioni sull'impatto delle pratiche agricole sulla biodiversità edafica
- Abbastanza facile formare le persone per la misura del QBS-ar
- Costo minimo delle attrezzature di campionamento e di laboratorio (oltre a un microscopio)

Criticità:

- Necessario avere un laboratorio con personale competente, dove sia possibile consegnare i campioni di suolo entro 48 ore
- Conservare i campioni al fresco (10-20 °C)

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Soil biodiversity is essential for its functionality and the provision of ecosystem services. The QBS-ar method, developed by the University of Parma and recognized as one of the most interesting and effective methods for assessing soil biodiversity, is reliable, simple, rapid, and relatively inexpensive to perform. This method was explained in more detail during the ClimateSmartAdvisors thematic webinar "Biological Quality of Soil (QBS) and plant efficiency: methods and practical utility in sustainable agriculture" in November 2025.

A soil sample is collected in the field, following a clear and precise protocol. The sample is then transported to the laboratory, where a suitably trained person can easily perform the QBS-ar assessment. The method is repeatable and produces comparable results across different sites and overtime, allowing us to assess for the effects of different environments or management methods on soil biodiversity, across space (different sites) or time (different years, or because of different agronomic systems).

Advantages when using a method:

- A simple, quick, reliable and cost-effective method for measuring soil biodiversity.
- Provides information on the impact of agricultural practices on soil biodiversity.
- It is relatively easy to train people to carry out QBS-ar measurements.
- Minimal cost of sampling and laboratory equipment (apart from a microscope).

In addition, it is important to have access to a laboratory with qualified staff, where soil samples can be delivered within 48 hours, and store the samples in a cool place (10–20 °C)

Understanding the effect of soil management strategies on its biodiversity is crucial for performing sustainable soil management. Yield quantity and quality are strictly dependent on the presence of a welcoming soil, where roots can effectively grow and develop, thus allowing the plants to perform at their best.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Biological quality of soil and plant efficiency | Webinar | Climate Smart Advisors

URL:

https://www.youtube.com/watch?v=5J-_bQ9TpDs

Title/Description

Cristina Menta presentation: Soil fauna diversity and roles

URL:

<https://www.youtube.com/watch?v=8ZXZF6eRjKY>

Title/Description

QBS-ar Soil Biological Quality index based on microarthropods.

URL:

https://www.fao.org/fileadmin/user_upload/GSP/GLOSOLAN/8th_GLOSOLAN/Presentations/DAY_2/Item12_DAvino_QBS-ar_SOP_sent.pdf

Title/Description

Cristina Menta presentation: GLOBAL SYMPOSIUM ON SOIL BIODIVERSITY | 19-22 April 2021

URL:

ADVISORY METHODS AND PEER LEARNING

https://www.fao.org/fileadmin/user_upload/GSP/GSOBI-21/DAY2/PS4/15-16/4_Menta_Cristina_ID127.pdf

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PRACTICE ABSTRACT NUMBER #48

TITLE IN NATIVE LANGUAGE

Metody facylitacji wspierające proces uczenia się doradców: doświadczenia polskiej społeczności praktyków

TITLE IN ENGLISH

Facilitation Methods That Support Advisor Learning: Experience from the Polish Community of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Poland, Warmian-Masurian Voivodeship

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS *

Małgorzata Razminas, m.razminas@w-modr.pl

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS *

1. Smart advisory tools and methods
2. Meeting facilitation
3. CoP experience

THEMATIC AREA

Advisory Methods and Peer Learning

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

W niniejszym streszczeniu praktycznym przedstawiono wyniki prac polskiej społeczności praktyków (CoP) w ramach projektu ClimateSmartAdvisors (CSA) oraz omówiono zestaw metod facylitacyjnych i ćwiczeń przetestowanych podczas działań CoP i udostępnionych na platformie Farming for Climate. Celem było zbadanie, które metody najlepiej wspierają zaangażowanie doradców, refleksję, wymianę wiedzy oraz wspólne rozwiązywanie problemów w kontekście rolnictwa przyjaznego dla klimatu.

Polska społeczność praktyków przetestowała kilka metod partycypacyjnych:

- Aktywne słuchanie znacznie zaangażowało uczestników i pomogło stworzyć poczucie jedności na początku spotkania.
- Alternatywne wykorzystanie... stanowiło początkowo wyzwanie i wymagało podania przykładu, ale pobudziło ciekawość i zaangażowanie.
- Burza mózgów z wykorzystaniem karteczek samoprzylepnych okazała się skuteczna w gromadzeniu spostrzeżeń z wizyty w gospodarstwie i wspieraniu wniosków grupy.
- Jesienne liście pomogły usystematyzować wiedzę i ujawniły wspólne spostrzeżenia uczestników....
- Jesienne liście pomogły uporządkować wiedzę i ujawniły wspólne spostrzeżenia uczestników.
- Wzajemne coachingi pokazały, jak ważna jest rola moderatora w utrzymaniu właściwego kierunku dyskusji i przestrzeganiu harmonogramu.
- Wyprowadzone wnioski wykorzystano w metodzie „advokata diabła” lub „advokata anioła”, która wyraźnie uwypukliła argumenty za i przeciw danemu stwierdzeniu.
- Projekt „Rolnik i jego droga doradcza” pokazał, że nie ma jednej słusznej ścieżki doradczej, choć poziom zaangażowania różnił się w zależności od uczestników.
- Gra karciana „Szczęśliwa rodzina” zachęcała doradców do analizowania praktyk przyjaznych dla środowiska oraz do usystematyzowania możliwości ich wdrożenia w gospodarstwach rolnych.

Przetestowane metody wykazały, że odpowiednio dobrane narzędzia facylitacyjne mogą wzmocnić działania społeczności praktyków poprzez pobudzanie kreatywności, odwagi i aktywnego udziału, a także poprawić jakość dyskusji i wspierać wspólne uczenie się w ramach tych społeczności. Pomogły one doradcom skuteczniej znajdować odpowiedzi, wzmacniać relacje, budować zaufanie, efektywniej wykorzystywać czas oraz skupiać się na głównym temacie. Doświadczenie to pokazało również, że niektóre metody wymagają zdecydowanej facylitacji lub jasnego przykładu, aby zapewnić zaangażowanie... Doświadczenie to pokazało również, że niektóre metody wymagają intensywnego wsparcia lub jasnego przykładu, aby zapewnić zaangażowanie uczestników.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This Practice Abstract presents outcomes from the Polish Community of Practice (CoP) within the ClimateSmartAdvisors (CSA) project and reflects on a set of facilitation methods and exercises tested during CoP activities and stored on Farming for Climate. The aim was to

ADVISORY METHODS AND PEER LEARNING

explore which methods best support advisor engagement, reflection, knowledge exchange, and joint problem-solving in climate-smart farming contexts.

The Polish CoP tested several participatory methods:

- **Active listening** strongly engaged participants and helped create a sense of unity at the start of the meeting.
- **Alternative use of...** was initially challenging and required an example, but it stimulated curiosity and participation.
- **Brainstorming with sticky notes** was effective for collecting observations from a farm visit and supporting group conclusions.
- **Autumn leaves** helped systematise knowledge and revealed shared observations among participants.
- **Coaching by peers** showed the importance of facilitation for keeping direction and time
- Insights generated fed into the **Devil's or Angel's Advocate** method, which clearly highlighted arguments for and against a statement.
- **The Farmer and Their Advisory Journey** demonstrated that there is no single correct advisory pathway, although engagement varied among participants.
- The **Happy Family card game** encouraged advisors to analyse environmentally friendly practices and systematise implementation possibilities on farms.

The tested methods showed that well-chosen facilitation tools can strengthen CoP work by stimulating creativity, courage, and active participation, and improve discussion quality and support collaborative learning within Communities of Practice. They helped advisors find answers more effectively, strengthen relationships, build trust, use time more efficiently, and stay focused on the main topic. The experience also highlighted that some methods need strong facilitation or a clear example to ensure engagement.

ADDITIONAL INFORMATION

Facilitating elements:

- holding CoP meetings outside the regular workplace to maximize focus on the tasks being carried out;
- equipping the group with sticky notes, a flipchart, large sheets of paper (minimum A2), coloured markers and pens;
- prior substantive preparation of the facilitator to lead the meeting.

Obstacles:

- each method must be practised individually; it is not possible to learn them solely by reading booklet - hands-on experience is essential.
- time must be invested in getting to know all methods and tools in order to select those that work best for the group.

Future actions:

- working with additional methods and tools of smart advisory;
- attempting to integrate smart advisory methods into advisors everyday work, beyond CoP meetings.

Messages for end-users:

- It is worthwhile to practise various smart advisory methods and tools, as different situations require different approaches;
- The more frequently the methods are used, the more naturally they become part of everyday practice.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors Advisory Practices

URL:

<https://www.farmingforclimate.eu/repository?type=2>

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PRACTICE ABSTRACT NUMBER #57

TITLE IN NATIVE LANGUAGE

Auswirkungen des Klimawandels auf Wasserressourcen und Trinkwasserschutzstrategien:
Herausforderungen, Technologieansatz, Chancen und politische Interventionen

TITLE IN ENGLISH

Assessing the Impact of Climate Change on Water Ressources and Conservation
Strategies: Challenges, Technologies, Opportunities and Policy Interventions

GEOGRAPHICAL LOCATION (IF RELEVANT)

Luxembourg, Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Increase drinking water quality
2. Optimize technical engineering-based possibilities
3. Consider the European context

THEMATIC AREA

Water management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Basierend auf den Kontakten im Rahmen von der CSA Projektvorbereitung mit dem belgischen Lead Partner war CONVIS nicht zuletzt aufgrund von langjährigen Erfahrungen im Bereich Wasserschutz als TL (Thematic Lead) zur Thematik Wassermanagement designiert worden. Besonders wichtig und sinnvoll hierzu erschien die sehr breit aufgestellte Basis an Handlungsmöglichkeiten, die derzeit in Luxemburg zur Verfügung steht. Die angewendete Strategie zwecks Animation vom CSA TL Water Management bestand darin, dem CSA Konsortium zunächst einen Überblick der agronomischen, technischen Möglichkeiten zu übermitteln sowie die politische Situation zur Trinkwassersituation in Luxemburg zu erläutern. Im weiteren Verlauf vom Projekt soll der gleiche Ansatz auf andere Regionen von Projektpartner ausgeweitet werden. Zudem soll die Thematik Trinkwasserschutz um die Thematik Wasserverbrauch (Bewässerung, Wasserspeicherung im Boden usw.) ergänzt werden. Im Rahmen von dem ersten KE Event zu dieser Thematik waren diverse konkrete Ansätze insbesondere aus Luxemburg zu dem Themenfeld vorgestellt worden.

Fakt ist, das Thema Wasser Management kann lokal sehr unterschiedlich betrachtet werden und die zu Lösenden Probleme sind meist regionsspezifisch. Daher wurde uns schnell klar, dass die Behandlungsfelder insbesondere um das Thema Wasserverbrauch ausgeweitet werden musste. Zudem wurde aber auch deutlich, dass Wasser Qualitätsthemen sich aus europaweiter Sicht nicht nur exklusiv auf den Trinkwasserschutz beschränken, sondern auch die Wasserqualität in Flüssen und Hochsee eine gewisse Rolle spielen. Dies waren die zentralen Erkenntnisse von der von uns geleiteten Break Out Session in Almeria. Bei einer zu dieser Gelegenheit durchgeführten Umfrage wurde festgestellt, dass insbesondere Beratungsansätze und die technischen Möglichkeiten zu deren lokalen Implementierung von höchstem Interesse sind.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within the ClimateSmartAdvisors project, CONVIS was designated as Thematic Lead for water management based on contacts established with the Belgian lead partner during project preparation and on its many years of experience in water protection. Luxembourg offers a broad range of existing measures and approaches related to water protection, which provided a useful starting point for the thematic work.

The strategy for developing this thematic area first focused on providing the project consortium with an overview of the agronomic and technical measures available, together with an explanation of the political and regulatory context related to drinking water protection in Luxembourg. As the project progresses, this approach will be extended to include the experiences and conditions of other partner regions.

In addition to drinking water protection, the thematic work was expanded to include water consumption issues such as irrigation and water storage in the soil. During the first knowledge exchange event on this topic, several concrete approaches were presented, particularly examples from Luxembourg.

Discussions within the project showed that water management challenges can differ significantly at the local level, as the problems farmers face are often region-specific. It therefore became clear that the scope of the topic needed to be broadened, especially regarding water consumption. At the same time, it was recognised that water quality concerns are not limited to drinking water protection but also relate to the condition of rivers and marine environments.

These insights emerged clearly during the breakout session on water management held in Almeria. A survey conducted during this session showed that advisors are particularly interested in practical advisory approaches and the technical options available for implementing water management measures in their local contexts.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Water management – focus on the management of water protection areas / Webinar

URL:

https://www.youtube.com/watch?v=DnAsFv0_JH4&t=2333s

Title/Description

Nitrat und Trinkwasser - Article

URL:

<https://www.dvgw.de/themen/umwelt/nitrat-im-wasser>

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PRACTICE ABSTRACT NUMBER #58

TITLE IN NATIVE LANGUAGE

Omgaan met scepsis en boeren motiveren voor klimaatvriendelijke praktijken in de Belgische CoP

TITLE IN ENGLISH

Dealing with Farmers' Scepticism and Encouraging Engagement with Climate-Smart Practices - Experience from the Belgian CoP

GEOGRAPHICAL LOCATION (IF RELEVANT)

Belgium

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Marleen Gysen - Marleen.gysen@boerenbond.be

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Reduces farmers' resistance to climate topics
2. Builds trust through farmer-centred communication
3. Increases uptake of climate-smart practices

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Veel landbouwers staan sceptisch tegenover klimaatverandering, wat hun bereidheid om klimaatvriendelijke maatregelen toe te passen vaak beperkt. De eerste Belgische ClimateSmartAdvisors CoP werd opgericht om adviseurs beter toe te rusten om melkvee- en veehouders te motiveren haalbare adaptatie- en mitigatiemaatregelen in praktijk te brengen.

Bij de start van de CoP werden leervragen geformuleerd. Twee daarvan focusten op het omgaan met scepsis van landbouwers en het stimuleren van de toepassing van klimaatvriendelijke praktijken:

1. Klimaatverhalen: Hoe kan een adviseur het verhaal over klimaat, , klimaatverandering en klimaatvriendelijke landbouw in België op een inzichtelijke manier brengen en de kansen, noden en prioriteiten voor klimaatvriendelijke landbouw bespreekbaar maken?
2. Weerstand aanpakken: Hoe kan een adviseur omgaan met de weerstand die veel landbouwers hebben tegen klimaatthema's en het starten met klimaatvriendelijke landbouwpraktijken?

Om deze vragen te beantwoorden, werkte de CoP aan twee pijlers: inspiratie en storytelling in de taal van de landbouwer, en boeren motiveren om de overstap naar klimaatvriendelijke oplossingen te maken. Adviseurs leerden dat klimaatthema's niet als een los onderwerp moeten worden gebracht, maar op een natuurlijke manier in het advies geïntegreerd. Storytelling speelt daarbij een sleutelrol: in plaats van klimaatverandering abstract te presenteren, vertalen adviseurs het naar wat relevant is voor de boer. Thema's worden geïntroduceerd door te antwoorden op de vraag: *“Wat levert het de landbouwer op?”* Gesprekken beginnen bij de persoon, niet bij de cijfers, om vertrouwen op te bouwen voordat data wordt gedeeld.

Deze aanpak helpt weerstand te verminderen en maakt kansen voor klimaatvriendelijke landbouw bespreekbaar. Ze kan breed worden toegepast door adviesdiensten in Europa, mits adviseurs ondersteuning krijgen via training in communicatietechnieken, storytelling en het kaderen van advies rond boerenprioriteiten.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Farmers' scepticism about climate change often limits their willingness to adopt climate-smart practices. The first Belgian ClimateSmartAdvisors Community of Practice (CoP) was established to strengthen advisors' skills in motivating Belgian dairy and livestock farmers to implement feasible and appropriate adaptation and mitigation measures.

At the start of the CoP, learning questions were identified to guide the work. Two of them focused on dealing with farmers' scepticism and encouraging engagement with climate-smart practices:

1. Climate Storytelling: How can a climate-smart advisor present the story about climate, climate-related problems and topics, climate change, and climate-smart farming in Belgium in an insightful way and make opportunities, needs, and priorities for climate-smart farming discussable?

2. Tackling Resistance: How can a climate-smart advisor address the resistance that many farmers have about climate topics, climate change, and getting started with climate-smart farming practices?

To address these questions, the Belgian CoP worked on inspiration and storytelling in farmers' language, and motivating farmers to transition to climate-smart solutions. Advisors learned that climate topics should be integrated naturally into advice rather than treated as an additional subject. Storytelling is essential: instead of presenting climate change as an abstract concept, advisors translate it into what matters for the farmer. Themes are introduced by answering "What's in it for the farmer?" Conversations start with the person first, then the figures, building trust before sharing data.

These strategies help tackle resistance and make opportunities for climate-smart farming discussable. They can be adopted by advisory services across Europe, provided advisors receive training in communication techniques, storytelling, and framing advice around farmers' priorities.

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PRACTICE ABSTRACT NUMBER #73

TITLE IN ENGLISH

Program to Promote, Support, and Assist with Generational Renewal, New Initiatives, and/or Open Succession in the Primary Sector

GEOGRAPHICAL LOCATION (IF RELEVANT)

Basque country - north Spain

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Stronger generational renewal in farming
2. Better long-term viability of farm businesses
3. More sustainable and attractive rural futures

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within the Basque Community of Practice, advisors applied facilitation techniques learned through the ClimateSmartAdvisors project to strengthen knowledge exchange and improve advisory practice. One example was an exchange meeting with INTIA colleagues on advisory approaches for manure and slurry management. This peer exchange helped compare methods, reflect on experience, and identify more effective, context-specific advice for Basque farms.

The agro-livestock sector faces a major challenge: ensuring generational renewal in a context shaped by climate change, rapid digitalization, market volatility, and pressure on natural resources. In this context, generational renewal is not only a demographic issue but also a strategic condition for the continuity, sustainability, competitiveness, and resilience of rural areas. The Gaztenek Plan addresses this challenge by supporting young people entering the sector and farm owners preparing for succession.

Gaztenek goes beyond financial aid and supports the whole transition process. For young farmers, it helps overcome barriers such as access to land, administrative complexity, and financial uncertainty through technical advisory, training, and support in preparing incorporation and business plans. For retiring farmers, it facilitates fair transfer agreements and helps ensure that farms remain viable and attractive during succession.

A key strength of the plan is its proximity-based advisory approach. It encourages knowledge exchange between experienced farmers and newcomers, strengthens collaboration among families, local stakeholders, and administrations, and provides mentorship during the first years after installation. This reduces isolation and supports innovation, sustainability, technological integration, environmental stewardship, and value-added strategies. A key lesson learned is that financial support alone is not enough: long-term success depends on continuous expert advisory during establishment and succession.

ADDITIONAL INFORMATION

The Gaztenek Plan acts as a bridge between two generations and helps ensure that the knowledge accumulated over decades is not lost but adapted to current needs. For young entrepreneurs, support includes project-specific viability analysis that considers local climate, soil quality, and market demand. Training covers agricultural techniques, business management, digital tools, and environmental sustainability. Support in preparing a Business Plan is also important for accessing grants and managing resources efficiently.

For retiring farm owners, the plan facilitates responsible transfer through mediation and sustainable planning, helping prevent the farm from losing value before the successor takes over. Its practical approach is based on trust and proximity. Shared learning enables young people to benefit from experience, while experienced farmers are encouraged by new ideas and technological skills. Networking among families, local stakeholders, and administrations helps reduce isolation, while post-incorporation mentorship provides support when real management challenges appear.

The plan also promotes innovation and sustainability through precision agriculture, IoT sensors, management software, biodiversity protection, reduced carbon footprints, niche markets, short supply chains, and on-farm product transformation.

A key lesson from advisory experience is that while funding may help start the process, expert advisory is decisive for long-term success. Its value lies in risk mitigation, resource optimization, and strategic support, helping young entrepreneurs navigate regulations, administrative procedures, technical choices, and market uncertainty. In this way, the plan supports not only farm continuity, but also the preservation of landscape, rural culture, and the social fabric of rural territories.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Spanish ClimateSmartAdvisors Community of Practice - Sustainable Manure and Slurry Management

URL:

<https://climatesmartadvisors.eu/cops/sustainable-manure-and-slurry-management/>

Title/Description

GAZTENEK 2027 Presentation

URL:

<https://www.arabakomendialdea.eus/wp-content/uploads/2022/09/GAZTENEK-2027.pdf>

Title/Description

Onekin EUS – Gaztenek programa

URL:

<https://onekin.eus/es/programa/programa-gaztenek/>

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PRACTICE ABSTRACT NUMBER #75

TITLE IN NATIVE LANGUAGE

Ενίσχυση της ενεργού συμμετοχής σε συμβουλευτικές Κοινότητες Πρακτικής μέσω απλών διαδραστικών ψηφιακών εργαλείων

TITLE IN ENGLISH

Boosting Engagement in Advisory Communities of Practice Through Simple Interactive Digital Tools

GEOGRAPHICAL LOCATION (IF RELEVANT)

Greece

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Increase participation and interest in CoPs
2. Strengthen peer-to-peer learning
3. Support participatory agenda-setting

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Η χαμηλή συμμετοχή και η περιορισμένη αλληλεπίδραση ήταν κοινές προκλήσεις κατά τη διάρκεια των Ελληνικών Κοινοτήτων Πρακτικής (CoPs), ιδιαίτερα όταν βασιζόνταν σε ανοιχτές συζητήσεις για να πυροδοτήσουν τον διάλογο. Με βάση τις πληροφορίες και τις απόψεις που συγκεντρώθηκαν απευθείας από τους συμμετέχοντες των CoPs, οι σύμβουλοι ανέφεραν ότι οι παραδοσιακές μορφές διαδικτυακών συναντήσεων είχαν γίνει ρουτίνα, με αποτέλεσμα την παθητική συμμετοχή. Οι παρατηρήσεις από τα Ελληνικά CoPs αντισταθμίζουν αυτές τις προκλήσεις, με τους συμμετέχοντες να επιδεικνύουν περιορισμένη συμμετοχή και τάση προς παθητική παρουσία αντί για ενεργή συμβολή. Το παρόν Practice Abstract παρουσιάζει μια απλή, συμμετοχική προσέγγιση η οποία αξιοποιεί απλά ψηφιακά εργαλεία (π.χ. εργαλεία ζωντανής ψηφοφορίας, Mentimeter) για να τονώσει τη συμμετοχή, να πυροδοτήσει διαδραστικές εισροές και να ενισχύσει τον προβληματισμό μεταξύ των συμβούλων.

Με την ενσωμάτωση μικρού αριθμού σαφώς διατυπωμένων και στοχευμένων ερωτήσεων, με τη χρήση απλών διαδραστικών εργαλείων (polling, Mentimeter κλπ.), οι συντονιστές μπορούν να ενθαρρύνουν την ενεργή συμμετοχή συμμετεχόντων χωρίς να τους επιβαρύνουν. Η επιλογή της ανώνυμης συμμετοχής, που επισημάνθηκε από τους συμμετέχοντες ως ιδιαίτερα πολύτιμη, μπορεί να ενισχύσει την συμμετοχή και να συμβάλει στη διαμόρφωση συνθηκών όπου οι συμμετέχοντες αισθάνονται πιο άνετα να μοιράζονται απόψεις και ιδέες. Η άμεση οπτικοποίηση των απαντήσεων, όπως σημειώθηκε από τις αντιδράσεις των μελών των CoPs, πυροδοτεί ζωντανές συζητήσεις, αναδεικνύει κοινές ανησυχίες και ενισχύει την ουσιαστική αλληλεπίδραση.

Αυτή η προσέγγιση αποδείχθηκε ιδιαίτερα χρήσιμη σε περιβάλλοντα όπου ο διαθέσιμος χρόνος είναι περιορισμένος και τα επίπεδα συμμετοχής χαμηλά. Απαιτεί ελάχιστη προετοιμασία, μπορεί εύκολα να προσαρμοστεί σε διαφορετικά μεγέθη ομάδων και λειτουργεί συμπληρωματικά με άλλες πρακτικές.

Συνολικά, η εμπειρία από τα ελληνικά CoPs δείχνει ότι η ενσωμάτωση απλών διαδραστικών εργαλείων κατά τη διάρκεια των συναντήσεων μπορεί να βελτιώσει τη συμμετοχή, να ενθαρρύνει την ανταλλαγή μεταξύ συμμετεχόντων και να βοηθήσει τους συμβούλους να προσδιορίσουν συλλογικά τα θέματα προτεραιότητας, διαμορφώνοντας έτσι τις μελλοντικές συζητήσεις. Αυτή η προσέγγιση υποστηρίζει τη μετάβαση από την παθητική συμμετοχή σε μια πιο ενεργή εμπλοκή, διασφαλίζοντας ότι οι δραστηριότητες της CoP αντανακλούν καλύτερα τις ανάγκες και τις εμπειρίες των συμβούλων.

Ομάδα-στόχος: σύμβουλοι, γεωπόνοι, Climate Smart Coaches, συμβουλευτικοί οργανισμοί και δίκτυα.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Low participation and limited interaction were common challenges during the Greek Community of Practice (CoP) meetings, particularly when open floor discussions were used to spark conversation. Based on inputs and reflections gathered directly from CoP participants, advisors reported that traditional online meeting formats had become routine, resulting in passive attendance. Observations from the CoP reflected these challenges, with participants showing limited engagement and a tendency towards passive attendance rather than active contribution. This Practice Abstract presents a participatory approach that uses

ADVISORY METHODS AND PEER LEARNING

simple digital tools (e.g. live polling tools, Mentimeter) to stimulate engagement, interactive inputs, and reflection among advisors.

Integrating a few clearly framed questions with simple interactive tools encourages broad participation without overwhelming participants. Linking questions to real advisory cases or practical applications tends to attract stronger interest and spark conversation. Anonymous input, highlighted by participants as particularly valuable, promotes honest reflection and helps advisors feel comfortable sharing ideas. Immediate visualization of responses sparked discussion, revealed shared concerns, and supported peer exchange, and participant reflections were embedded in a participatory framework that informs future CoP planning.

This approach is particularly useful where time is limited and participation levels vary. It requires minimal preparation by participants and more by facilitators, adapts easily to different group sizes, and works well alongside peer mentoring, thematic discussions, and farm visits. Experience from the CoP shows that integrating simple interactive tools can improve participation, encourage peer exchange, and help advisors collectively identify priority topics. This supports a shift from passive attendance to active engagement, ensuring CoP activities better reflect advisors' needs and experiences.

ADDITIONAL INFORMATION

This participatory approach works best when questions are kept few, clear and closely linked to the objectives of the CoP meeting. Facilitators may need to invest some time in preparing and testing questions to avoid overwhelming participants and to support meaningful discussion. It is particularly beneficial for facilitators to stay informed about recent developments relevant to the meeting's thematic focus, such as for example new regulations or relevant updates, or specific incentives, and to incorporate these into the discussion. Bringing in recent updates and context-specific information can serve as a strong trigger for engagement, stimulating dialogue, and encouraging participants to share their perspectives. Experience shows that interactive questions are most effective when integrated into the flow of presentations or discussions, as they spark interest and encourage dialogue, rather than being reserved for the end when participants fatigue may limit engagement. The approach requires minimal preparation, can be easily adapted to different group sizes, and works well alongside peer mentoring, thematic discussion groups and farm visits, making it particularly useful in contexts where time is limited and participation levels vary.

Varying levels of digital confidence among participants may require a brief introduction and reassurance at the start of the session. Emerging themes and ideas drawn from these interactions help frame the agenda of upcoming meetings, guide topic selection, and inform the design of field-based learning activities. In this way, advisors move from passive attendees to active contributors, steering the learning process away from fixed, top-down agendas towards more responsive and needs-driven interaction that better reflects the needs and experiences of advisors.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

www.climatesmartadvisors.eu

X CSAdvisors_EU

[in](#) ClimateSmartAdvisors

[f](#) climatesmartadvisors

ADVISORY METHODS AND PEER LEARNING

Greek ClimateSmartAdvisors Community of Practice - Crop Management Strategies

URL:

<https://climatesmartadvisors.eu/cops/crop-management-strategies/>

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PRACTICE ABSTRACT NUMBER #83

TITLE IN NATIVE LANGUAGE

Les foires agricoles : donner de l'impact aux prises de contact

TITLE IN ENGLISH

Agricultural Fairs - Impacting Peer-to-Peer Discussion

GEOGRAPHICAL LOCATION (IF RELEVANT)

Wallonia (Belgium)

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Involve the whole team of an organisation around a specific goal
2. Define the area of communication with a short list of subjects to focus on
3. Develop communication skills for all colleagues

THEMATIC AREA

Herd management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Landbouwbeurzen bieden waardevolle kansen voor adviseurs om met landbouwers in contact te komen, maar gesprekken blijven vaak kort en zonder opvolging. Tijdens de Landbouwbeurs van Libramont testte een Belgische Community of Practice (CoP) een gecoördineerde en collectieve aanpak om adviesdiensten beter te presenteren, het teamwork te versterken en contacten om te zetten in concrete acties.

Het gezamenlijke doel was om tijdens de vierdaagse beurs 250 contactformulieren te verzamelen rond vier thema's die belangrijk zijn voor landbouwers: digitalisering, administratieve vereenvoudiging, dekmanagement bij koeien en prijsregistratie. Een pilootgroep jonge adviseurs ontwikkelde en testte de aanpak samen met hun leidinggevenden. Na verfijning werd het concept uitgerold naar het volledige team.

Dagelijkse briefings hielpen om boodschappen af te stemmen, motivatie hoog te houden en samenwerking tussen verschillende profielen te versterken. Papieren en digitale tools (formulieren en QR-codes) structureerden de gesprekken met landbouwers. In totaal werden 182 formulieren ingevuld. Hoewel het streefdoel niet volledig werd gehaald, waren de kwaliteit van de uitwisselingen en de relevantie van de vragen van de landbouwers zeer waardevol. Elke vraag kreeg opvolging via telefoons, bedrijfsbezoeken, persoonlijk advies of demonstraties van hulpmiddelen.

De ervaring toont dat landbouwbeurzen effectieve adviesmomenten kunnen worden met duidelijke doelstellingen, teamvoorbereiding en gestructureerde opvolging. Door de aanpak vooraf te testen met een pilootgroep werden de methoden gemakkelijker opgenomen door het team. Interne communicatie en samenwerking tussen afdelingen zijn cruciaal, terwijl tools eenvoudig en praktijkgericht moeten blijven. Vooraf geplande opvolgacties zorgen ervoor dat eerste contacten uitgroeien tot echte ondersteuning voor landbouwers.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Agricultural fairs are important opportunities for advisors to interact with farmers, but institutional stands often lead to short exchanges without structured follow-up. During the Libramont Agricultural Fair, a Belgian Community of Practice (CoP) tested a more coordinated and collective approach to stand management in order to better present advisory services, strengthen teamwork, and transform contacts with farmers into concrete follow-up actions.

A collective objective was defined: collect 250 contact forms during the four-day fair around four key themes relevant to farmers' daily work: going paperless, administrative simplification, mating management, and post-entry price recording. The approach was first developed and tested by a pilot group of young advisors working with their managers. After refinement, the concept was implemented by the wider advisory team during the fair.

Daily team briefings helped coordinate messages, maintain motivation and strengthen collaboration between colleagues from different professional backgrounds. Both paper and digital tools (forms and QR codes) were used to structure discussions with farmers. In total, 182 forms were completed. Although the initial target was not fully reached, the quality of the exchanges and the relevance of farmers' requests proved valuable. Each request was recorded and followed up through phone calls, farm visits, personalised advice or demonstrations of advisory tools.

ADVISORY METHODS AND PEER LEARNING

This experience showed that agricultural events can become effective advisory tools when supported by clear objectives, prior team preparation and structured follow-up. Testing new approaches with a pilot group facilitates adoption and engagement by larger teams. Internal communication and cross-department collaboration are essential, while tools used during events should remain simple and adapted to field realities. Planning follow-up activities in advance is crucial to transform first contacts into practical support for farmers.

8.4 Climate Smart Farming Practices and Tools

This cluster includes PAs focused on concrete climate-smart farming practices, technical solutions and practical tools that can support climate mitigation and adaptation at farm level. It covers topics such as emission reduction, circular farming approaches, operational tools for advisory work, and mechanisms that support uptake of climate-smart solutions. The cluster captures the more directly practice-oriented and technical dimension of the project's outputs.



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PRACTICE ABSTRACT NUMBER #15

TITLE IN NATIVE LANGUAGE

Η συμβολή της πλατφόρμας FarmingForClimate στη δράση κατά της κλιματικής αλλαγής, μέσω της υποστήριξης γεωργών και συμβούλων και της παροχής εργαλείων και μεθόδων συμβουλευτικής και καθοδήγησης.

TITLE IN ENGLISH

The Contribution of the FarmingForClimate platform to Climate Action by Supporting Farmers and Advisors and Providing Advisory Tools and Guidance Methods

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe and beyond

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Access to climate mitigation and adaptation knowledge, tools, and advisory resources
2. Structured presentation supported by rich media and practitioner feedback
3. Improved advisory effectiveness and decision-support for climate-smart farming

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Το Farming for Climate είναι ένας διαδικτυακός ψηφιακός κόμβος που υποστηρίζει αγρότες και συμβούλους στη λήψη κλιματικά έξυπνων αποφάσεων για τη γεωργική τους δραστηριότητα. Η πλατφόρμα φιλοξενεί μια εκτενή συλλογή εργαλείων αξιολόγησης για το κλίμα και τον άνθρακα, τα οποία μπορούν να χρησιμοποιηθούν για τον υπολογισμό του αποτυπώματος άνθρακα σε επίπεδο αγροκτήματος και για τη στήριξη τεκμηριωμένων αποφάσεων.

Κάθε εργαλείο παρουσιάζεται σε φιλική προς τον χρήστη μορφή, με σαφείς πληροφορίες σχετικά με τον σκοπό του, τη μεθοδολογία του και τον τρόπο πρακτικής εφαρμογής του. Οι λειτουργίες φιλτραρίσματος και αναζήτησης επιτρέπουν στους χρήστες να εντοπίζουν γρήγορα τα εργαλεία που ανταποκρίνονται καλύτερα στις ανάγκες και τις συνθήκες της εκμετάλλευσής τους.

Παράλληλα, η πλατφόρμα περιλαμβάνει έναν αναλυτικό κατάλογο συμβουλευτικών πρακτικών, σχεδιασμένων για την υποστήριξη αγροτών και συμβούλων στη διαδικασία λήψης αποφάσεων στο πεδίο. Οι πρακτικές αυτές περιλαμβάνουν συμμετοχικές μεθοδολογίες, καθώς και πιο τεχνικές, βήμα προς βήμα προσεγγίσεις. Με τη συγκέντρωση εργαλείων για το κλίμα και μεθόδων συμβουλευτικής σε ένα σημείο, το FarmingForClimate μειώνει τον χρόνο αναζήτησης αξιόπιστων πληροφοριών. Έτσι ενισχύει την δυνατότητα των συμβούλων και των αγροτών να συμμετέχουν ουσιαστικά στο μετριασμό της κλιματικής αλλαγής και στην προσαρμογή σε αυτήν, υποστηρίζοντας ένα πιο βιώσιμο μέλλον για τον αγροτικό τομέα.

Κατά τη διάρκεια του έργου ClimateSmartAdvisors, η πλατφόρμα Farming for Climate θα ενημερώνεται τακτικά με νέα εργαλεία, πρακτικές, μελέτες περίπτωσης και ανατροφοδότηση από επαγγελματίες, αντανakλώντας τις επιστημονικές εξελίξεις, και τις ανάγκες των αγροτών και των συμβούλων. Οι μελλοντικές αναβαθμίσεις θα βελτιώσουν τη χρηστικότητα, την προσβασιμότητα και τη συμμετοχή των χρηστών μέσω βελτιωμένων δυνατοτήτων αναζήτησης και φιλτραρίσματος, αυξημένης διαδραστικότητας και προσαρμοσμένης καθοδήγησης για διαφορετικά γεωργικά συστήματα, συμβουλευτικά πλαίσια και περιφερειακά συμφραζόμενα, διασφαλίζοντας τη διαχρονική συνάφεια, την αξιοπιστία και τη μακροπρόθεσμη διαλειτουργικότητα της πλατφόρμας με συναφείς πλατφόρμες.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Farming for Climate is an online digital hub, developed within ClimateSmartAdvisors project, and designed to support farmers and advisors in making climate-smart decisions in agricultural practice. The platform hosts an extensive collection of climate and carbon assessment tools that can be used to estimate farm-level carbon footprints and support informed decision-making.

Each tool is presented in a user-friendly format, with clear information on its purpose, methodology, and practical application. Advanced filtering and search functionalities enable users to quickly identify the tools that best match their specific farming systems and advisory needs.

In addition, the platform includes a comprehensive inventory of advisory practices aimed at supporting farmers and advisors in on-the-ground decision-making. These practices range from participatory methodologies to more technical, step-by-step approaches. By consolidating climate tools and advisory methods in a single, easily accessible platform, Farming for Climate reduces the time required to identify reliable resources and strengthens the capacity of advisors and farmers to engage in climate change mitigation and adaptation, supporting a more sustainable future for European agriculture.

During the ClimateSmartAdvisors project, Farming for Climate platform will be regularly updated with new climate and carbon assessment tools, advisory practices, case studies, and practitioner feedback, reflecting scientific advances, policy developments, and the needs of farmers and advisors. Future development will enhance usability, accessibility, and engagement through improved search and filtering, greater interactivity, and expanded guidance tailored to different farming systems, advisory contexts, and regions. These ongoing updates will ensure the platform's relevance, credibility, as well as long-term interoperability with relevant platforms.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Farming for Climate

URL:

<https://www.farmingforclimate.eu/>

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PRACTICE ABSTRACT NUMBER #17

TITLE IN NATIVE LANGUAGE

Bingo-Control de malas hierbas. Identificación de malas hierbas para un control dirigido.

TITLE IN ENGLISH

Weeds Control Bingo: Identifying Weeds for Targeted Control

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe and beyond

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. It provides training for the recognition and differentiation of weeds.
2. It helps in the selection of herbicides, avoiding ineffective spraying. This will help to reduce the number of treatments since we will avoid double applications.
3. It aids in technical decision-making regarding crop management by providing a comprehensive overview of what farmers have on their plots. It can be extended to the identification of pests and diseases.

THEMATIC AREA

Crops Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

El conocimiento de las especies de malas hierbas es fundamental a la hora de poder combatir el desarrollo de éstas, ya sea mediante el uso de productos fitosanitarios u otras medidas alternativas de manejo. Para ello es de especial interés la realización de jornadas de identificación de malas hierbas, donde técnicos y agricultores, reciben la formación necesaria para poder diferenciar dichas malas hierbas en campo.

Aún siendo fundamental estos conocimientos, en muchas ocasiones, tanto el asesor como el agricultor carecen de ellos. Ambos son los colectivos objetivos de dicha formación.

Previamente a la realización del ejercicio en campo se reúne a los participantes en una sala donde se explica la dinámica. Es recomendable utilizar tanto una presentación con diapositivas como imágenes plastificadas de las malas hierbas para su posterior identificación en campo. Durante la formación en la sala se proporcionará a los participantes el conocimiento de las principales características diferenciales necesarias para identificar y diferenciar malas hierbas en estado tanto de plántula como adultas. Esta información deberá ser lo más visual posible y será complementada con la práctica en campo.

Previamente, el organizador debe haber buscado parcelas donde haya una muestra amplia de las principales malas hierbas que encuentran en la zona, en especial las más importantes.

Los materiales necesarios son: Una pantalla y proyector para la formación, para mostrar imágenes de semillas. Fichas con fotos de las malas hierbas en plántula y planta adulta. Ficha para apuntar las malas hierbas que se van observando e identificando.

Para enriquecer aún más la jornada se pueden utilizar las malas hierbas recogidas e identificadas por los/las participantes y realizar un herbario que podría ser mostrado en jornadas posteriores de formación.

Este tipo de talleres pueden ser organizados por asesores con conocimiento en la identificación de malas hierbas y dirigidos a otros asesores y agricultores que deseen formarse en este tema. Es recomendable un buen dominio en botánica y habilidades blandas para impartir estas jornadas.

Se espera que tras esta formación los asistentes puedan combatir una de las mayores amenazas de los cultivos, como son las malas hierbas, evitando errores en el uso de herbicidas y realizando el manejo del cultivo con las decisiones adecuadas.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Being able to identify weed species is essential for controlling their growth and spread before deciding on herbicides or other management measures. Weed identification workshops are particularly valuable for potential participants, from advisors to farmers, who often lack the specific expertise needed, which can hinder farm productivity and sustainability.

This training was conducted within the Spanish Community of Practice within ClimateSmartAdvisors project, where participants received the necessary training to differentiate weed species in the field.

Prior to the field exercise, participants gather in a room where the procedure is explained. It is recommended to use a slide presentation and laminated images of weeds for later identification in the field. During the classroom session, participants learn the key distinguishing characteristics needed to identify weed species at both seedling and mature stages. The information should be presented as visually as possible and complemented with practical field exercises.

Before conducting the exercise, the organizer should identify plots with a wide variety of the main weeds present in the area, including the most important ones. The materials required include a room with a screen and projector for the training. The session can be complemented with images of weed seeds, fact sheets showing weeds as seedlings and mature plants, and a form to record the weeds observed and identified.

To further enrich the workshop, weeds collected and identified by participants can be compiled into an herbarium for future training sessions. These workshops can be organized by advisors with expertise in weed identification. Strong botanical knowledge and soft skills are valuable for leading the training.

After the training, participants are expected to better manage one of the main threats to crops by avoiding mistakes in herbicide use and making more appropriate crop management decisions.

ADDITIONAL INFORMATION

This training has already been successfully carried out in the past by INTIA advisors.

To prepare this training, several points must be considered:

First, it should be planned well in advance and the timing carefully chosen. We want to ensure that participants do not have too many other commitments during this period. For farmers, it's important to avoid overlap with planting and harvesting seasons. Furthermore, many weeds are seasonal and have specific germination and growth periods. This must be taken into account to obtain a representative sample of weeds in the field.

It is crucial to conduct preliminary research to identify plots where we can find a sufficient quantity of weeds to demonstrate in our training. Commonly many weeds typically appear in certain crops. Since a significant portion of the day takes place in the field, it's helpful to have information about the expected weather conditions.

Also, although not mandatory, a small gift could be prepared for the participants who were most successful in identifying weeds. For the rest, laminated sheets with images and distinctive characteristics of weeds could be offered, which they can carry in their vehicles during their time in the field. If sheets are laminated, they are more durable.

Weeds differ according to their stage of development.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Herbario de la Universidad Pública de Navarra

URL:

<https://www.unavarra.es/herbario/index.htm>

Title/Description

Sociedad española de malherbología

URL:

<https://semh.net/>

Title/Description

Herbario digital de la Universitat de Lleida

URL:

<http://www.malesherbes.udl.cat/web-c.htm>

Title/Description

Infloweb. Connaître et gérer la flore adventice

URL:

<https://www.infloweb.fr/>

Title/Description

Weed Identification – Wisconsin Horticulture

URL:

<https://hort.extension.wisc.edu/article-topic/weed-identification/>

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PRACTICE ABSTRACT NUMBER #27

TITLE IN NATIVE LANGUAGE

Gestione intelligente della mandria con Si@lleva: migliorare la sostenibilità e la redditività negli allevamenti lattiero-caseari

TITLE IN ENGLISH

Smart Herd Management with Si@lleva: Improving Sustainability and Profitability in Dairy Farms

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Optimize herd performance
2. Enhance animal welfare
3. Reduce Environmental impact

THEMATIC AREA

Herd Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Le aziende da latte affrontano sfide crescenti legate alla sostenibilità economica, ambientale e sociale, oltre alla necessità di garantire il benessere animale. La gestione efficace della mandria è cruciale per migliorare fertilità, produttività e redditività.

Si@lleva offre un ambiente digitale integrato che combina dati produttivi, riproduttivi, sanitari e dei controlli funzionali in un'unica piattaforma di supporto alle decisioni. I consulenti utilizzano il sistema durante le visite aziendali e nelle consulenze da remoto per analizzare indicatori a livello di singola bovina e di mandria, identificare inefficienze e guidare gli allevatori nell'adozione di pratiche climate-smart. Dashboard e alert automatici consentono di individuare problematiche come bassa fertilità, cellule somatiche elevate, efficienza alimentare subottimale o intervalli parto-parto troppo lunghi — fattori direttamente collegati a maggiori emissioni di metano per litro di latte. Migliorando la fertilità, riducendo i giorni aperti, potenziando la salute della mammella e aumentando la produttività per capo, Si@lleva aiuta a ottimizzare l'efficienza biologica, riducendo così l'intensità delle emissioni: lo stesso output viene prodotto con meno risorse e meno animali non produttivi. L'integrazione con i dati ufficiali dei controlli funzionali garantisce precisione e tracciabilità, permettendo ai consulenti di confrontare le performance aziendali con benchmark regionali e nazionali e di quantificare i progressi nelle azioni di mitigazione.

All'interno della CoP, i consulenti vengono formati all'uso di Si@lleva come strumento di consulenza climate-smart:

- per identificare le criticità gestionali che influenzano le emissioni (fertilità, salute, costanza produttiva);
- per monitorare i miglioramenti tramite KPI standardizzati;
- per supportare l'allevatore nell'adozione di decisioni basate sui dati che migliorano produttività e impatto ambientale.

Ciò rafforza la capacità dei consulenti di offrire servizi mirati e supporta gli allevatori nell'implementazione di soluzioni pratiche con benefici misurabili.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Dairy farms face growing challenges related to economic, environmental, and social sustainability, as well as the need to ensure animal welfare. Effective herd management is crucial to improving fertility, productivity, and profitability.

Si@lleva provides an integrated digital environment that combines productive, reproductive, health, and milk-recording data into a single decision-support platform. Advisors use the tool during farm visits and remote consultations to analyse individual-cow and whole-herd indicators, identify inefficiencies, and guide farmers in adopting climate-smart practices. Through dashboards and automatic alerts, advisors can detect issues such as low fertility, high somatic cell counts, suboptimal feeding efficiency, or prolonged calving intervals-factors directly linked to higher methane emissions per litre of milk. By improving reproductive performance, reducing days open, enhancing udder health, and increasing milk yield per cow, Si@lleva helps optimise biological efficiency. This results in lower emissions intensity, as the

same output is produced with fewer resources and fewer non-productive animals. The integration with official milk-recording data ensures accuracy and traceability, enabling advisors to benchmark farms against regional and national performance and to quantify progress in emission-reducing actions.

Practical implications: Within the ClimateSmartAdvisors' Community of Practice in Italy, advisors are trained to use Si@lleva as a climate-smart advisory tool:

- to identify management gaps affecting emissions (fertility, health, production consistency);
- to monitor improvements over time through standardised KPIs;
- to support farmers in implementing evidence-based decisions that enhance productivity while reducing environmental impact.

This strengthens advisors' capacity to deliver targeted, data-driven sustainability services and helps farmers adopt practical solutions with measurable benefits.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Si@lleva

URL:

<https://www.sialleva.it>

Title/Description

Stalla 4.0

URL:

[Stalla 4.0 - A.R.A.V.](#)

Title/Description

CSA Community of Practice in Italy

URL:

<https://climatesmartadvisors.eu/cops/how-to-reduce-environmental-impact-of-livestock-farm-in-italy/>

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PRACTICE ABSTRACT NUMBER #31

TITLE IN NATIVE LANGUAGE

Den Energieverbrauch auf dem Bauernhof und zu Hause kennen: Ein erster Schritt zu mehr Effizienz in der energieintensiven Landwirtschaft

TITLE IN ENGLISH

Knowing Energy Use on the Farm and at Home: A First Step Towards Greater Efficiency in Energy-Intensive Farming

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Klaus Engelmann, Michael Billensteiner (michael.billensteiner@lk-stmk.at)

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Energy efficiency
2. Lower costs
3. Knowledge building

THEMATIC AREA

Energy Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Wie erkenne ich, wie viel ich verbrauche?

Zur Erhebung des Energieeinsparpotenzials muss zunächst ermittelt werden, wo und wie viel Energie überhaupt verbraucht wird. Die Kenntnisse über den betrieblichen Energiebedarf sind die Basis für Maßnahmen zur Energieeinsparung und Effizienzsteigerung.

Energiekennzahlen und Messdaten helfen, den Erfolg von Einsparmaßnahmen sichtbar zu machen und sind Basis für einen Vergleich mit anderen Betrieben. Die Energiebuchhaltung ist der erste Schritt, um sich einen Überblick über den Energieverbrauch und die Energiekosten im Betrieb zu verschaffen.

Elektronische Datenerfassung

Für eine detaillierte Erfassung der Energieflüsse gibt es elektronische Monitoring-Systeme. Mit diesen Geräten wird ein genaues Lastprofil für Strom und Wärme aufgezeichnet. Ebenso lassen sich Temperaturen und Wasserverbräuche erheben. Neben dem Gesamtverbrauch werden durch die Installation von Messsensoren Verbrauchsdaten zu einzelnen Anlagen und Produktionsprozessen erhoben. Ebenso wird die Eigenstromproduktion (beispielsweise einer Photovoltaik-Anlage) erfasst. Mittels der smarten Steuerung können die Energieverbräuche der solaren Eigenstromproduktion angepasst werden.

Energiekennzahlen

Bei landwirtschaftlichen Betrieben mit Nutztierhaltung entfällt der größte Anteil des Stromverbrauchs auf die Milchgewinnung (Milchviehhaltung), die Stallbelüftung (Schweinemast, Geflügelhaltung) bzw. die Ferkelbeheizung (Schweinezucht).

TIPP

Zeichnen Sie die Leistung und Betriebszeiten Ihrer elektrischen Verbraucher in einer übersichtlichen Tabelle auf. Auf diese Weise bekommen Sie ein Gefühl dafür, wo dringender Handlungsbedarf bei der Umsetzung von Energiesparmaßnahmen gegeben ist.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This Practice Abstract is based on outputs generated through the Austrian Community of Practice on energy management, as well as Austrian Co-Design Innovation Experiment (CoDle) within ClimateSmartAdvisors project.

How can I determine how much energy I consume?

To assess the potential for energy savings, it is first necessary to determine where and how much energy is being consumed. Knowledge of a farm's energy requirements forms the basis for measures to save energy and increase efficiency.

Energy indicators and measurement data help to highlight the success of energy-saving measures and provide a basis for comparison with other farms. Energy accounting is the first step towards gaining an overview of energy consumption and energy costs within a business.

Electronic data collection

Electronic monitoring systems are available for detailed recording of energy flows. These devices record an accurate load profile for electricity and heat. Temperatures and water consumption can also be recorded. In addition to total consumption, consumption data for individual systems and production processes is collected by installing measuring sensors. Own electricity production (e.g. from a photovoltaic system) is also recorded. Smart control systems can be used to adjust energy consumption to match the solar electricity produced.

Energy indicators

On farms with livestock, the largest share of electricity consumption is accounted for by milk production (dairy farming), stable ventilation (pig farming, poultry farming) and piglet heating (pig breeding).

TIP:

Record the power consumption and operating times of your electrical appliances in a clear table. This will give you an idea of where urgent action is needed to implement energy-saving measures.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

CSA Community of Practice – Energy Management

URL:

<https://climatesmartadvisors.eu/cops/energy-management/>

Title/Description

Bauer macht Power - Episode 1: Christian & Theresia Peter

URL:

<https://www.youtube.com/watch?v=f4Kv5yHBOQM&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e>

Title/Description

Bauer macht Power - Episode 2: Johannes & David Tomic

URL:

<https://www.youtube.com/watch?v=koMG8yETbvQ&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=2>

Title/Description

Bauer macht Power - Episode 3: Elisabeth & Thomas Resch

URL:

<https://www.youtube.com/watch?v=zqItL6kuMpM&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=3>

Title/Description

Bauer macht Power - Episode 4: Johann Ruhsam

URL:

<https://www.youtube.com/watch?v=jr-C-G33r94&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=4>

Title/Description

Bauer macht Power - Episode 5: Sandra & Stefan Maier

URL:

<https://www.youtube.com/watch?v=KSZTjIXU86Q&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=5>

Title/Description

Bauer macht Power - Episode 6: Hans Gnauer

URL:

<https://www.youtube.com/watch?v=AN4LpeLCwNI&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=6>

Title/Description

Bauer macht Power - Episode 7: Sandra & Stefan Maier

URL:

<https://www.youtube.com/watch?v=WyPZBF-91WY&list=PLWhOyCKt-BFxCGYPvxWcf4CF4DRVR607e&index=7>

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PRACTICE ABSTRACT NUMBER #32

TITLE IN NATIVE LANGUAGE

Autarke Stromversorgung für landwirtschaftliche Betriebe mit Photovoltaik und Speichersystemen: Senkung der Energiekosten durch Solarstrom aus eigener Produktion

TITLE IN ENGLISH

Self-Sufficient Farm Power Supply with Photovoltaics and Storage: Reducing Energy Costs Through On-Farm Solar Electricity

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Klaus Engelmann, Michael Billensteiner (michael.billensteiner@lk-stmk.at)

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Energy efficiency
2. Lower costs
3. Knowledge building

THEMATIC AREA

Energy Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE *

Kennen landwirtschaftliche Betriebe ihr Stromlastprofil?

Für landwirtschaftliche Berater:innen ist das Stromlastprofil eine zentrale Grundlage, um die Wirtschaftlichkeit einer Eigenstromversorgung – etwa durch Photovoltaik – beurteilen zu können. Das Stromlastprofil beschreibt den zeitlichen Verlauf des Stromverbrauchs eines Betriebes. Abhängig von Betriebszweig und Produktionsverfahren können sich die Lastprofile landwirtschaftlicher Betriebe deutlich unterscheiden.

Viele landwirtschaftliche Betriebe weisen grundsätzlich günstige Voraussetzungen für die direkte Nutzung von Solarstrom auf. Beispielsweise benötigen Lüftungssysteme und Kühlaggregate häufig genau dann die höchste Leistung, wenn Photovoltaikanlagen die größten Stromerträge liefern – insbesondere im Sommer rund um die Mittagszeit.

Herausfordernder ist die Eigenstromnutzung in Rinder- und Milchviehbetrieben. In diesen Betriebsformen fällt ein wesentlicher Teil des Stromverbrauchs zu Tageszeiten an, zu denen keine oder nur geringe Solarstromerträge verfügbar sind, etwa in den frühen Morgenstunden oder am Abend.

Berater:innen können insbesondere folgende Anwendungen als geeignete Einsatzbereiche identifizieren:

- Lüftungsanlagen in Schweine- und Geflügelmastställen
- Ganzjährig betriebene Kühllager in Obst- und Gartenbaubetrieben
- Klimatisierung von Ferienwohnungen oder Verkaufsräumen
- Beleuchtung in Schau-, Verkaufs- oder Ausschankräumen von Direktvermarktungsbetrieben während der Tageszeiten
- Automatisierte Melksysteme (Melkroboter) inklusive Reinigungsgeräte und Milchkühlung

Solarstromspeicher

Stromspeicher ermöglichen es, überschüssigen Solarstrom zwischenspeichern und zeitversetzt bereitzustellen, wenn keine oder nur geringe Solarstromproduktion stattfindet. Für landwirtschaftliche Betriebe können sie damit sowohl zur Erhöhung des Eigenverbrauchsanteils als auch zur Absicherung kritischer Verbraucher – beispielsweise in Stallanlagen – beitragen.

Die Entwicklung leistungsfähiger und wirtschaftlich tragfähiger Speichersysteme gilt als wichtiger Faktor für eine steigende Energieautonomie landwirtschaftlicher Betriebe. Der Markt für Stromspeicher entwickelt sich derzeit dynamisch und weist weiterhin beträchtliches Kostensenkungspotenzial auf. Für die Beratungspraxis empfiehlt es sich daher, technologische und preisliche Entwicklungen im Speicherbereich laufend zu beobachten.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This Practice Abstract is based on outputs generated through the Austrian Community of Practice on energy management and the Austrian Co-Design Innovation Experiment (CoDIE) within the ClimateSmartAdvisors project.

For agricultural advisors, understanding a farm's electricity load profile is a key basis for assessing the economic viability of self-sufficient electricity supply, for example through photovoltaics. The load profile describes how electricity consumption is distributed over time and can vary significantly depending on the farming system and production methods.

Many farms have favourable conditions for the direct use of solar power. This is especially the case where electricity demand is highest when photovoltaic systems also generate the most electricity, particularly around midday in summer. This creates good opportunities to improve self-consumption and reduce electricity costs. However, in cattle and dairy farming, a larger share of electricity consumption often takes place in the early morning or evening, when little or no solar power is available. In such cases, self-use of solar electricity is more challenging.

Electricity storage systems can help address this challenge by storing surplus solar power and making it available later when production is low or absent. For farms, storage can increase self-consumption and help secure critical electricity uses, including in livestock housing. As storage technologies are developing quickly and costs may continue to decrease, advisors should regularly monitor technological and market developments in this area.

Advisors can use this knowledge to identify where photovoltaics and storage are most suitable, support farm-specific energy planning, and help farmers improve energy autonomy and efficiency.

ADDITIONAL INFORMATION

Examples of suitable applications include ventilation systems in pig and poultry fattening houses, cold stores in fruit and horticultural businesses, air conditioning in holiday homes or sales rooms, lighting in showrooms or direct marketing areas during daylight hours, and automated milking systems including cleaning equipment and milk cooling.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

CSA Community of Practice – Energy Management

URL:

<https://climatesmartadvisors.eu/cops/energy-management/>

Title/Description

Bauer macht Power - Episode 1: Christian & Theresia Peter

URL:

<https://www.youtube.com/watch?v=f4Kv5yHBOQM&list=PLWhOyCKt-BFxCGYPvXWcf4CF4DRVR607e>

Title/Description

Bauer macht Power - Episode 2: Johannes & David Tomic

URL:

<https://www.youtube.com/watch?v=koMG8yETbvQ&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=2>

Title/Description

Bauer macht Power - Episode 3: Elisabeth & Thomas Resch

URL:

<https://www.youtube.com/watch?v=zqItL6kuMpM&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=3>

Title/Description

Bauer macht Power - Episode 4: Johann Ruhsam

URL:

<https://www.youtube.com/watch?v=jr-C-G33r94&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=4>

Title/Description

Bauer macht Power - Episode 5: Sandra & Stefan Maier

URL:

<https://www.youtube.com/watch?v=KSZTjIXU86Q&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=5>

Title/Description

Bauer macht Power - Episode 6: Hans Gnauer

URL:

<https://www.youtube.com/watch?v=AN4LpeLCwNI&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=6>

Title/Description

Bauer macht Power - Episode 7: Sandra & Stefan Maier

URL:

<https://www.youtube.com/watch?v=WypZBF-91WY&list=PLWhOyCKt-BFxCGYpVxWcf4CF4DRVR607e&index=7>

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PRACTICE ABSTRACT NUMBER #33

TITLE IN NATIVE LANGUAGE

Emissionsmindernde Ausbringung organischer Dünger auf Grünland mittels Schlitzverfahren

TITLE IN ENGLISH

Emission-reducing Organic Grassland Fertilization using Slit Injection

GEOGRAPHICAL LOCATION (IF RELEVANT)

Worldwide

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Paul-Moritz Röber - paul.roebergruenlandzentrum.de

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. more efficient use of the nutrients contained
2. less emission of ammonia and greenhouse gases
3. stimulation of tillering

THEMATIC AREA

Grassland Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Hintergrund der Auswahl des Themas war, dass gemeinsam mit dem Thematic Lead *Manure Management* ein Manure-Quiz auf dem CSA General Assembly 2025 in Málaga durchgeführt wurde.

Die emissionsmindernde Ausbringung organischer Dünger auf Grünland mittels Schlitzverfahren ist eine wirksame Maßnahme zur Reduktion von Ammoniakverlusten. Dabei öffnen Scheiben, Zinken oder Messer schmale Bodenrillen, in die Gülle direkt abgelegt und anschließend teilweise rückverfestigt wird. Dadurch wird der Kontakt zwischen Ammoniumstickstoff und der Atmosphäre stark reduziert. Studien zeigen NH_3 -Minderungen von 60–90 % gegenüber Breitverteilung und 30–50 % gegenüber Schleppschlauchsystemen. Gleichzeitig erhöht sich die Stickstoffeffizienz, wodurch mineralische Ergänzungsdüngung reduziert werden kann, und die Futterqualität verbessert sich, da weniger Blattverschmutzung entsteht.

Im Rahmen des ClimateSmartAdvisors (CSA)-Projekts wurden diese Maßnahmen im Wissensaustausch zwischen Praktikerinnen, Beraterinnen und Forschenden diskutiert, um die Umsetzung in der Praxis zu fördern. Dabei zeigte sich, dass für eine erfolgreiche Anwendung geeignete Boden- und Witterungsbedingungen entscheidend sind: tragfähige, leicht feuchte Böden, moderate Temperaturen und idealerweise Ausbringung direkt nach dem Schnitt. Die Technik erfordert sorgfältige Wartung und verursacht höhere Investitionskosten, bietet jedoch langfristige ökologische und ökonomische Vorteile.

Praktisch können Landwirtinnen und Landwirte durch das Schlitzverfahren ihre Grünlandbewirtschaftung klima- und umweltfreundlicher gestalten, Emissionen reduzieren, Stickstoff effizienter nutzen und die Futterqualität verbessern. Die Erkenntnisse aus dem CSA-Projekt können z.B. in Communities of Practice geteilt werden, damit Erfahrungsaustausch und Beratung die Umsetzung auf Betrieben erleichtern.

Fazit: Das Schlitzverfahren ist eine praxisbewährte Innovation für emissionsmindernde organische Düngung auf Grünland. Die Technik gilt als effektive Lösung, um klimaangepasste Grünlandbewirtschaftung durchzuführen, welche ökologische, ökonomische und qualitative Vorteile vereint.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The topic was selected following a Manure Quiz conducted jointly with the *Manure Management* thematic area at one of ClimateSmartAdvisors General Assembly meetings. The emission-reducing application of organic fertilizer on grassland using the slot injection method is an effective measure for reducing ammonia losses. Discs, tines, or knives create narrow soil slots into which slurry is directly deposited and then partially re-compacted. This greatly reduces the contact between ammonium nitrogen and the atmosphere. Studies show NH_3 reductions of 60–90 % compared to broadcast application and 30–50 % compared to trailing hose systems. At the same time, nitrogen use efficiency is increased, reducing the

need for mineral fertilizer supplementation, and forage quality is improved due to less leaf contamination.

Within the framework of the ClimateSmartAdvisors project, these measures were discussed in knowledge-exchange activities between practitioners, advisors, and researchers to promote practical implementation. It was highlighted that successful application requires suitable soil and weather conditions: stable, slightly moist soils, moderate temperatures, and ideally application immediately after cutting. The technique requires careful maintenance and involves higher investment costs but offers long-term ecological and economic benefits.

In practice, farmers can use the slot injection method to make grassland management more climate- and environmentally friendly, reduce emissions, improve nitrogen efficiency, and enhance forage quality. Insights from the CSA project are shared through Communities of Practice to facilitate experience exchange and advisory support for on-farm implementation.

The slot injection method is a field-tested innovation for emission-reducing organic fertilization of grassland. Within the CSA project, the technique was identified as an effective tool for climate-adapted grassland management, providing ecological, economic, and qualitative benefits.

ADDITIONAL INFORMATION

- **Clear environmental benefits:** Strong, well-documented reductions in NH₃ emissions (60–90%) support regulatory acceptance and funding.
- **Improved nitrogen efficiency:** Higher nutrient availability increases forage yield and reduces mineral fertilizer demand, making the method economically attractive.
- **Compatibility with climate and agri-environment schemes:** Many policies encourage or subsidize low-emission spreading techniques.
- **High acceptance in quality forage production:** Reduced contamination of herbage improves silage quality, appealing to livestock producers.
- **Technical maturity:** Modern slot applicators are reliable, precise, and can be integrated into existing slurry management systems.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title:

Information from the Chamber of Agriculture, Germany on the slot application

URL:

<https://www.landwirtschaftskammer.de/landwirtschaft/ackerbau/duengung/guelle/technik/index.htm#schlitz>

Title:

Low-emission application of organic fertilizers

URL:

https://www.nutrinet.agrarpraxisforschung.de/fileadmin/daten/pdf/Publikationen/Merkblatt_Verlustarme_Ausbringung_von_Wirtschaftsduengern.pdf

Title:

Thünen Report 64 – „Ammoniakemissionen aus der Landwirtschaft und Minderungsmaßnahmen“, Thünen Institute

URL:

https://www.thuenen.de/media/publikationen/thuenen-report/Thuenen_Report_64.pdf

Title:

Air Pollutant Emission Inventory Guidebook – Agriculture (NH₃ Emissions), EMEP/EEA

URL:

<https://www.eea.europa.eu/publications/emep-eea-guidebook-2023/part-b-sectoral-guidance-chapters/3-agriculture/3-d-agricultural-soils-2023>

Title:

„Ammoniakemissionen in der Landwirtschaft mindern“, Europäische Umweltagentur/
European Environmental Agency

URL:

https://www.ktbl.de/fileadmin/user_upload/Artikel/Emissionen/Ammoniakemissionen_in_Landwirtschaft_mindern.pdf

Title:

Picture of a slit-injector on grassland

URL:

<https://www.landwirtschaftskammer.de/fotos/zoom/g/guelleschlitzdoppelscheibe.jpg>

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PRACTICE ABSTRACT NUMBER #39

TITLE IN NATIVE LANGUAGE

Eddy Covariance per la misurazione del sequestro del Carbonio nei sistemi agricoli

TITLE IN ENGLISH

Eddy Covariance for Measuring Carbon Sequestration in Agricultural Systems

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Marco Tonni, m.tonni@federbioservizi.it

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. carbon sequestration
2. carbon credits
3. measure carbon in soil
4. greenhouse effect

THEMATIC AREA

Soil Health and Biodiversity

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Il presente documento sintetico si concentra sulla misurazione del sequestro del carbonio nei sistemi agricoli, illustrando come le pratiche agricole sostenibili possano contribuire alla riduzione delle emissioni di gas serra e favorendo la generazione di crediti di carbonio certificabili. È particolarmente utile per gli operatori che cercano prove attendibili dell'impatto climatico a livello di azienda agricola.

Nell'ambito del progetto ClimateSmartAdvisors (CSA), nel dicembre 2024 è stato proposto ai consulenti un webinar tematico dal titolo "Workshop CSA: Misurazione del carbonio nel suolo - La tecnica della covarianza di Eddy", nell'ambito dell'area tematica "Salute del suolo e biodiversità". Il webinar ha presentato la tecnica della covarianza di Eddy (EC) come un metodo efficace per misurare le emissioni e il sequestro di carbonio nei sistemi agricoli. A differenza dei metodi di stima, la Commissione europea misura direttamente lo scambio di gas tra un sistema pedologico e l'atmosfera, consentendo di ottenere un bilancio netto degli scambi di CO₂. Se applicata in condizioni adeguate, questa tecnica è considerata precisa e affidabile. Inoltre, è in grado di fornire risultati in un lasso di tempo più breve rispetto ad altri sistemi di valutazione, sebbene sia necessario tenere conto della variabilità stagionale.

La tecnica della covarianza dei vortici può rivelarsi uno strumento prezioso per le aziende agricole, i consulenti, i ricercatori e gli enti pubblici interessati a misurare il sequestro del carbonio, a valutare gli effetti delle pratiche agricole sul clima o a raccogliere dati a sostegno dei programmi di crediti di carbonio e della valutazione delle politiche pubbliche. Tuttavia, la sua applicazione richiede un'attenta valutazione. Tra le principali sfide figurano l'elevato costo delle attrezzature, la complessità della raccolta e della gestione dei dati e la necessità di competenze specifiche. Per questo motivo, l'attuazione richiede solitamente la collaborazione con università o centri di ricerca. Inoltre, il sito deve essere scelto con cura, poiché il metodo richiede in genere circa 10 ettari di terreno pianeggiante e omogeneo. Sebbene si raccomandi di effettuare misurazioni continue per almeno un anno, è preferibile un periodo più lungo, idealmente di tre anni, al fine di tenere conto delle variazioni stagionali nei sistemi viventi.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This Practice Abstract focuses on measuring carbon sequestration in agricultural systems, demonstrating how sustainable agricultural practices can contribute to the reduction of greenhouse gas emissions, and supporting the generation of certifiable carbon credits. It is particularly relevant for actors seeking reliable evidence of climate impact at farm level.

Within the ClimateSmartAdvisors (CSA) project, a thematic webinar was proposed to advisors in December 2024 under the title CSA Workshop "Measuring soil carbon - the Eddy Covariance Technique", within the thematic area Soil Health & Biodiversity. The webinar presented the Eddy Covariance (EC) technique as a powerful method for measuring carbon emissions and sequestration in agricultural systems. Unlike estimation approaches, European Commission directly measures gas exchange between a soil-based system and the atmosphere, making it possible to obtain a net balance of CO₂ exchanges. When applied in suitable conditions, the technique is considered precise and reliable. It can also deliver results in a shorter period than some other evaluation systems, although seasonal variability must be

taken into account.

The Eddy Covariance technique can be a valuable tool for farms, advisors, researchers, and public entities interested in measuring carbon sequestration, assessing the climate effects of agricultural practices, or generating evidence for carbon credit schemes and public policy evaluation. However, its application requires careful consideration. Main challenges include the high cost of equipment, the complexity of data collection and management, and the need for specific expertise. For this reason, implementation usually requires collaboration with universities or research centres. In addition, the site must be carefully selected, as the method generally requires around 10 uniform, flat hectares. While at least one year of continuous measurements is recommended, a longer period, ideally three years, is preferable in order to account for seasonal variation in living systems.

ADDITIONAL INFORMATION

- Gathering accurate data from various agricultural systems can significantly enhance understanding of the impact and effectiveness of agronomic strategies in addressing climate change and promoting soil health.
- Measure is much better than estimate.
- Engaging higher-level of stakeholder could improve the effectiveness of policy decisions at regional or National level.
- Carbon credits could be objectively defined.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Operationalizing the "eddy covariance" technique to certify carbon farming in vineyards

URL:

<https://www.youtube.com/watch?v=9YsRqebB660>

Title/Description

Comparison of sensible heat fluxes by large aperture scintillometry and eddy covariance over two contrasting-climate vineyards

URL:

<https://hdl.handle.net/11577/3340542>

Title/Description

Eddy covariance raw data processing for CO₂ and energy fluxes calculation at ICOS ecosystem stations

URL:

<https://hdl.handle.net/11577/3286173>

Title/Description

#ExploreICOS: Prosecco with a purpose – the potential of vineyards as carbon sinks

URL:

CLIMATE SMART FARMING PRACTICES & TOOLS

<https://www.icos-cp.eu/exploreicos-prosecco-purpose-potential-vineyards-carbon-sinks>

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PRACTICE ABSTRACT NUMBER #40

TITLE IN NATIVE LANGUAGE

Aszálytűrő vetésforgó kialakítása pillangós növényekkel

TITLE IN ENGLISH

Developing a Drought-tolerant Crop Rotation with Legumes

GEOGRAPHICAL LOCATION (IF RELEVANT)

Everywhere in Europe without the Northern Region

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Tibor Bányai, banyaitibor@gazdakontroll.hu

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. More secure yields in crop production
2. Soil conservation
3. Better economic performance

THEMATIC AREA

Climate Smart Farming Practices & Tools

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Az elmúlt években Magyarországon egyre gyakoribbá váló száraz időszakok komoly kihívást jelentenek a növénytermesztés számára. A tavaszi csapadék egyenetlen eloszlása és a nyári tartós aszály jelentősen rontja a hagyományos vetésforgók teljesítményét, ezért a gazdálkodóknak újra kell gondolniuk termesztési rendszereiket a gazdaságosság megőrzése mellett.

A **ClimateSmartAdvisors** (CSA) projekt magyarországi **Community of Practice** (CoP) csoportjában a vetésforgókat a meglévő gyakorlatok, valamint a szaktanácsadók gazdálkodókkal végzett munkája során szerzett tapasztalatai alapján elemeztük. A tapasztalatok azt mutatják, hogy a pillangós növények vetésforgóba történő beillesztése javítja a talaj termékenységét és biológiai aktivitását, csökkenti a külső inputok iránti igényt, valamint hozzájárul a terméseredmények stabilizálásához aszályos körülmények között is.

A megvalósítást segíti a gazdálkodók növekvő alkalmazkodási hajlandósága és a növényi fehérjék iránti piaci kereslet erősödése. Ugyanakkor kihívást jelent a termesztési tapasztalat hiánya, a piaci bizonytalanság és az inputokhoz való hozzáférés korlátozottsága.

A szaktanácsadási rendszer erősítése, a bemutató gazdaságok szerepének növelése és a piaci feltételek javítása kulcsfontosságú a gyakorlat szélesebb körű elterjedéséhez. A gazdálkodók számára javasolt a pillangós növények fokozatos bevezetése és a vetésforgó arányainak átalakítása a klímaváltozáshoz való alkalmazkodás érdekében.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In recent years, increasingly dry conditions have posed growing challenges for crop production in Hungary. Irregular rainfall distribution in spring and prolonged summer droughts significantly affect the performance of traditional crop rotations, requiring farmers to rethink their production systems while maintaining economic viability.

Within the **Hungarian Community of Practice** (CoP) of the **ClimateSmartAdvisors** (CSA) project, crop rotation strategies were analysed based on existing practices and advisors' field experience gained through their work with farmers. The discussions highlighted that integrating legumes into crop rotations can improve soil fertility, enhance soil biological activity and reduce dependency on external inputs, while also contributing to more stable yields under drought conditions.

Key enabling factors include increasing farmers' motivation to adapt to climate change and growing market demand for plant-based proteins. At the same time, barriers such as limited experience with legumes, market uncertainties and access to appropriate inputs need to be addressed.

Strengthening advisory support, promoting demonstration activities and improving market conditions are essential to support adoption. Farmers are encouraged to gradually integrate

legumes into their crop rotations and adjust crop proportions to better cope with increasing climate variability.

ADDITIONAL INFORMATION

These insights were identified through discussions within the Hungarian Community of Practice (CoP) of the CSA project and are supported by advisors' practical experience gained through their work with farmers.

Facilitating factors include increasing farmer motivation driven by visible climate impacts on yields and profitability, as well as growing market demand for plant-based proteins. EU policy instruments, such as CAP eco-schemes, also provide financial incentives for diversified crop rotations and legume cultivation. Advisory services and existing knowledge networks play a key role in supporting uptake and knowledge transfer.

Obstacles include limited farmer experience with legumes, initial yield uncertainties and short-term economic pressures that discourage experimentation. In addition, underdeveloped market infrastructure, limited access to quality seeds and appropriate machinery, and climate variability itself can constrain successful implementation.

Recommended future actions: To support adoption, it is recommended to strengthen demonstration activities, develop regional market channels and processing capacities, and explore risk-sharing mechanisms (e.g. insurance schemes). Further applied research is needed to identify region-specific legume varieties and optimise their integration into local cropping systems.

Messages for end-users: Start small by introducing legumes on a portion of your land before scaling up. Connect with advisory services and peer networks to learn from others' experiences. Consider the long-term soil health benefits when evaluating the economics of crop rotation changes. Monitor and document your results to contribute to collective learning. Remember that adaptation is a gradual process requiring patience and flexibility. Explore available subsidies and support programmes that can reduce transition risks.

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PRACTICE ABSTRACT NUMBER #47

TITLE IN NATIVE LANGUAGE

Virtuelle Zäune als Weg einer effizienten und Klimaangepassten- und Umweltfreundlichen Beweidung

TITLE IN ENGLISH

Virtual Fences as a Way of Efficient, Climate Adapted and Environmentally Friendly Grazing

GEOGRAPHICAL LOCATION (IF RELEVANT)

Worldwide

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Protection of sensitive ecosystems and biodiversity
2. Climate protection through improved grazing management
3. Efficient use of resources and adaptation to climate change

THEMATIC AREA

Grassland Management, Herd Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Im Rahmen des ClimateSmartAdvisors (CSA)-Projekts wurde Virtual Fencing als innovative Technologie mit großem Potenzial für ein klimaangepasstes Herden- und Weidemanagement identifiziert und diskutiert. Das Thema wurde in einer thematischen Online-Veranstaltung gemeinsam von den Themenbereichen Herd Management (CFD) und Grassland Management (CSA) unter dem Titel „Virtual Fencing – from pilot to practice?“ aufgegriffen. Das Webinar ermöglichte den Wissensaustausch zwischen Beratenden, Forschenden und Praktikerinnen und Praktikern zur Überführung von Pilotanwendungen in die landwirtschaftliche Praxis.

Virtual Fencing ist eine innovative Technologie zur Steuerung von Weidetieren ohne physische Zauninfrastruktur. Mithilfe von GPS-Halsbändern oder Ohrmarken werden virtuelle Weidegrenzen definiert, die Tiere durch akustische Signale und leichte Impulse leiten.

Virtuelle Zäune ermöglichen den flexiblen Ausschluss ökologisch sensibler Bereiche wie Feuchtgebiete, Uferzonen oder erosionsgefährdete Böden. Dadurch werden Trittschäden, Nährstoffeinträge in Gewässer sowie Bodenerosion reduziert. Ein präziseres Weidemanagement fördert eine gleichmäßige Beweidung und gesunde Grasnarben. Dies verbessert die Kohlenstoffspeicherung im Boden, erhöht die Wasserspeicherfähigkeit und reduziert Flächen mit Über- oder Unterbeweidung.

Aus klimapolitischer Sicht leistet Virtual Fencing vor allem einen Beitrag zur Anpassung an den Klimawandel. Weideflächen können kurzfristig und ohne bauliche Eingriffe an Wetterextreme, wie Dürre oder Starkniederschläge angepasst werden. Dies erhöht die Resilienz landwirtschaftlicher Betriebe gegenüber Klimarisiken, verbessert die Arbeitseffizienz und unterstützt das Tierwohl durch optimierte Weideführung.

Der Austausch im Thematic-Network-Webinar verdeutlichte, dass für den Übergang von Pilotprojekten in eine breitere praktische Anwendung weiterhin Beratungsangebote, Schulungen für Landwirtinnen und Landwirte sowie ein kontinuierlicher Wissenstransfer innerhalb von Communities of Practice erforderlich sind.

Fazit

Virtual Fencing stellt einen vielversprechenden Ansatz dar, um Weidesysteme nachhaltiger, flexibler und klimaresilienter zu gestalten.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within the framework of the ClimateSmartAdvisors (CSA) project and its activities within Communities of Practice, virtual fencing was identified and discussed as an innovative technology with strong potential for climate-smart livestock management.

Virtual fencing is an innovative technology for managing grazing livestock without physical fencing infrastructure. Using GPS collars or ear tags, virtual grazing boundaries are defined that guide animals through acoustic signals and mild impulses.

Virtual fences allow the flexible exclusion of ecologically sensitive areas such as wetlands, riparian zones, or erosion-prone soils. This reduces trampling damage, nutrient runoff into water bodies, and soil erosion.

More precise grazing management promotes uniform grazing and healthy swards. This enhances soil carbon sequestration, improves water retention capacity, and reduces areas affected by overgrazing or undergrazing.

From a climate perspective, virtual fencing contributes primarily to adaptation. It enables rapid adjustment of grazing areas in response to weather extremes such as droughts or heavy rainfall, without requiring structural interventions. This increases farm resilience to climate risks while improving labour efficiency and supporting animal welfare through better-managed grazing conditions.

The CSA thematic exchange event highlighted that scaling digital innovations such as virtual fencing from pilot projects to wider practice requires continued advisory support, farmer training, and cross-regional knowledge sharing within Communities of Practice. Virtual fencing was recognised as a promising tool to strengthen the sustainability, flexibility, and climate resilience of grassland-based livestock systems.

ADDITIONAL INFORMATION

1. Regulatory status: No EU-wide harmonised approval yet; use depends on national animal welfare regulations
2. Costs: Investment in GPS collars/tags plus ongoing software and data fees; savings from reduced physical fencing
3. Effort: Initial setup and animal training required; day-to-day management mainly digital and time-efficient
4. Practical limits: Reliable GPS and power supply needed; best suited for extensive grazing systems
5. Experiences from initial pilot projects and practical applications presented and discussed within the CSA knowledge exchange demonstrate significant potential for enabling more efficient, climate- and environmentally friendly grazing systems.
6. At the same time, species-rich grasslands can be specifically protected or grazed for limited periods, supporting biodiversity objectives.
7. In addition, the need for materials, transport, and maintenance associated with conventional fencing is eliminated, lowering resource use and reducing indirect greenhouse gas emissions.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title:

Virtual fencing – technology overview and applications (Wikipedia)

URL:

https://en.wikipedia.org/wiki/Virtual_fencing

Title:

Virtual fencing in grassland-based livestock systems – practical overview

URL:

<https://www.oekolandbau.de/bio-in-der-praxis/oekologische-landwirtschaft/oekologischer-pflanzenbau/oekologische-gruenlandwirtschaft/virtuelle-zaeune-die-smarte-zukunft-der-weidetierhaltung/>

Title:

Virtual Fencing Technology for Cattle Management – Review paper (MDPI, 2023)

URL:

<https://www.mdpi.com/2077-0472/13/1/123>

Title:

Effectiveness and animal welfare aspects of virtual fencing (Animal / Thünen Institute)

URL:

https://literatur.thuenen.de/digbib_extern/dn069965.pdf

Title:

Detailed schematic representation of the virtual fencing concept, including the components used. GPS—Global Positioning System. **In:** Influence of Virtual Fencing Technology in Cattle Management and Animal Welfare

URL:

<https://www.mdpi.com/2673-933X/5/2/21>

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PRACTICE ABSTRACT NUMBER #49

TITLE IN NATIVE LANGUAGE

Cómo Garantizar un Control Biológico Eficaz en Invernaderos Hortícolas

TITLE IN ENGLISH

How to Ensure Effective Biological Control in Horticultural Greenhouses

GEOGRAPHICAL LOCATION (IF RELEVANT)

The research and innovation activities took place in Almería (Spain), but the practice is also relevant for other regions of Southern Europe.

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Reduced pesticide residues and market risk
2. Stable pest control through biodiversity
3. Improved crop resilience and management

THEMATIC AREA

Crops Management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Este Resumen Práctico se desarrolló en la Comunidad de Práctica española “Cultura” del proyecto ClimateSmartAdvisors, basado en el intercambio de conocimientos y la recopilación de buenas prácticas para ayudar a agricultores y asesores a adoptar estrategias de protección de cultivos sostenibles y climáticamente inteligentes. El control biológico es una herramienta clave para la gestión sostenible de plagas en invernaderos hortícolas, pero su eficacia depende de una adecuada planificación y aplicación como un sistema integrado. El principal reto es garantizar un control biológico estable y eficaz frente a plagas como trips, mosca blanca, pulgones o minadores de hoja del tomate, reduciendo la dependencia de productos fitosanitarios.

Los resultados muestran que el éxito del control biológico no depende solo de liberar enemigos naturales comerciales, sino de la identificación temprana de plagas, introducción preventiva de organismos beneficiosos adaptados al cultivo y temporada, gestión adecuada del clima del invernadero y manejo integrado del cultivo. En regiones como Almería, este enfoque se ha adoptado en alrededor del 82 % de los invernaderos.

En la práctica, el control biológico debe implementarse de forma preventiva, evitando tratamientos químicos incompatibles, asegurando un monitoreo continuo del cultivo y fomentando la biodiversidad mediante la combinación de organismos beneficiosos comerciales y naturales, apoyándose en plantas refugio.

Las experiencias prácticas confirman su eficacia. El uso de colmenas de abejorros en cultivos de tomate ha mejorado la calidad del fruto y ha facilitado la transición hacia estrategias compatibles con pesticidas. El control biológico de minadores de hoja con parasitoides (por ejemplo, *Diglyphus isaea*) ha permitido la supresión de la plaga a largo plazo con intervenciones mínimas. En pimiento dulce, el uso de ácaros y chinches depredadores contra trips ha ayudado a superar problemas de resistencia y reducir residuos.

Aunque requiere una inversión inicial, los beneficios incluyen mayor estabilidad del sistema productivo, reducción de residuos químicos, mejora del entorno laboral y mejor aceptación en el mercado.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This Practice Abstract was developed within the Spanish Community of Practice “Culture” of the ClimateSmartAdvisors project, based on knowledge exchange and the compilation of good practices to help farmers and advisors adopt climate-smart and sustainable crop protection strategies. Biological control is a key tool for sustainable pest management in horticultural greenhouses, but its effectiveness depends on proper planning and its application as an integrated system. The main challenge is to ensure stable and effective biological control against pests such as thrips, whiteflies, aphids, or tomato leaf miners, while reducing dependence on chemical plant protection products.

Results show that successful biological control does not rely only on releasing commercially available natural enemies, but on early pest identification, preventive introduction of beneficial

organisms adapted to the crop and season, proper greenhouse climate management, and integrated crop management. In regions such as Almería, this approach has enabled adoption in around 82% of greenhouses.

In practice, biological control should be implemented preventively, avoiding incompatible chemical treatments, ensuring continuous crop monitoring, and promoting biodiversity through the combination of commercial and naturally occurring beneficial organisms, supported by refuge plants.

Practical experiences confirm its effectiveness. The use of bumblebee hives in tomato crops has improved fruit quality and facilitated the transition to pesticide-compatible strategies. Biological control of leaf miners with parasitoids (e.g. *Diglyphus isaea*) has enabled long-term pest suppression with minimal interventions. In sweet pepper, the use of predatory mites and bugs against thrips has helped overcome resistance issues and reduce residues.

Although an initial investment is required, benefits include greater production stability, reduced chemical residues, improved working conditions, and better market acceptance.

ADDITIONAL INFORMATION

The implementation of biological control is facilitated by access to specialized technical advice, farmer training, and on-farm demonstrations, many of which were promoted through the Spanish Community of Practice (CoP) “Culture” of the ClimateSmartAdvisors project. Peer-to-peer learning and knowledge exchange among farmers and advisors are also key to building confidence and improving decision-making.

A major challenge is the transition from chemical control, as incompatible products or residual effects from previous cropping cycles can hinder the establishment of beneficial organisms. This transition often requires changes in management practices, increased monitoring, and a shift towards preventive approaches.

Successful adoption depends on a gradual transition strategy, combining early pest detection, preventive releases of beneficial organisms, and biodiversity-based measures. Collaboration among farmers, advisors, suppliers, and research centers plays a crucial role in ensuring technical support, adapting solutions to local conditions, and scaling up implementation.

Future actions should focus on strengthening advisory services, expanding farmer training programs, and improving access to knowledge and practical tools. Supporting the wider adoption of integrated, climate-smart pest management systems will be essential to enhance resilience, reduce chemical inputs, and meet market and regulatory demands.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors Community of Practice in Spain - Mitigation and Adaptation Practices in Mediterranean Protected Cultivation

URL:

<https://climatesmartadvisors.eu/cops/mitigation-and-adaptation-practices-in-mediterranean-protected-cultivation/>

Title/Description

Experiencias de control biológico por conservación en horticultura protegida.

URL:

<https://www.plataformatierra.es/innovacion/experiencias-control-biologico-por-conservacion-horticultura-protegida>

Title/Description

Control biológico: herramienta clave en el control del '*Thrips parvispinus*'.

URL:

<https://www.plataformatierra.es/innovacion/control-biologico-herramienta-clave-en-el-control-del-thrips-parvispinus>

Title/Description

La campaña, *I Love Bichos*, de Hortyfruta, promueve el uso del control biológico en los invernaderos de Andalucía.

URL:

<https://ilovebichos.com/>

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PRACTICE ABSTRACT NUMBER #50

TITLE IN NATIVE LANGUAGE

Optimaliseren van groenbemestermengsels: verbetering van bodemgezondheid, biodiversiteit en stikstofbeheer in de West-Europese Akkerbouw.

TITLE IN ENGLISH

Optimising Cover Crop Mixtures: Enhancing Soil Health, Biodiversity, and Nitrogen Management in Western European Arable Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

Western Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Increase biodiversity
2. Improve soil structure
3. Reduce nitrogen leaching

THEMATIC AREA

Soil Health

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

De eerst Nederlandse CoP richtte zich op de voor- en nadelen van verschillende groenbemestermengsels, met speciale aandacht voor bewerkbaarheid en aaltjesproblematiek. De belangrijkste bevinding is dat mengsels van groenbemesters zorgen voor risicospreiding, betere bodembedekking, meer biodiversiteit en een verbeterde bodemstructuur. Vlinderbloemigen in mengsels dragen bij aan stikstofbinding, waardoor bemesting vaak niet nodig is. Mengsels zijn echter duurder, lastiger te zaaien door verschillende zaadvormen en -dieptes, en kunnen ziekte- en plaagdruk verhogen als er waardplanten aanwezig zijn.

Innovatieve oplossingen zijn het combineren van soorten op basis van het stappenplan uit het Groenbemester-handboek of E-learning, zodat het mengsel optimaal aansluit bij de lokale omstandigheden en doelen (zoals organische stof, bodemstructuur, biodiversiteit). Commerciële mengsels zijn vaak goed uitgebalanceerd, maar het is belangrijk te controleren op waardplanten voor ziekten en plagen.

Verder blijkt dat laat ingezaaide groenbemesters tot eind september/begin oktober nog zinvol zijn voor het voorkomen van stikstofuitspoeling, mits de juiste soorten worden gekozen en de zaaidichtheid wordt verhoogd. De mineralisatie van stikstof hangt af van het type groenbemester, het moment van inwerken en de weersomstandigheden. Vlinderbloemigen leveren stikstof aan het volggewas, vooral als ze in het voorjaar worden ingewerkt.

Tot slot is het advies om bij beperkte bemestingsruimte te kiezen voor mengsels met vlinderbloemigen en het stro af te voeren. Directzaai en niet-kerende grondbewerking werken goed, mits rekening wordt gehouden met gewasresten en kieming. Groenbemesters dragen bij aan een positieve waterbalans en een betere bewerkbaarheid van de bodem in het voorjaar.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The first Dutch Community of Practice within ClimateSmartAdvisors focused on the advantages and disadvantages of various cover crop mixtures, with special attention to workability and nematode issues. The main finding is that mixtures of cover crops provide risk spreading, better soil coverage, increased biodiversity, and improved soil structure. Legumes in mixtures contribute to nitrogen fixation, often making additional fertilisation unnecessary. However, mixtures are more expensive, more difficult to sow due to different types of seed and sowing depths and can increase disease and pest pressure if host plants are present.

Innovative solutions include combining species based on the step-by-step plan from the Cover Crop Handbook or E-learning, so that the mixture is optimally tailored to local conditions and objectives (such as organic matter, soil structure, biodiversity). Commercial mixtures are often well-balanced, but it is important to check out host plants for diseases and pests.

Furthermore, it appears that late-sown cover crops, up to the end of September/beginning of October, are still useful for preventing nitrogen leaching, provided the right species are chosen, and the sowing density is increased. The mineralisation of nitrogen depends on the

type of cover crop, the timing of incorporation, and weather conditions. Legumes supply nitrogen to the subsequent crop, especially when incorporated in spring.

Finally, the advice is to choose mixtures with legumes and remove straw when fertilisation space is limited. Direct sowing and non-inversion tillage work well, provided crop residues and seed germination are considered. Cover crops contribute to a positive water balance and improved soil workability in spring.

ADDITIONAL INFORMATION

Facilitating elements:

1. Availability of practical guidelines and decision-support tools (e.g., cover crop handbooks, e-learning modules) makes it easier for farmers to select and implement suitable mixtures.
2. Increasing awareness of soil health and sustainability encourages adoption.
3. Collaboration between farmers, advisors, and researchers supports knowledge exchange and local adaptation.

Obstacles:

1. Higher costs and technical challenges (e.g., mixing and sowing seeds of different sizes and depths) may hinder implementation.
2. Risk of increased pest and disease pressure if mixtures contain host plants.
3. Limited experience with custom mixtures and uncertainty about optimal composition for specific conditions.

Future actions/research:

1. Further research is needed to optimise mixture composition for different soil types, climates, and cropping systems.
2. Development of cost-effective sowing techniques and machinery for mixed seeds.
3. Long-term monitoring of soil health, biodiversity, and yield impacts to refine recommendations.

Messages to end-users:

1. Carefully select species based on local conditions and management goals.
2. Use available decision-support tools and consult experts when needed.
3. Share experiences and results with peers to accelerate learning and improvement.
4. Stay informed about new research and innovations in cover crop management.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title:

Best4Soil – Bodemgezondheid en aaltjesbeheer

URL:

<https://www.best4soil.eu/nl/>

Title:

Green Manure and Nutrient Utilization – CSA Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/green-manure-and-nutrient-utilization/>

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PRACTICE ABSTRACT NUMBER #60

TITLE IN NATIVE LANGUAGE

Gestão de água: Estratégias de rega deficitária em amendoeais

TITLE IN ENGLISH

Water Management: Deficit Irrigation Strategies in Almond Orchards

GEOGRAPHICAL LOCATION (IF RELEVANT)

Mediterranean Region – Portugal

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Improved water use efficiency
2. Increased crop resilience to drought
3. Reduced water footprint.

THEMATIC AREA

Water management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

A crescente preocupação com o uso eficiente da água na agricultura reflete o aumento das pressões associadas à seca, à variabilidade da precipitação e a outros fenómenos climáticos extremos. Na bacia mediterrânica, a redução da disponibilidade hídrica limita a produtividade e incentiva a adoção de práticas de rega mais eficientes.

Perante este cenário, e considerando que a gestão eficiente da água tornou-se uma prioridade, a 1.^a CoP portuguesa discutiu, entre outros temas, como é que os produtores podem melhor adaptar-se e gerir este recurso. A título de exemplo, definir uma estratégia de rega adaptada ao local, à cultura e às características da exploração é fundamental para otimizar o uso da água e garantir o desenvolvimento ótimo do amendoal. A rega deficitária regulada (RDI) foi a primeira a ser formalizada, reduzindo a rega apenas em fases menos sensíveis ao stress hídrico, enquanto a rega deficitária sustentada (SDI/RDS) surgiu posteriormente, propondo uma limitação moderada e relativamente constante ao longo de todo o ciclo.

- Rega deficitária regulada (RDI): Reduz a rega em fases menos sensíveis da cultura e tem sido promovida há mais de duas décadas como estratégia de poupança de água, embora possa implicar maior risco de impacto no miolo e na produtividade em determinados contextos.
- Rega deficitária sustentada (SDI/RDS): Aplica uma fração fixa da ET_c ao longo de todo o ciclo, maximizando a eficiência do uso da água, reduzindo o risco de moniliose, mantendo o tamanho e peso da amêndoa e melhorando a eficiência da colheita por vibração. Com a RDS, a humidade do solo diminui de forma gradual ao longo da campanha, promovendo o desenvolvimento radicular, ao contrário do défice regulado, que pode induzir stress excessivo na fase de maturação e afetar o tamanho do miolo.

A adoção de estratégias de rega deficitária bem calibradas ao contexto local permite aumentar a eficiência do uso da água no amendoal, reduzindo consumos sem comprometer o rendimento e a qualidade da amêndoa, e contribuindo para a resiliência das explorações em cenários de seca crescente.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The growing concern with the efficient use of water in agriculture reflects increasing pressure from drought, rainfall variability and other extreme climatic events. In the Mediterranean basin, reduced water availability that consequently limits productivity, has encouraged the adoption of more efficient irrigation practices.

Considering sustainable water management has become a priority, the 1st Portuguese Community of Practice (CoP) within ClimateSmartAdvisors project has discussed, among other topics, how farmers can better adapt and manage this resource. For example, defining an irrigation strategy adapted to the site, the crop and the farm's characteristics is crucial to optimize water use and ensure optimal development of the almond orchard. Regulated deficit

irrigation (RDI) was the first approach to be formalized, reducing irrigation only during phenological stages that are less sensitive to water stress, while sustained deficit irrigation (SDI/RDS) emerged later, proposing a moderate and relatively constant limitation throughout the entire crop cycle. See more information in additional information below.

The adoption of deficit irrigation strategies that are well calibrated to local conditions can increase water use efficiency in almond orchards, reducing water consumption without compromising yield and kernel quality, while contributing to farm resilience under increasing drought pressure.

ADDITIONAL INFORMATION

Regulated deficit irrigation (RDI): Reduces irrigation during less sensitive crop stages and has been promoted for more than two decades as a water-saving strategy, although it may imply a higher risk of impacts on kernel development and yield in certain contexts.

Sustained deficit irrigation (SDI): Applies a fixed fraction of ET_c throughout the whole season, maximizing water use efficiency, reducing the risk of brown rot in almonds, maintaining kernel size and weight, and improving mechanical harvest efficiency by shaking. With this strategy, soil moisture levels gradually decrease over the irrigation season, promoting root development, in contrast to regulated deficit irrigation, which may induce excessive stress during the maturation phase and affect kernel size.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Development of Water Management Models in Almond Orchards – CSA Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/development-of-water-management-models-in-almond-orchards/>

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PRACTICE ABSTRACT NUMBER #61

TITLE IN NATIVE LANGUAGE

Réduire le méthane entérique chez les ruminants : des leviers prêts à l'emploi

TITLE IN ENGLISH

Reducing Enteric Methane in Ruminants: Ready-to-use Levers

GEOGRAPHICAL LOCATION (IF RELEVANT)

EU

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Reduce methane emissions
2. Scientific update
3. Ready-to-use levers

THEMATIC AREA

Additives for reducing methane emissions

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Ce travail répond au défi pratique de réduire les émissions de méthane entérique des ruminants tout en maintenant les performances animales, la rentabilité des exploitations et la facilité de mise en œuvre pour les utilisateurs finaux. Dans le cadre du projet CSA, la première mission était de s'appuyer sur une synthèse scientifique publiée afin de traduire des connaissances consolidées en messages opérationnels et en options pratiques pour les acteurs de terrain. Un webinaire sur ce thème a été organisé pour favoriser le transfert de connaissances et leur appropriation en pratique, et des infographies pour les réseaux sociaux ont été créées [liens ci-dessous].

La revue met en évidence les solutions les plus prometteuses à l'échelle de l'exploitation. Parmi les additifs alimentaires, le 3-nitrooxypropanol (3-NOP, Bovaer®) apparaît comme l'option la plus robuste et la mieux validée, avec des réductions de méthane d'environ 20 à 40 % chez les bovins laitiers, sans effet négatif sur l'ingestion ni la productivité, et une efficacité accrue dans les rations riches en amidon. Les algues rouges (*Asparagopsis* spp.) peuvent permettre des réductions supérieures à 50 %, mais leur utilisation exige un contrôle strict des doses ainsi qu'une vigilance sur l'ingestion et sur d'éventuels résidus de bromoforme et d'iode. Des leviers de conduite, comme une meilleure qualité des fourrages, des ensilages plus riches en glucides non fibreux et un pâturage ajusté, peuvent aussi réduire les émissions tout en améliorant l'efficacité d'utilisation des nutriments.

En pratique, les meilleurs résultats reposent sur la combinaison de (1) rations efficaces, (2) d'un additif validé et (3) d'un suivi en élevage de l'ingestion, de la production et de la composition du lait. Les publics cibles sont les éleveurs, conseillers, nutritionnistes, chercheurs et décideurs publics.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This work addresses the practical challenge of reducing enteric methane emissions from ruminants while maintaining animal performance, farm profitability and ease of implementation for end-users. In the ClimateSmartAdvisors project, the very first mission was to build on a published scientific review and translate consolidated scientific knowledge into operational messages and practical options for practitioners. A thematic webinar on the topic "Measuring, predicting, reducing enteric methane emissions of dairy cows: easy or not?" was organized to support knowledge transfer and uptake in practice.

The review highlights the most promising farm-ready solutions. Among feed additives, 3-nitrooxypropanol (3-NOP, Bovaer®) appears as the most consistent and validated option, typically reducing methane emissions by around 20–40% in dairy cattle without negative effects on feed intake or productivity, with stronger responses in starch-rich diets. Red seaweed (*Asparagopsis* spp.) may achieve reductions above 50%, but its use requires strict dose control and attention to feed intake and possible bromoform and iodine residues. Management strategies, including improved forage quality, higher non-fibrous carbohydrate silages and adjusted grazing intensity, can further reduce methane yield and emission intensity while improving nutrient-use efficiency.

In practice, the best results are likely to come from combining: (1) efficient diet formulation, (2) a validated additive, and (3) on-farm monitoring of intake, milk yield and milk composition. Benefits for end-users include lower methane emissions, better feed efficiency and improved environmental performance. Constraints include additive costs, availability, dose adjustment, acceptability and regulatory conditions. The main target audiences are farmers, advisors, nutritionists, researchers and policy makers.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Mitigation strategies for methane emissions in ruminant livestock: a comprehensive review of current approaches and future perspectives.

URL:

<https://doi.org/10.3389/fanim.2025.1610376>

Title/Description

CSA Thematic Webinar “Measuring, predicting, reducing enteric methane emissions of dairy cows: easy or not?”

URL:

<https://www.youtube.com/watch?v=E-62yGC-ovw&t=2101s>

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PRACTICE ABSTRACT NUMBER #64

TITLE IN NATIVE LANGUAGE

Migliorare l'efficienza dell'azoto nell'allevamento: strategie pratiche dalla Comunità di pratica italiana

TITLE IN ENGLISH

Improving Nitrogen Efficiency in Livestock Farming: Practical Strategies from the Italian Community of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Italy

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Reduction in protein in feed
2. Reduction of nitrogen excretion
3. Maintenance of feed conversion ratio

THEMATIC AREA

Dairy & pig management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

A livello nazionale gli allevamenti zootecnici tendono ad essere concentrati su aree ridotte di territorio, in particolare nella valle del fiume Po. Per questo motivo è necessario cercare di rendere maggiormente sostenibile l'allevamento sia dal punto di vista ambientale che economico. L'utilizzo non efficiente di azoto nel razionamento animale porta a ricadute negative a livello ambientale con l'emissione di gas climalteranti (GHG) e ammoniaca precursore delle polveri sottili. Attraverso un impiego più mirato del razionamento proteico è possibile rendere l'allevamento di bovini e suini maggiormente sostenibile.

Per raggiungere l'obiettivo di mantenere inalterate le caratteristiche dell'allevamento pur modificando il razionamento nel suino è necessario prestare attenzione alla formulazione con alta efficienza dell'azoto e valutare come questo venga impiegato in allevamento.

Nel caso del suino è stato valutato come l'impiego di sei aminoacidi di sintesi permetta di raggiungere il livello di proteina minima equilibrata, cioè il livello per cui non si hanno ripercussioni sullo sviluppo dell'animale. Se si confronta una dieta standard con diete formulate attraverso l'impiego di aminoacidi è possibile passare da un'efficienza del 34.7% fino al 40.7%. Questo si ripercuote positivamente sulla quantità di azoto presente nei reflui riducendo la sua concentrazione.

Per le bovine da latte, sono state prese in esame le Buone Pratiche di allevamento che vedono come chiave di svolta la diretta gestione dei reflui in allevamento e gli spandimenti. In particolare, l'impiego di strutture di copertura dei reflui, così come le strategie per lo spandimento dei reflui permettono di ridurre significativamente la produzione di ammoniaca da liquami.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In Italy, livestock farms are often concentrated in small areas, particularly in the Po River valley. This creates a strong need to make livestock farming more sustainable from both an environmental and economic perspective. The points presented in this Practice Abstract emerged from discussions with Climate Smart Advisors and are linked to Community of Practice exchanges on practical ways to reduce emissions while maintaining production levels.

A key issue is the inefficient use of nitrogen in animal feed, which contributes to GHG and ammonia emissions, the latter being a precursor of fine particulate matter. More targeted use of protein feed can help make cattle and pig farming more sustainable.

For pigs, maintaining production while modifying feed rations requires careful formulation with high nitrogen efficiency and evaluation of how feed is used on farms. It has been shown that using six synthetic amino acids makes it possible to reach the minimum balanced protein level without negative effects on animal development. Compared to a standard diet, amino-acid-based diets can increase nitrogen efficiency from 34.7% to 40.7%, with a positive effect on reducing the nitrogen concentration in manure.

For dairy cows, good farming practices were identified with a focus on manure management and spreading. In particular, the use of manure covering structures and improved spreading strategies can significantly reduce ammonia emissions from slurry.

Advisors play a fundamental role in spreading these best practices, thanks to the trust farmers and breeders place in them. As they visit farms regularly, they can observe farm flows, understand real needs, and recommend the most suitable strategy or technology, and connect farmers and other sector actors to encourage peer-to-peer exchange and practical feedback, helping adoption of adaptation and mitigation practices. However, adoption may be delayed because some best practices require significant investment by farmers and breeders.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Italian ClimateSmartAdvisors Community of Practice - How to Reduce Environmental Impact of Livestock Farm in Italy

URL:

<https://climatesmartadvisors.eu/cops/how-to-reduce-environmental-impact-of-livestock-farm-in-italy/>

Title/Description

Il ruolo del consulente per ridurre l'impatto ambientale in agricoltura
Linkedin post

URL:

<https://terraevita.edagricole.it/istruzione-formazione/consulente-riduzione-impatto-ambientale-agricoltura/>

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PRACTICE ABSTRACT NUMBER #65

TITLE IN NATIVE LANGUAGE

Strategie di irrigazione mirate per la coltivazione di pomodori da industria e kiwi: spunti dalla Comunità di pratica italiana

TITLE IN ENGLISH

Targeted Irrigation Strategies for Processing Tomatoes and Kiwifruit: Insights from the Italian Community of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Italy – Emilia-Romagna

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Sustainable and smart water use
2. Healthy and productive plants
3. Less water loss

THEMATIC AREA

Water management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Nella regione Emilia-Romagna, l'irrigazione riveste un ruolo fondamentale nella produzione ortofrutticola. Nell'ambito della Comunità di pratica italiana ClimateSmartAdvisors sugli aspetti innovativi dell'irrigazione nel settore ortofrutticolo, i ClimateSmartAdvisors hanno discusso raccomandazioni pratiche per un'irrigazione più mirata, tenendo conto delle caratteristiche fisiologiche delle principali colture e della necessità di un uso più efficiente e sostenibile dell'acqua.

Il dibattito si è concentrato in particolare su due colture principali del Nord Italia: il pomodoro da industria e il kiwi. Per quanto riguarda il pomodoro da industria, la qualità del prodotto viene valutata in base al grado Brix, che può essere migliorato riducendo il più possibile lo stress idrico. Il fabbisogno idrico medio annuo si aggira intorno ai 400-600 mm/ha. I sistemi di irrigazione consigliati sono quelli a goccia a terra o su solchi; i sistemi su solchi sono considerati più efficienti grazie alle minori perdite idriche. La distanza tra le file varia generalmente tra 0,3 e 0,5 m e tra 1,5 e 1,8 m. Il coefficiente colturale (K_c) varia da 0,4 a 1,05, a seconda dello stadio di crescita della coltura, con il picco di fabbisogno durante la fase di ingrossamento degli acini. Si raccomanda un'irrigazione frequente con volumi ridotti, utilizzando l'irrigazione a impulsi, per evitare lo stress causato sia dalla saturazione che dalla carenza idrica.

Per i kiwi, il coefficiente colturale raggiunge 1,2 da luglio a settembre, il che significa che in questo periodo occorre reintegrare il 120% dell'acqua persa per traspirazione. I sistemi consigliati comprendono l'irrigazione a goccia, l'irrigazione a pioggia o una combinazione di entrambe, al fine di ottenere un effetto di regolazione climatica. I periodi più critici sono la fioritura, l'allegagione e lo sviluppo dei frutti.

Queste strategie di irrigazione specifiche per coltura possono contribuire a ridurre il consumo idrico e i relativi costi, migliorando al contempo l'efficienza e la sostenibilità dell'uso dell'acqua. Per i consulenti, questo materiale offre indicazioni pratiche utili per pianificare l'irrigazione in base alle esigenze specifiche dell'azienda agricola e migliorare il processo decisionale in collaborazione con gli agricoltori.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In the Emilia-Romagna region, irrigation plays a fundamental role in fruit and vegetable production. Within the ClimateSmartAdvisors Italian Community of Practice on Innovative Irrigation Aspects in the Fruit and Vegetable Sector, Climate Smart Advisors discussed practical recommendations for more targeted irrigation, considering the physiological characteristics of key crops and the need for more efficient and sustainable water use.

The exchanges focused in particular on two major crops in northern Italy: processing tomatoes and kiwifruit. For processing tomatoes, product quality is assessed through the BRIX degree, which can be improved by reducing water stress as much as possible. Average annual irrigation needs are around 400-600 mm/ha. Recommended irrigation systems are ground-mounted or ridged drip irrigation, with ridged systems considered more efficient because of lower water losses. Row spacing generally varies between 0.3 and 0.5 m and 1.5 and 1.8 m.

The crop coefficient (K_c) ranges from 0.4 to 1.05, depending on the crop stage, with the highest demand during berry enlargement. Frequent irrigation with smaller volumes, using pulsed irrigation, is recommended to avoid stress caused by both saturation and water shortage.

For kiwifruit, the crop coefficient reaches 1.2 from July to September, meaning that 120% of transpired water must be replaced during this period. Recommended systems include drip irrigation, sprinkler irrigation, or a combination of both to create a climate control effect. The most critical periods are flowering, fruit set, and fruit development.

These crop-specific irrigation strategies can help reduce water consumption and costs while improving the efficiency and sustainability of water use. For advisors, this material provides practical guidance that can support farm-specific irrigation planning and improve decision-making together with farmers.

ADDITIONAL INFORMATION

It is important to bear in mind that climate patterns vary from year to year and from area to area. To choose the correct and sustainable irrigation management, various factors not mentioned above must be considered in addition to climate patterns, such as soil characteristics, for example.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors Community of Practice in Italy - The Innovative Irrigation Aspects on Fruit and Vegetable Sector

URL:

<https://climatesmartadvisors.eu/cops/the-innovative-irrigation-aspects-on-fruit-and-vegetable-sector/>

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PRACTICE ABSTRACT NUMBER #71

TITLE IN NATIVE LANGUAGE

Zelene kulture u hrvatskoj konzervacijskoj poljoprivredi: koristi za tlo, okoliš i profitabilnost gospodarstva

TITLE IN ENGLISH

Cover Crops in Croatian Conservation Agriculture: Benefits for Soil, Environment, and Farm Profitability

GEOGRAPHICAL LOCATION (IF RELEVANT)

Croatia

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Protection and improvement of soil health
2. Reduction of environmental pressures from farming
3. Improvement of the sustainability and profitability of production

THEMATIC AREA

Crops management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Hrvatska zajednica prakse ClimateSmartAdvisors (CoP) na temu "Utjecaj konzervacijske poljoprivrede na tlo i okoliš" provela je sekundarne pokuse usjeva u pet regija Hrvatske. Nalazi i zaključci u ovom sažetku prakse temelje se na tim aktivnostima CoP-a.

Uloga uzgoja pokrovnih usjeva je prekrivanje površine tla, što može značajno smanjiti potencijal za eroziju tla vjetrom i/ili vodom. U godinama ili dijelu vegetacijske sezone u kojima je povećana količina oborina i/ili s pojavom intenzivnih vjetrova postoji veća opasnost od erozije tla te ukoliko je tlo pokriveno glavnim usjevom, pokrovnim usjevom ili biljnim ostacima erozija tla je značajno smanjena. Nakon prestanka rasta biljaka, listovi, stabljike i korijenje pokrovnih usjeva razgrađuju se, oslobađaju hranjive tvari i potiču mikrobiološku aktivnost i stvaranje agregata u tlu i time dovode do povećanja organske tvari tla. Tijekom tog procesa, dio ostataka pokrovnih usjeva ugrađuje se u tlo kao organska tvar.

Osim navedenog pokrovni usjevi opskrbljuju hranivim tvarima slijedeći uzgajani usjev, prekidaju ciklus razvoja biljnih štetočina, doprinose smanjenju emisije stakleničkih plinova skladištenjem ugljika u tlo. Uzgojem usjeva iz porodice leguminoza koje mogu biološki fiksirati dušik iz atmosfere te opskrbiti tlo dušikom smanjuje se potreba za unosom sintetičkih dušičnih gnojiva. Neki pokrovni usjevi mogu korijenovim sustavom prodrijeti u zbijene slojeve tla, što olakšava korijenju sljedećeg usjeva lakši i potpuniji razvoj. Stvarne koristi od pokrovnog usjeva ovise o izabranoj vrsti i produktivnosti usjeva koji se uzgaja te o tome koliko vremena preostaje za rast prije pripreme ta za uzgoj sjedećeg usjeva u plodoredu.

Primjer i zapažanje poljoprivrednika koji je prakticirao ovu vrstu obrade tla je taj da u proljeće može ranije ući sa radovima u svoja polja što je za njega dosta veliki benefit ali i dobitak na vremenu je ima manje prohoda, uz utrošak manje umjetnog gnojiva i pesticida.

Značajni rezultati su vidljivi tek onog momenta kada pojedini poljoprivrednik investira pozamašna sredstva u nabavu nove opreme i prateće sustave. Tad ovakva vrsta obrade postaje vrlo perspektivna obzirom na uštedu vremena i troškove stalnih ulaganja (gnojivo i radna snaga).

Koristi od ove vrste obrade tla imaju srednja i veća što se tiče posjeda poljoprivrednih površina i oni koji su spremni na značajne tehnološke promjene i investicije u ratarskoj proizvodnji. Također savjetnici iz raznih regija mogu u praktičnim primjerom pokazati i dokazati poljoprivrednicima što i kako odraditi ovu vrstu obrade tla.

Znanstvena zajednica ima još jedan primjer ove vrste obrade tla na širem prostoru (više regija).

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The Croatian ClimateSmartAdvisors Community of Practice (CoP) on "The impact of conservation agriculture on the soil and environment" conducted secondary crop experiments in five regions of Croatia. The findings and conclusions in this Practice Abstract are based on these CoP activities.

Cover crops increase plant biomass returned to the soil and add nutrients when incorporated in green form. Their main role is to cover the soil surface and reduce the risk of erosion by wind and water, especially during periods of heavy rainfall or strong winds. When soil is covered by a main crop, cover crop, or plant residues, erosion is significantly reduced. After growth stops, leaves, stems, and roots decompose, releasing nutrients, stimulating microbial activity and soil aggregate formation, and increasing soil organic matter.

Cover crops also provide nutrients to the following crop, help break pest cycles, and contribute to reducing greenhouse gas emissions by storing carbon in the soil. Legume cover crops can fix nitrogen biologically, reducing the need for synthetic fertilizers. Some cover crops can penetrate compacted soil layers, helping the roots of the next crop develop more easily. The actual benefits depend on crop type, productivity, and the time available for growth within the crop rotation.

A farmer using this approach observed that he could enter fields earlier in spring, needed fewer passes, and used less fertilizer and pesticides. However, significant results become visible when farmers invest in new equipment and support systems. In such cases, this cultivation method becomes promising because of time savings and lower long-term input and labour costs.

This approach is especially relevant for medium and large farms and for farmers ready for major technological changes and investments. Advisors can use practical examples to show farmers how this type of soil cultivation works. The scientific community also gains evidence from a wider geographical area.

ADDITIONAL INFORMATION

Cover crops, while offering numerous environmental and sustainability benefits, face challenges in controlling weeds, diseases, and pests. Traditional tillage methods, which often suppress these problems, are minimized in conservation agriculture. Therefore, it is crucial to develop alternative strategies, such as crop rotation, biological control, and precise application of plant protection products, to ensure successful production while preserving soil and biodiversity. Reduced tillage and increased crop residues can create favorable conditions for the development of weeds, diseases, and pests. The main method of weed control is mechanical destruction of weeds before the seed formation stage and this method is effective in controlling seed weeds. A greater problem is posed by rhizomatous weeds that are brought to the soil surface by conservation tillage, where they germinate, and further depletion of the nutrient reserves of rhizomatous weeds can be achieved by repeated mechanical weed control interventions. Control strategies include crop rotation, the use of cover crops and precise application of herbicides. The few trials conducted so far have shown that cover crops can be key to long-term weed control in conservation agriculture, reducing dependence on chemical agents and improving soil health. Some pests may benefit from increased crop residues, where plant cover attracts pests, while others may be suppressed by increased biodiversity. Integrated pest management, which combines biological control, crop rotation and precise insecticide application, is essential for pest management. Plant residues represent a source for maintaining the potential and source of plant disease infections, as the moisture retained in plant residues creates favorable conditions for the development of some

plant diseases. Crop rotation, use of resistant varieties and biological control are important tools for disease management.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Croatian ClimateSmartAdvisors Community of Practice - The Impact of Conservation Agriculture on the Soil and Environment

URL:

<https://climatesmartadvisors.eu/cops/the-impact-of-conservation-agriculture-on-the-soil-and-environment/>

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PRACTICE ABSTRACT NUMBER #74

TITLE IN NATIVE LANGUAGE

Dirvožemio tyrimų laboratorija - prie tvaraus ūkininkavimo link

TITLE IN ENGLISH

Laboratory of Soil Analysis - Towards Climate Smart Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

Lithuania

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Soil health analysis and fertilization plans (if needed).
2. Reduction of the use of fertilizers.
3. Sustainable agriculture.

THEMATIC AREA

Soil health

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

LŽŪKT laboratorijoje atliekami dirvožemio, vandens, mėšlo, srutų, sėklų kokybės nustatymo ir kt. tyrimai. Laboratorija turi Nacionalinio akreditavimo biuro patvirtintą akreditavimo pažymėjimą, Aplinkos apsaugos agentūros leidimą atlikti tyrimus. Tobulinant tyrimų kokybę, dirbama su Olandijos ir Vokietijos partneriais.

Pastaruoju metu vis daugiau žemdirbių atsigręžia į svarbiausią savo ūkio išteklių – dirvožemį. Norint užauginti ne tik gausų, bet ir tvarų derlių, vien technikos ir trąšų nepakanka - būtina rūpintis dirvožemio sveikata. Jo gyvybingumą palaiko atsakingas ūkininkavimas. Dirvožemio tyrimai yra populiariausia iš LŽŪKT laboratorijos siūlomų paslaugų, kadangi vis didesniams žemdirbių skaičiui tampa svarbūs ekonominiai ir aplinkosauginiai ūkininkavimo aspektai. Žemdirbiai yra linkę sumokėti už dirvožemio tyrimus, kad sutaupytų pinigų ir nepirktų per didelio kiekio trąšų. Dirvožemio ėminiai imami rankiniu ar automatizuotu būdu pagal mokslininkų parengtą metodiką. Automatizuotas dirvožemio ėminio paėmimas rekomenduojamas ūkiams, norintiems pasirengti tręšimo planą kintama trąšų norma, užsiimantiems tiksliaja žemdirbyste. Naudojama moderni ėminių paėmimo technika (keturračiai su GPS). Paslauga teikiama planuojantiems tręšimą pagal dirvožemyje esančias maisto medžiagas, turintiems dirvožemio būklės problemų, ekologiniams ūkiams, kuriems privaloma išsitiirti dirvožemį. Ištyrus dirvožemio ėminius, automatizuotai pateikiami laukų turtingumo maisto medžiagomis žemėlapiai. Tai leidžia žemdirbiams trąšas naudoti tik tam tikrose lauko vietose, netręšiant viso lauko, todėl sumažėja išlaidos trąšoms bei trąšų poveikis dirvožemiui. Dirvožemio sveikatingumo tyrimas padeda žemdirbiams priimti duomenimis grįstus sprendimus, giliau pažinti savo dirvožemį ir kryptingai planuoti ūkio veiklą, taikant tvarios žemdirbystės principus.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Soil analysis is a core tool in climate-smart farming as it provides data needed to farm more efficiently, adapt to climate change, and reduce environmental impact therefore, soil analysis is directly related to ClimateSmartAdvisors project's aim, which is adoption of Climate Smart farming practices. As a result, the topic of GHG emissions and climate change was chosen for the Lithuanian Community of Practice.

Laboratory of LAAS analyses all soil samples taken from customers' farms. The laboratory has an accreditation certificate by the National Accreditation Bureau and a permit from the Environmental Protection Agency to conduct research.

Soil samples are taken both manually and automatically following the methodology developed by scientists. Automated soil sampling is recommended for farms that want fertilization plans to be prepared with a variable fertilizer rate and are engaged in precision agriculture. Modern sampling techniques are used. The service is provided for those planning fertilization work based on the nutrients in soil, those who have soil condition problems, and organic farms for which soil testing is obligatory. After soil samples are analyzed, maps of nutrient richness of fields are automatically generated. This allows farmers to use fertilizers in very specific areas of a field avoiding fertilization of a whole field. Therefore, costs of fertilizers and the impact of the fertilizers on soil are reduced.

Farmers benefit from soil analysis as testing of soil health helps farmers to make data-based decisions, gain deeper understanding of their soil, and purposefully plan farm activities according to the principles of sustainable agriculture. Advisors play an important role in interpretation of data received from the laboratory. As farmers get various parameters of their soil analysis, they need a specialist to explain the parameters and plan farm activities based on the results of soil analysis.

Title/Description

Lithuanian ClimateSmartAdvisors Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/climate-change/>

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A large, stylized graphic in the background of the header section. It features several concentric, overlapping arcs in shades of teal and yellow, creating a sense of movement and a circular shape that partially encloses the 'CLIMATE SMART ADVISORS' text.

PRACTICE ABSTRACT NUMBER #76

TITLE IN ENGLISH

Using Digital Tools for Agroforestry Advice: Lessons from the UK Community of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe-wide (Agroforestry Living Labs in Czechia, Finland, Germany, Italy, the Netherlands and the United Kingdom)

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Ian Knight - ian.knight@abacusagri.com

3 BENEFITS OF THE PRACTICE - ADD KEYWORDS

1. Faster, evidence based advisory decisions
2. Better agroforestry design and species choice
3. Improved mapping, baseline and monitoring

THEMATIC AREA

Agroforestry in relation to landscape

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) - IN ENGLISH

As part of the UK Community of Practice on agroforestry, tested through the Abacus Agri Climate Smart Advisor Team CPD, this practice addresses the challenge of providing consistent, evidence-based agroforestry advice. Agroforestry advisors are expected to cover system design, establishment, management, carbon and biodiversity outcomes, and scheme compliance, but doing this efficiently requires practical and repeatable tools.

The experience showed that advisors can work more effectively by using a small set of open-access digital tools that cover four core needs: (1) site constraints and opportunities, (2) tree and shrub species choice, (3) baseline mapping and monitoring, and (4) peer examples. Suggested toolkit examples include AgroforesTreeAdvice for tree species, varieties, and rootstocks matched to site constraints; the LPIS Sustainability Compass (LUCIM) for parcel context, land cover, and Copernicus-based indicators to support baseline assessment and targeting; and the Agroforestry Map of Europe and Gallery for peer examples, layouts, and contacts to sense-check designs and learn from practice.

In practice, Climate Smart Advisors should first define the agroforestry system, such as silvoarable, silvopastoral, orchards, or hedgerows. They should then identify the stage of enterprise development: scoping, design, establishment, or management. Mapping tools can be used to screen constraints and opportunities, species tools to shortlist options, and example maps to test layout and management choices with the farmer. Advisors should capture outputs, including maps, assumptions, and actions, and provide a clear follow-up report to the client. This approach supports faster and more consistent advice, provides stronger evidence for grant or investment decisions, and enables clearer conversations with farmers about trade-offs, performance, and monitoring.

ADDITIONAL INFORMATION

What helps; keep an 'advisor toolkit' of 2 or 3 tools you are comfortable with and use them consistently across clients. Export maps and screenshots into a simple follow up pack so farmers can act on the advice.

What can get in the way; tools vary in geographic coverage, input requirements and maturity. Treat outputs as decision support, not 'the answer', and sense check against local soils, climate, markets and UK/ EU scheme rules. Some mapping functions depend on the availability and resolution of parcel data and satellite layers. Digital confidence and time to learn a new tool can be limiting factors.

Practical tip: agree a standard workflow; screen site, shortlist species, test layout, plan actions, record assumptions and capture farmer feedback; it improves your advisory offer and helps prioritise future tool development.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

The UK ClimateSmartAdvisors Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/abacus-agri-uk-climate-smart-advisor-team-cpd/>

Title/Description

AgroforestryAdvice (tree species/variety selection decision support)

URL:

<https://agroforestryadvice.sk8.inrae.fr/>

Title/Description

LPIS Sustainability Compass (LUCIM platform)

URL:

<https://mvagroecology.github.io/lucim/>

Title/Description

Agroforestry Map of Europe (peer examples and contacts)

URL:

<https://euraf.net/agroforestry-map-of-europe/>

Title/Description

CORDIS summary: agroforestry digital tools and results

URL:

<https://cordis.europa.eu/article/id/462590-data-harnessing-tools-tap-potential-of-agroforestry>

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PRACTICE ABSTRACT NUMBER #80

TITLE IN NATIVE LANGUAGE

Mise en place de cultures de couverture à base de trèfle pour la couverture du sol en été dans le cadre de l'agriculture de conservation : enseignements pratiques tirés de l'expérience française

TITLE IN ENGLISH

Establishing Clover Cover Crops for Summer Soil Cover in Conservation Agriculture: Practical Lessons from France

GEOGRAPHICAL LOCATION (IF RELEVANT)

Western France

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Céline Bourlet, celine.bourlet@pl.chambagri.fr

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Cover soil during summer
2. Ensure a good development of the cover crop
3. Limit soil erosion and nutriment losses

THEMATIC AREA

Crops management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

L'intérêt de l'agriculture de conservation pour répondre au défi du changement climatique a été présenté lors du webinaire "Impacts du non-labour sur l'émission de GES", auquel une centaine de personnes ont participé. Ce type d'agriculture repose en partie sur une couverture maximal du sol. Cette fiche donne plus de détails sur les conditions de réussite de deux techniques pour assurer le bon développement d'un couvert à l'été.

Le couvert est semé avec ou dans la culture principale et est déjà bien implanté à la moisson. Le trèfle est la principale espèce utilisée. Les éléments sont issus d'un observatoire de parcelles conduit de 2020 à 2024 dans le cadre du projet CLIMATVEG (Pays de la Loire, France).

Réussir son couvert semé en sortie d'hiver dans une culture en place

Le semis du couvert est anticipé mais vient peu concurrencer la culture principale. En cas d'usage d'herbicides, il est important de bien choisir les produits pour éviter la destruction du couvert.

Dans l'observatoire (21 parcelles), le trèfle (majoritairement blanc) semé dans le blé s'est mieux développé que dans les autres céréales, associées ou non. Un interrang large (> 20 cm) a permis le binage avant le semis du couvert puis une meilleure couverture du sol. Les conditions météo des 2 semaines autour du semis ne semblent pas influencer sa réussite, mais des températures plus douces (autour de 10,5 °C en moyenne) ont un effet positif. Malgré les conditions sèches de 2022 (sécheresse importante), le taux de réussite de la stratégie est de 62%, sans doute grâce au bon développement du couvert au préalable.

Semer un couvert en même temps qu'une céréale d'hiver

Il est important de semer le trèfle, en surface, à la volée ou avec un semoir double caisson. Semé en mélange avec la céréale, la profondeur de semis est trop élevée. Pour assurer une biomasse de 1 tMS/ha et une couverture du sol de 60%, la levée doit atteindre 160 pieds/m². Pour arriver à ce chiffre, la densité de semis doit être de 450-500 grains/m². Concernant les conditions météo, des températures plutôt chaudes (> 16°C) et des précipitations moyennes à élevées dans le mois le semis qui suit ont un impact positif.

La prise en compte de ces éléments dans l'implantation des couverts pourra faciliter leur réussite et donc une bonne couverture du sol pendant l'été. Cette fiche s'adresse aux conseillers et agriculteurs souhaitant mettre en place ce type de couvert. Son utilisation peut être étendu aux pays de climat tempéré.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Conservation agriculture can help address climate change and was presented in the 2024 thematic webinar "Impacts of tillage on GHG emissions", attended by around 100 participants. A key principle of this approach is maintaining good soil cover. This Practice Abstract focuses on two ways to ensure good summer soil cover under French conditions. In both cases, the cover crop is sown with or into the main crop so that it is already established at harvest. Clover is the main cover crop used. The advice is based on observations from farmer plots in the CLIMATVEG project (Pays de la Loire, France) from 2020 to 2024.

1. Undersow a cover crop after winter in the main crop

This anticipates sowing while limiting competition with the main crop. If herbicides are used, product choice and dosage must be carefully managed to avoid destroying the cover crop. In the observatory (21 plots), clover sown in wheat performed better than in other cereals. Wide row spacing (>20 cm) allowed hoeing before sowing and resulted in better soil cover. Weather in the two weeks around sowing did not seem to significantly affect success, but higher mean temperatures (10.5°C) had a positive effect. Despite the dry summer of 2022, success reached 62%, likely because the cover crop was already well developed.

2. Sow a cover crop at the same time as a winter cereal

Clover should be sown on the surface, using broadcast sowing or a double-hopper seeder. If sown together with the cereal in one pass, it may be placed too deep. In the observatory, success depended on plant numbers at emergence. To achieve biomass above 1 t DM/ha and more than 60% soil cover, plant density had to exceed 160 plants/m². Recommended seed rate is 450-500 seeds/m². Warm temperatures (>16°C) around sowing and medium to high rainfall in the following month had a positive impact.

ADDITIONAL INFORMATION

In the future climate in western France, higher temperatures are expected which could have a positive impact on those techniques. However, heavier winter and spring rain may be a problem as it would decrease soil bearing capacity and bring too watery conditions for legumes.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors & Climate Farm Demo Joint Thematic Webinar – YouTube video

URL:

<https://www.youtube.com/watch?v=HuvoI0Bbkms&list=PLOYrtkIDkcdS75ZwlQ5lRWj6vHGOPhlJh&index=14&t=4s>

Title/Description

Deliverables of the Climatveg project on soil cover (practices description and video) - French

URL:

<https://rd-pays-de-la-loire.chambres-agriculture.fr/projets/detail-du-projet/climatveg/couverture-maximale-des-sols>

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PRACTICE ABSTRACT NUMBER #82

TITLE IN ENGLISH

Digestate from Biogas and Agricultural Soils: Key Factors Influencing Soil Quality and Organic Matter

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Thomas Gontier (Idele) - thomas.gontier@idele.fr

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Best use of digestate
2. Scientific update
3. Ready-to-use levers

THEMATIC AREA

Biogas production

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Presented during the ClimateSmartAdvisors 2025 Thematic Knowledge Exchange webinar Digestate from biogas - what impact on agricultural soils, this practice addresses the question of how digestate spreading affects soil quality. Anaerobic digestion is often criticised for possible negative effects on soil, but digestate spreading should be assessed as part of the broader issue of soil organic matter, soil life, and the full anaerobic digestion cycle on farms.

The effect of digestate on soil depends on several interlinked factors. One key factor is the nature of the inputs used in anaerobic digestion, such as slurry, manure, crops, agricultural and industrial waste, unpackaged products, dry matter content, and degradability rate. The more degradable the inputs are, the more biogas they produce, but the less organic matter they return to the soil. Some industrial inputs, especially unpackaged products, may also contain undesirable materials such as plastics, metal, or glass. The origin of inputs also matters, since importing organic matter from outside the farm can help return carbon to soils. The type of digestate spread is equally important: raw, solid, and liquid fractions do not have the same effect, as most organic matter is found in the solid phase. In addition, storage conditions, especially whether storage is covered, influence nitrogen losses.

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Title/Description

ClimateSmartAdvisors Knowledge Exchange Thematic Webinar – YouTube video

URL:

<https://www.youtube.com/watch?v=q91Wx0xGCGI>

Title/Description

Ferti-Dig: Fertiliser avec les digestats de méthanisation Agricole

URL:

<https://fertiliser-avec-des-digestats.fr/>

8.5 Training and Capacity Building

This cluster brings together PAs related to training approaches, educational materials and competence development for advisors and other relevant actors. It includes train-the-trainer resources, soft skills development, methods and materials for teaching and learning, and content that supports capacity building for climate and digital transitions. The cluster is particularly important for strengthening the knowledge base and professional capabilities needed to implement climate-smart advisory work effectively.



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PRACTICE ABSTRACT NUMBER #18

TITLE IN ENGLISH

Co-designing a Climate-Smart Ttrain-the-Trainer Programme Across EU Partners

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Annelie Bernhart, annelie.bernhart@fueak.bayern.de

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Climate advisory methods and tools adapted to diverse contexts, supporting advisors in addressing a wide range of climate change topics.
2. Strengthened capacity of Climate Smart Coaches through a dedicated EU training programme on climate change advisory.
3. Practical guidance for facilitating Communities of Practice (CoPs), helping coaches organise peer learning and knowledge exchange among advisors and farmers.

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Advisors play a key role in supporting farmers in the transition towards climate-smart farming. To strengthen this role, a training programme was developed to help advisors in ClimatSmartAdvisors project build technical knowledge and facilitation skills needed to work effectively with groups of farmers and other stakeholders.

An analysis of advisors' training needs identified four thematic (technical knowledge) priorities, which reflect the areas where they expect the greatest demand for knowledge and practical guidance when supporting farmers:

1. soil health and biodiversity,
2. crop management,

3. grassland production,
4. and mechanisms that reward climate-smart practices.

Participants also expressed interest in developing soft skills that help them work with groups and facilitate learning processes. The most important skills include motivating a group, co-constructing meeting agendas and activities, and facilitating discussions. Other relevant skills include effective communication within the group, fostering peer-to-peer learning, and delegating responsibilities among participants. They also highlighted the need for practical guidance on improving farmer–advisor relationships. They are interested in learning how to better engage farmers, address negative attitudes, and support farmers in overcoming resistance to adopting climate-smart practices.

Based on these needs, a training programme was designed combining two days of online learning with four days of in-person training. The programme provides guidance on how to set up and manage a community of practice, including selecting members, defining objectives, and monitoring progress. It also introduces facilitation methods, approaches for analysing collaboration networks, and tools for identifying and prioritising climate mitigation and adaptation practices in different production systems. In addition, the programme provides practical guidance on how advisors can organise and deliver their own training activities.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

News - Second Train-the-Trainer activity

URL:

<https://climatesmartadvisors.eu/news/second-train-the-trainer-activity/>

Title/Description

News - Teagasc hosts groundbreaking Train-the-Trainer workshop

URL:

<https://climatesmartadvisors.eu/news/teagasc-hosts-groundbreaking-train-the-trainer-workshop-for-climatesmartadvisors-project-in-dublin/>

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PRACTICE ABSTRACT NUMBER #19

TITLE IN ENGLISH

How Agricultural Advisors Can Identify Priority Climate Actions in Their Region

GEOGRAPHICAL LOCATION (IF RELEVANT)

Dublin, Ireland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Carolanne O'Brien, carolanne.obrien@teagasc.ie

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Helps advisors see which actions are feasible, high-impact, and where extra support is needed (High impact, practical actions)
2. Provides a simple, evidence-based way to compare and prioritise climate actions (Prioritisation)
3. Makes advisory conversations more practical and relevant for farmers (Practical advice)

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Advisors must consider a wide range of climate mitigation and adaptation actions, but it can be difficult to know which options are feasible for farmers and capable of delivering meaningful climate impact. This practice introduces a simple, structured method - adapted from the ClieNFarms Creative Arena and used during the ClimateSmartAdvisors Train the Trainer programme - to help advisors identify and prioritise climate actions for their sector. It provides a practical starting point for climate discussions, helping advisors and farmers focus on feasible, high-impact actions while identifying where additional support or incentives may be needed to increase adoption.

Advisors either receive or create a set of cards, each presenting a relevant climate solution. Each card briefly describes the action and includes two scoring boxes where advisors record a score for potential climate impact (1-5) and likelihood of implementation on farms (1-5). Advisors begin by identifying the actions most applicable to the farming sector they work with. Each action is then scored for climate impact and likelihood of implementation. This produces a clear understanding of:

- which actions have a positive climate impact and are likely to be implemented on farm ("quick wins")
- which high-impact actions need additional advisory support or incentives
- where barriers limit adoption of impactful practices

Groups identify their top three solutions and then examine 2-3 actions with high impact but low likelihood to explore barriers, prerequisites, and support needs.

This method helps advisors build trust with farmers by starting with realistic, implementable actions, while also creating opportunities to introduce more ambitious climate measures over time. The exercise supports evidence-based advisory planning, strengthens advisor-farmer dialogue, and encourages a practical approach to climate action at farm level. Costs are minimal, and materials can be delivered in printed or digital format.

ADDITIONAL INFORMATION

The implementation of this method is supported by simple, easy-to-use materials (solution cards) and works best when advisors have a good understanding of local farming systems. Group discussion also helps to validate feasibility scores and encourages shared learning. Potential obstacles include differences in advisors' knowledge of specific climate measures and the need to keep impact rankings updated as new research and policies emerge.

Future actions could include developing a digital version of the tool, updating the list of climate solutions as technologies evolve, and testing the approach directly with farmer groups to support co-learning.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClieNFarms – The Creative Arena Methodology

TRAINING AND CAPACITY BUILDING

URL:

https://clienfarms.eu/wp-content/uploads/2023/09/ClieNFarms_Practice-abstract_N.-19_Creative-arena.pdf

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PRACTICE ABSTRACT NUMBER #20

TITLE IN ENGLISH

Identifying Barriers and Developing Solutions for Climate-Smart Practice Adoption

GEOGRAPHICAL LOCATION (IF RELEVANT)

Dublin, Ireland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Carolanne O'Brien, carolanne.obrien@teagasc.ie

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Identifying barriers to adoption
2. Targeted advisory support
3. Enabling uptake of high-impact climate actions

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Advisors may identify climate mitigation or adaptation actions that have high potential impact but low likelihood of uptake due to practical, technical, or financial constraints. This practice introduces a structured approach that advisors can use to understand why such actions are difficult to implement and what is needed to enable adoption.

The exercise brings advisors, or other agricultural stakeholders including farmers and researchers, together in small groups and focuses on one or more high-impact, low-likelihood climate actions. For each action, participants complete a simple template by:

1. Noting the climate practice being considered,
2. Identifying what needs to be in place first for the practice to be taken on,
3. Listing the main barriers to implementation, and

4. Identifying the types of support required to overcome these barriers.

Participants first complete the template individually or within their group, then discuss their thinking in pairs. The pairs return to the wider group to share insights, compare perspectives, and refine the identified barriers and support needs.

This structured exchange helps advisors test assumptions, identify common challenges, and build a shared understanding of enabling conditions across different farming systems. While delivered as a group exercise, the same step-by-step approach can be applied in day-to-day advisory work. Advisors can use it in one-to-one discussions with farmers to assess readiness, identify barriers early, and clarify what supports or incentives may be needed before adoption is realistic.

This practice strengthens advisors' problem-solving capacity, supports more targeted and realistic climate advice, and helps move from identifying ambitious actions to developing practical pathways for implementation. Costs are minimal, requiring only a simple template and discussion, and the method can be used in both group and individual advisory settings.

ADDITIONAL INFORMATION

This practice works best when run in conjunction with an exercise that helps advisors first identify and prioritise climate mitigation and adaptation actions based on their impact and likelihood of implementation (See Practice Abstract #20). Linking both exercises allows advisors to move logically from identifying priority actions to understanding what is needed to enable their uptake.

Group-based delivery supports shared learning and helps build confidence in assessing barriers and support needs, while the same structured approach can also be applied in one-to-one advisory settings.

Potential challenges include limited time for discussion and varying levels of familiarity with specific climate practices. Keeping the exercise focused on a small number of priority actions helps address these challenges.

This exercise was used as part of the ClimateSmartAdvisors Training-of-Trainers (TTT) programme to train Climate Smart Coaches. Although described here as a tool for advisors, the approach is not limited to advisory settings and can also be used with other agricultural stakeholders, including farmers, and researchers.

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PRACTICE ABSTRACT NUMBER #21

TITLE IN ENGLISH

How to Deliver Impactful Training Events to Support Climate Smart Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Sarah Erbanova, sarah.erbanova@sac.co.uk

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Maximise engagement at training events
2. Deliver impactful training events
3. Practical, relatable case studies

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

ClimateSmartAdvisors training upskills advisors, bridges research and farm practices, and increases confidence in climate-smart decision-making. It supports:

- Building core knowledge
- Expanding technical skills
- Engagement with new topics and ideas
- Sharing expertise and experience

Advisor training activities are most effective when they reflect real farming conditions and provide practical, relatable examples. Key factors for impactful training are:

1. Relevance

Know your audience, keep content practical and specific to farm systems, and avoid vague or unrelated examples. Relevant, practical material increases engagement and helps advisors translate learning directly into action.

2. Case studies

Local examples, testimonials, and evidence-based case studies show how climate measures work in practice. Seeing real outcomes builds trust and supports adoption.

3. Social skills

Many climate measures require management or behavioral change as opposed to technology. Trainers should be sensitive to traditions, avoid judgement, and encourage open discussion. A respectful environment helps learners explore concerns and understand tradeoffs.

4. Group discussions

Peer interaction deepens learning, supports reflection, and increases engagement. Well-managed discussions allow advisors to challenge ideas, ask questions, and relate training content to their own experience.

5. Up-to-date knowledge

Climate-smart farming evolves quickly, so training should use recent data, newest technologies, and current research. Outdated information can reduce credibility, while transparent explanation of limitations of new technologies strengthens trust.

6. Co-benefits

Emphasising wider gains (i.e. improved health, new jobs, increased resilience, biodiversity gains, and community benefits) helps advisors communicate the broader value of climate action. For example, on-farm renewables can cut emissions, reduce air pollution, support employment, diversify farm income, and increase access to clean energy.

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PRACTICE ABSTRACT NUMBER #23

TITLE IN NATIVE LANGUAGE

Déterminer les attentes et besoins des conseillers avant de les former.

TITLE IN ENGLISH

Determining the Training Needs of Advisors before Delivering a Training

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Florence Bedoin florence.bedoin@idele.fr

Caroline Evrat-Georgel caroline.evrat-georgel@idele.fr

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Better targeted training to fit the needs of the participants
2. Management of expectations of participants (who are advisors in our case)
3. Possibility of evaluation of the training based on the needs expressed.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Dans le cadre du projet ClimateSmartAdvisors, des formations sont dispensées à des groupes de conseillers à quatre reprises (il s'agit d'une « formation de formateurs » appelée « Train the Trainer », ou TTT). Chaque groupe est de taille importante (autour de 40 conseillers), composé de personnes issues d'horizons très divers, plus ou moins expérimentées, et occupant différentes fonctions telles que celles d'experts techniques ou de responsables de conseillers. Chaque pays a son propre contexte, avec un système agricole, des défis liés à l'adaptation au changement climatique et à l'atténuation de ses effets, ainsi qu'une organisation de conseil assez différents. Nous savons que dans le cadre d'une telle formation de groupe, il n'est pas possible de répondre exactement à tous les besoins de chaque personne, mais il est possible de concevoir une formation qui maximise l'apprentissage entre pairs et l'échange d'expériences.

Avant les formations, nous avons mené une enquête en ligne auprès des conseillers concernés, qui ont procédé à une auto-évaluation de leurs compétences et de leurs besoins dans différents domaines.

Les résultats ont été très importants pour nous, car ils nous ont permis de cibler et d'adapter la formation afin de répondre au mieux aux besoins des conseillers.

- Au sein d'un grand groupe, être capable de donner la parole aux personnes qui ont des défis ou des expériences particuliers.
- Favoriser l'apprentissage entre pairs en créant délibérément des groupes ayant des expériences similaires ou très différentes.
- Gérer les attentes : être capable de dire ce que nous pouvons apporter dans cette formation et ce que nous ne pouvons pas offrir.

Le sondage comportait des questions ouvertes et fermées.

Les domaines abordés dans les questions ont été identifiés grâce à l'expérience antérieure des formateurs sur le terrain et à quelques entretiens en face à face avec les futurs participants.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

During the ClimateSmartAdvisors project, training is provided to groups of advisors (Train the Trainer course). Each group is large (around 40 advisors), with participants coming from different backgrounds, differing levels of experience, and with different functions such as technical experts or managers of advisors. Each country also has its own context, with different agricultural and advisory systems and different challenges related to climate change adaptation and mitigation.

We recognize that in group training it is not possible to fulfill all individual needs. However, to ensure the training is as relevant as possible for participants, we conducted an online survey of the advisors involved prior to the training to carry out a self-assessment of their skills and needs related to the training. The survey included both open and closed questions. The topics of the questions were identified based on the previous experience of trainers in the field, as

well as a few face-to-face interviews with future participants.

The results were very important because they allowed us to target and adapt the training to better fit the needs of the advisors. They also helped with expectation management, enabling us to clearly communicate what the training could support and what was outside its scope.

The survey results helped us design the training in a way that optimizes peer-to-peer learning and exchange of experience through the following strategies:

- In a large group, give the floor to participants who have specific challenges, experiences, or expertise.
- Foster peer-to-peer learning by intentionally forming groups with either similar levels of experience or very different levels of experience.

Potential obstacles include low response rates when participants do not complete surveys, the risk of reduced participation if surveys are too long, and the possibility that results arrive too late to allow major adjustments to the training programme. See Additional information section.

ADDITIONAL INFORMATION

1. Sometimes participants do not answer surveys. In our case, a mitigation measure was to include the survey as part of the registration form.
2. Another challenge is that if the survey is too long, the response rate may decrease. Therefore, it is important not to plan a survey that is too long.
3. Finally, survey results sometimes arrive too late to allow major changes to the training script to fully reflect the needs expressed.

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PRACTICE ABSTRACT NUMBER #24

TITLE IN ENGLISH

Organising an Effective Community of Practice Training Event Through National and International Networking

GEOGRAPHICAL LOCATION (IF RELEVANT)

Dublin, Ireland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Carolanne O'Brien, carolanne.obrien@teagasc.ie

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. International expertise
2. Network-based learning
3. Advisor capacity building

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE

In some cases, no advisory experience is available domestically for emerging climate technologies or new legal obligations. Meaningful learning may therefore require “reaching out” to international networks before these topics can be effectively discussed and applied at national level. This practice outlines a structured approach for organising Community of Practice (CoP) training events by combining international and national expertise through existing networks.

Advisors first identify the main knowledge or advisory gap and then identify countries where the technology or regulatory requirement is already in place. International networks are used to identify suitable experts to engage with the group. Project networks, such as those within the ClimateSmartAdvisors project spanning multiple countries, are particularly valuable, as partners can be contacted directly or asked to recommend experts within their wider professional networks. Where direct expertise is not immediately available, thematic leaders whose contact details are publicly available on the ClimateSmartAdvisors website can also help identify contributors.

International experts are engaged through online sessions, providing insight into how scientific evidence on climate technologies is communicated to farmers, how legal obligations are managed in practice, and how farmer concerns are addressed. This international perspective is then contextualised to a national context (through a facilitated discussion as part of a Community of Practice (CoP) meeting, where advisors reflect on how similar developments could be addressed within local farming systems, advisory structures, and policy settings, supported by national experts.

This approach enables advisors to access international expertise to address domestic knowledge gaps and reflect on how emerging climate technologies or regulations could be applied within their national advisory and farming contexts.

ADDITIONAL INFORMATION

This approach works best when advisors have access to active national and international networks and sufficient facilitation time to translate international experience into locally relevant actions. Online or hybrid delivery greatly facilitates engagement with international experts and keeps costs low. Clear identification of the advisory or knowledge gap at the outset helps ensure that international input is focused and relevant.

Potential challenges include limited availability of suitable international experts, time constraints within training events, and the need to adapt insights from different policy or farming contexts to local conditions. These challenges can be addressed through good facilitation and by involving national experts to support interpretation and application.

Future actions could include developing guidance on selecting and engaging international contributors and testing the approach across different climate topics.

International networks are a valuable resource for addressing emerging knowledge gaps. Learning from countries with practical experience allows advisors to prepare earlier and

support farmers more confidently when new technologies or obligations arise.

For example, within the Irish Community of Practice within ClimateSmartAdvisors, it was noted that no national advisory expertise was available on methane-reducing feed additives, as the technology is not yet used domestically. An international expert from Denmark, where these additives are mandatory on dairy farms, was therefore engaged to share practical advisory experience. This learning then informed national discussion on how such obligations might be addressed and how methane mitigation options could be supported locally.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

ClimateSmartAdvisors website

URL:

[Climate Smart Advisors - ClimateSmartAdvisors](https://www.climatesmartadvisors.eu)

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PRACTICE ABSTRACT NUMBER #25

TITLE IN NATIVE LANGUAGE

Unapređenje kapaciteta poljoprivrednih savetodavaca u Srbiji za klimatski otpornu poljoprivredu: očuvanje zdravlja zemljišta i biodiverziteta kroz regenerativne prakse

TITLE IN ENGLISH

Building Climate-Smart Advisory Capacity in Serbia: Enhancing Soil Health and Biodiversity through Regenerative Agriculture Practices

GEOGRAPHICAL LOCATION (IF RELEVANT)

Serbia

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Improved soil health
2. Enhanced advisor capacity for climate-smart practices
3. Increased adoption of regenerative agriculture

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Projekat ClimateSmartAdvisors omogućava uspostavljanje savetodavnih Zajednica prakse (CoP), koje će biti aktivne najmanje dve godine, sa ciljem jačanja kapaciteta savetodavaca za prepoznavanje i rešavanje uticaja klimatskih promena na poljoprivredne sisteme. U Srbiji, prva CoP je bila fokusirana na zdravlje zemljišta i biodiverzitet, prepoznajući ih kao ključne resurse za dugoročnu otpornost na klimatske promene, sa posebnim naglaskom na regenerativnu poljoprivredu kao inovativni i održivi pristup upravljanju zemljištem. S obzirom na to da se regenerativna poljoprivreda još uvek retko primenjuje u Srbiji i da još nije formalno priznata niti podržana kroz nacionalne strategije ili subvencione šeme, CoP je prioritetno usmerena na uspostavljanje direktne saradnje između savetodavaca i pionirskih poljoprivrednika u ratarskim kulturama, kao i praktičara koji već primenjuju regenerativne metode, uključujući sistem bez oranja i sistem traka, setvu pokrovnih useve i cvetnih pojaseve. Terenske posete ovim farmama omogućile su praktično učenje, uvid u stvarne izazove i direktnu razmenu iskustava sa praktičarima. Kao opipljiv rezultat, CoP će razviti praktični priručnik za savetodavni rad u oblasti klimatski otporne poljoprivrede, koji će pružiti smernice i konkretne preporuke. Angažovanje više aktera, uključujući akademsku zajednicu, predstavnike industrije i organizacije koje se bave zaštitom životne sredine, omogućilo je širi uvid u prepreke za usvajanje praksi klimatski pametne poljoprivrede. Na osnovu ovih interakcija identifikovani su konkretni koraci za podršku širem prihvatanju, uključujući aktivnosti za jačanje kapaciteta savetodavaca i poljoprivrednika, izradu stimulativnih mehanizama i preporuke za politike. Ukupno, CoP je omogućila primenjive rezultate, praktične mogućnosti učenja i osnovu za širenje regenerativnih i klimatski otpornijih poljoprivrednih praksi u Srbiji.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The ClimateSmartAdvisors project facilitates the establishment of advisory Communities of Practice (CoPs), active for a period of at least two years, to strengthen advisors' capacities to recognize and address the impacts of climate change on farming systems.

In Serbia, the first CoP focused on soil health and biodiversity, acknowledging these as key resources for long-term climate resilience, with particular emphasis on regenerative agriculture as an innovative and sustainable approach to soil management. Since regenerative agriculture remains uncommon in Serbia and has not yet been formally recognized or supported through national strategies or subsidy schemes, the CoP prioritized fostering direct engagement between advisors and pioneering farmers cultivating arable crops, as well as practitioners actively implementing regenerative methods, including no-till and strip-till practices, cover crops, and flower strips.

Field visits to these farms enabled hands-on learning, exposure to real-life challenges, and direct exchange of experiences with practitioners. As tangible outputs, the CoP will develop a practical advisory manual for climate-resilient agriculture, providing guidance and concrete recommendations for implementing regenerative practices, and produce a video material promoting climate-smart farming to raise awareness among a broader audience about alternative soil conservation methods.

Multi-actor engagement with academia, industry representatives, and environmental organizations offered a broader understanding of barriers to adopting climate-smart practices. Based on these interactions, concrete steps were identified to support wider uptake, including capacity-building activities for advisors and farmers, design of incentive mechanisms, and policy recommendations. Overall, the CoP provided actionable outputs, practical learning opportunities, and a foundation for scaling regenerative and climate-resilient farming practices in Serbia.

ADDITIONAL INFORMATION

Obstacles: Key barriers include the limited recognition of regenerative agriculture in national policies, absence of dedicated subsidies or incentive schemes, and the generally low awareness of alternative soil management practices among conventional farmers. Access to relevant data and practical examples remains uneven, and scaling up innovations is constrained by institutional and regulatory gaps.

Future actions/research: To further strengthen the adoption of climate-resilient practices, future efforts should focus on expanding multi-actor networks, documenting and disseminating practical case studies, and developing locally adapted guidance for farmers. Research could explore cost-benefit analyses of regenerative practices and their impact on soil health, biodiversity, and productivity under climate variability. Policy engagement is needed to design support mechanisms and incentives that reward sustainable farming practices.

Messages to end-users: Advisors and farmers are encouraged to engage in peer-to-peer learning, experiment with regenerative approaches on a small scale, and actively participate in networks that connect practitioners, researchers, and policymakers. Incremental changes, guided by practical knowledge and evidence, can build resilience while promoting ecological and economic sustainability.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Regenerative Agriculture in Practice – Advisory manual for Advisors, CSA promo video

URL:

<https://regagrisrbija.rs/>

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The logo graphic for Climate Smart Advisors features several concentric, overlapping arcs in shades of teal and yellow, creating a sense of movement and a stylized circular shape.

PRACTICE ABSTRACT NUMBER #36

TITLE IN ENGLISH

A Practical Guide to Organizing Communities of Practice on Climate Advice in Agriculture

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Communities of Practice (CoPs) offer a powerful platform for agricultural advisors to share knowledge, develop skills, and find solutions together on climate smart advisory practices.
2. Activities in CoPs benefit from an embedding or connection to local realities
3. Involve members in defining CoP objectives to make sure the CoP meets their needs and interests.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Communities of Practice (CoP's) bieden een goed platform voor landbouwadviseurs om kennis te delen, vaardigheden te ontwikkelen en samen oplossingen te vinden voor klimaatslimme adviespraktijken. In het ClimateSmartAdvisors-project identificeerden we enkele basisprincipes voor succesvolle CoP's:

- **CoP's voor klimaatadvies vereisen duidelijke doelstellingen, sterke betrokkenheid en praktische relevantie.** Succesvolle CoP's beginnen met een goed gedefinieerd thema en leerdoelen, bij voorkeur gericht op één onderwerp zoals waterbeheer. Het gezamenlijk opstellen van agenda's en flexibiliteit om in te spelen op nieuwe vragen vergroten de betrokkenheid. Kleine, gemotiveerde groepen van vijf tot zes zorgvuldig geselecteerde adviseurs werken het best.
- **Vooruit plannen is essentieel:** plan bijeenkomsten voor een langere periode, combineer sessies met andere evenementen, en mix fysieke en online formats. Houd interactie tussen bijeenkomsten in stand via korte check-ins en gedeelde platforms. Bijeenkomsten moeten praktijkgericht zijn, inclusief bedrijfsbezoeken en casestudies, aangevuld met input van experts zonder te theoretisch te worden. Informele momenten versterken de groepsdynamiek.
- **Trainingen binnen CoP's zijn gestructureerd, door een trainer geleid en worden geëvalueerd.** Onderwerpen sluiten aan bij de behoeften van adviseurs en kunnen zowel technische kwesties (bijv. koolstofopslag) als soft skills omvatten. Interne of externe trainers kunnen worden ingezet.
- **Uitdagingen** zoals tijdsdruk en lage betrokkenheid kunnen worden aangepakt door zorgvuldige planning, gedeelde verantwoordelijkheden en activiteiten die aansluiten bij de dagelijkse praktijk. Documenteer en deel resultaten via openbare platforms, video's en andere initiatieven om de impact van de CoP te maximaliseren.

Samengevat: succesfactoren voor het organiseren van CoP's zijn duidelijke doelstellingen, vertrouwen, praktische relevantie, herhaalde training en voortdurende evaluatie.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Communities of Practice (CoPs) offer a powerful platform for agricultural advisors to share knowledge, develop skills, and co-create climate smart advisory practices. In the ClimateSmartAdvisors project, we identified some basic principles for successful CoPs:

- **CoPs for climate advice require clear objectives, strong engagement, and practical relevance.** Successful CoPs start with a well-defined theme and learning goals, ideally focusing on one topic such as water management. Co-creation of agendas and flexibility to adapt to emerging issues increase commitment. Small, motivated groups of five to six advisors work well, with careful selection to build trust.
- **Planning ahead is essential:** schedule meetings for a longer period, combine sessions with other events to increase effectiveness and efficiency, and mix physical and online formats. Maintain interaction between meetings through short check-ins and shared platforms. Meetings should be practice-oriented, including farm visits, and case studies, complemented by expert input without becoming overly theoretical. Informal moments strengthen group dynamics.
- **Training within CoPs are structured, trainer-led, and evaluated.** Topics must reflect advisors' needs, and can cover both technical issues (e.g., carbon storage,

methane reduction) and soft skills. Hybrid formats and internal or external trainers can be used, supported by international and local networks.

- **Challenges** such as time constraints, low engagement, and logistical issues can be addressed through careful planning, shared responsibilities, and grounding activities in everyday realities. Document and share outcomes via public platforms, videos, and collaborative initiatives to maximize impact.

In summary, key success factors for organising CoPs include clear objectives, trust, practical relevance, repeated training, and continuous evaluation. Well-organized CoPs empower advisors with confidence, knowledge, and skills to deliver effective climate-smart advice.

ADDITIONAL INFORMATION

Clear objectives

A successful CoP starts with well-defined objectives and learning goals. Actively involve CoP members in setting the agenda to create ownership. It is recommended to take time at each meeting to review and adjust objectives and activities if necessary.

Group composition

CoPs work best with a smaller, committed group. Select participants who have time, interest, and motivation to contribute. Diversity of expertise enriches discussions but might make it more difficult to find common objectives and interest.

CoP organisation

Schedule multiple meetings for a longer period and, if relevant, try to combine them with other events to increase effectiveness and efficiency. Alternating between physical and online meetings offers flexibility. Between meetings, it is important to keep interaction alive to maintain engagement, for example through short online check-ins, e-mail updates, phone calls and social media platforms.

Attractive and relevant meetings

Combine theoretical insights with concrete examples which make climate solutions and advice tangible and applicable, e.g., through farm visits, demonstrations, and case studies. Avoid overly theoretical sessions and leave room for peer-to-peer interaction. Informal moments (e.g., sharing a meal), strengthen trust and group dynamics.

Training within the CoPs

A training differs from a regular CoP meeting because it is trainer-led, has clear learning objectives, follows a structured format and learning outcomes are evaluated at the end. Topics can be related to technical themes (e.g., methane reduction) or soft skills (e.g., communication with farmers). Use internal expertise within the CoP or bring in external trainers.

Make outcomes shareable

Document CoP outcomes, e.g., take meeting minutes, collect key learnings, and record interesting advisory practices, tools and methods. Develop brochures, leaflets, and videos, and disseminate them to a wider audience. Collaborating with other initiatives increases reach.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

CoPs active in the ClimateSmartAdvisors project

URL:

<https://climatesmartadvisors.eu/cops/>.

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PRACTICE ABSTRACT NUMBER #41

TITLE IN NATIVE LANGUAGE

Vuorovaikutteinen tiedonvaihto ilmastoviisaiden neuvontapalvelujen vahvistamiseksi Euroopassa

TITLE IN ENGLISH

Interactive Knowledge Exchange to Strengthen Climate-Smart Advisory Capacity Across Europe

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Maria Suomela, maria.suomela@proagria.fi

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

- Structured cross-country knowledge exchange
- Improved advisor capacity through interactive learning
- Faster transfer of practical climate-smart solutions across regions

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Yksi ClimateSmartAdvisors-hankkeen tavoitteista on edistää rajat ylittävää tiedonvaihtoa ja vahvistaa ilmastoviisaan viljelyn neuvonnan osaamispohjaa koko EU:ssa. Tätä toteutetaan muun muassa nimettyjen teemavastaavien (thematic leaders) johdolla, jotka vastaavat jokainen omasta maatalouteen ja ilmastoon liittyvistä aihealueista. Hanke konsortion vuosikokouksen yhteydessä testattiin uutta menetelmää, jonka tavoitteena oli vahvistaa neuvojen välistä maidenvälistä vertaisoppimista teemavastaavien johdolla. Konsortion jäseniä pyydettiin ehdottamaan aiheita vuorovaikutteisiin oppimissessioihin, mikä varmisti sen, että työpajat vastasivat todellisia neuvonnan tarpeita, nousevia haasteita ja verkoston itse tunnistamia osaamisaukkoja.

Kahdella kierroksella järjestettiin tunnin mittaisia sessioita, joissa keskityttiin konkreettisiin neuvontakysymyksiin, kuten vesien suojeluun, metaanipäästöjen vähentämiseen, lannan ravinnehyödyntämiseen, luomupeltoviljelyn ilmastoratkaisuihin, energiansäästöön, maaperän monimuotoisuuteen ja Välimeren alueen kasvihuonetuotannon "nopeisiin voittoihin". Fasilitoidut pienryhmät mahdollistivat käytännön ratkaisujen vaihdon, kansallisten lähtökohtien vertailun sekä siirrettävien toimintamallien tunnistamisen.

Menetelmän keskeiset piirteet:

- Neuvojen ja teemavastaavien itse ehdottamat aiheet → korkea relevanssi ja sitoutuminen.
- Ongelmalähtöiset ja kohdennetut keskustelut yleisten esitysten sijaan.
- Maidenvälinen osallistujajoukko, joka mahdollistaa politiikkakehysten, tuotantojärjestelmien ja neuvonnan haasteiden vertailun.

Menetelmä osoittautui erittäin tehokkaaksi nopeassa osaamisen vahvistamisessa sekä jatkotoimien tunnistamisessa, kuten työkalujen pilotoinnissa, uusien tiedonvaihto -webinaarien suunnittelussa ja neuvojen välisen rajat ylittävän yhteistyön vahvistamisessa.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

One of the aims of the ClimateSmartAdvisors project is to promote cross-border knowledge exchange and strengthen the knowledge base of climate-smart advisors across the EU. This is done, for example, through assigned thematic leaders responsible for specific climate-controlled thematic areas in agriculture. A structured method to strengthen cross-country peer learning among climate-smart farming advisors was tested during one of the project's General Assembly meetings.

Consortium members were invited to propose topics for the interactive learning sessions. This ensured that each workshop addressed real advisory needs, emerging challenges, or specific knowledge gaps identified by the network itself.

Two rounds of 1-hour sessions were held, each focusing on a concrete advisory question such as water protection, methane reduction, manure valorisation, organic arable strategies, energy

savings, soil biodiversity, or greenhouse “quick wins” in Mediterranean climates.

Small, facilitated groups enabled participants to exchange practical solutions, compare national contexts, and identify transferable approaches.

Key features of the method:

- Advisor and thematic lead-driven topic selection → relevance and strong engagement.
- Focused, problem-oriented discussions rather than general presentations.
- Cross-country diversity enables comparison of policy frameworks, farm systems, and advisory constraints.

The approach proved highly effective for rapid capacity building and for identifying follow-up actions such as piloting tools, planning new Knowledge Exchange webinars, and connecting advisors across borders for continued collaboration.

ADDITIONAL INFORMATION

Facilitating elements:

- Clear session goals and a common learning question make cross-country comparison easier.
- assigned facilitators ensure structured discussion and capture key takeaways.
- Small, mixed groups allow open exchange.

Obstacles:

- Some topics require more time than a 1-hour session allows.
- Higher workload for facilitators in preparing and documenting sessions.

Future actions:

- The bottom-up call for session proposals ensured that the learning topics matched actual advisory needs and increased ownership among Climate Smart Coaches, Thematic Leaders, and National Coordinators.
- Linking the results to the year-round Knowledge Exchange programme ensures continuity.
- Repeating the interactive session format at future General Assembly meetings or integrating it as a part of study visits or thematic events will progressively build an EU-wide community of practice.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Public knowledge exchange webinars are available online.

URL:

<https://www.youtube.com/@FarmDemo/playlists>

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PRACTICE ABSTRACT NUMBER #59

TITLE IN NATIVE LANGUAGE

Mokymų programa ir mokymai ŠESD ir anglies ūkininkavimo tematika

TITLE IN ENGLISH

Training Programme and Training in GHG Emissions and Carbon Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

Lithuania

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Provide practical climate-smart farming advice.
2. Improve advisors' knowledge of carbon farming.
3. Extend knowledge of sources and calculation of GHG emissions on farms.

THEMATIC AREA

Crop management; soil health.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Pastaruoju metu aktualiausias konsultacijų temos žemdirbiams yra ŠESD emisijos ir anglies ūkininkavimas. Atsižvelgiant į šių temų aktualumą tiek žemdirbiams, tiek konsultacijas teikiantiems žemės ūkio konsultantams, buvo nuspręsta parengti mokymų programą ir organizuoti konsultantams mokymus, kad jie galėtų žemdirbiams teikti konstruktyvias ir praktiškas konsultacijas apie ŠESD emisijas ir anglies ūkininkavimą. Mokymų programą LŽŪKT konsultantams parengė LŽŪKT specialistai, kadangi jie geriausiai žino savo konsultantų poreikius.

Mokymus sudaro teorinė ir praktinė dalys. Mokymų metu pateikiama informacija apie ŠESD emisijų susidarymo priežastis, emisijoms apskaičiuoti naudojamus įrankius, pateikiamos rekomendacijos, kaip parengti ŠESD emisijų sumažinimo ūkiuose planus. Siekiant didžiausio mokymų efektyvumo, mokymai organizuojami ne didesnei nei 10 konsultantų grupei.

Mokymų programos parengimas ir mokymų organizavimas yra efektyvus būdas per trumpą laiką paruošti konsultantus teikti žemdirbiams konsultacijas tvaraus ūkininkavimo klausimais. Mokymų metu įgytas žinias konsultantai taiko konsultuodami žemdirbius. Kadangi mokymų programą parengė LŽŪKT specialistai, LŽŪKT konsultantai gali susisiekti su mūsų specialistais bet kuriuo metu, jei jiems kyla klausimų.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

As the ClimateSmartAdvisors project also focuses on the adoption of climate-smart farming practices, the Lithuanian Community of Practice (CoP) on “Climate change” was established with a focus on GHG emissions and climate change. CoP members identified that one of the challenges of adopting climate-smart farming practices was the lack of knowledge among advisors and farmers about innovative solutions. In response, a training programme and training sessions on GHG emissions and carbon farming were developed.

The topics of GHG emissions and carbon farming are of high interest to both agricultural advisors and farmers, as carbon farming is still a relatively new practice in agriculture and requires new knowledge, particularly among advisors. Agricultural advisors from LAAS were selected as the target group for the training, as they play a key role in transferring knowledge to farmers. The training is expected to strengthen the role of advisors in the transition to climate-smart farming.

The training provides information on GHG emissions, tools for calculating GHG emissions, and recommendations on how to prepare farm-level plans for reducing emissions. A tool for calculation of GHG emissions is being developed in Lithuania therefore, tools offered to be used in CFD project were presented and used in the practical part of the training (i.e. *Farm Carbon Calculator* and *Cap'2er*). The training on GHG emissions and carbon farming offers an effective way to prepare agricultural advisors in a relatively short time to provide climate-smart advice, as they focus on key aspects of climate-smart farming and demonstrate how to use specific tools for calculating farm-level GHG emissions based on real farm data. The training is delivered in person. Advisors gain new knowledge that can be directly applied in their advisory work, while farmers receive new knowledge and are introduced to innovative solutions.

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PRACTICE ABSTRACT NUMBER #68

TITLE IN NATIVE LANGUAGE

Konsultāciju redzesloka paplašināšana, izmantojot daudznozaru konsultāciju modeli, kas pārsniedz vienas prakses risinājumus.

TITLE IN ENGLISH

Broadening Advisory Perspectives Beyond Single-Practice Solutions Through a Multidisciplinary Advisory Model

GEOGRAPHICAL LOCATION (IF RELEVANT)

Latvia

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Multi-disciplinary consultancy
2. Economically viable and resilient farm
3. Enhancing the knowledge capacity of consultants

THEMATIC AREA

Soil health

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Daudzas saimniecības joprojām saņem konsultācijas no atsevišķiem ekspertiem, kas bieži rada sadrumstalotus ieteikumus, pretrunīgas prioritātes un zemu pārliecību par to īstenošanu. „Inkubatora” modelis risina šo problēmu, atbalstot saimniecību ar koordinētu konsultantu grupu, nevis tikai ar vienu konsultantu. Galvenajā komandā parasti ietilpst ekonomists, uzņēmējdarbības vadības speciālists, agronoms, psihologs un projekta vadītājs. Vajadzības gadījumā var piesaistīt papildu ekspertus, piemēram, augsnes bioloģijas, kompostēšanas, augu barošanas vai klimata risku pārvaldības jomā.

Šis modelis palīdz lauksaimniekiem novērtēt klimata ziņā gudras prakses visā saimniecības kontekstā. Tādi pasākumi kā komposta izmantošana augsnes apsaimniekošanā, augsnes aerācija vai uz augu veselību vērstas stratēģijas tiek apspriestas ne tikai no tehniskās īstenojamības viedokļa, bet arī saistībā ar naudas plūsmu, darbaspēku, investīciju iespējām, lauksaimnieku motivāciju un ilgtermiņa uzņēmējdarbības mērķiem. Psihologs atbalsta uzvedības izmaiņas, stresa pārvaldību un komunikāciju, savukārt projekta vadītājs nodrošina struktūru, koordināciju un turpmāko rīcību.

Praksē tas samazina pretrunīgus ieteikumus un palīdz lauksaimniekiem pieņemt apzinātākus lēmumus. Klimata ziņā gudras darbības vairs netiek uzskatītas par atsevišķiem pasākumiem, bet gan par daļu no stratēģijas, kas vērsta uz izturības, ražīguma un rentabilitātes uzlabošanu. Galvenās priekšrocības ir plašāka klimata ziņā gudru prakšu ieviešana, labāka vides un ekonomisko mērķu saskaņotība un lielāka lauksaimnieku pārliecība. Lai gan šis modelis prasa lielāku koordināciju un vairāku ekspertu iesaistīšanos, tas piedāvā efektīvāku ceļu, kā klimata ziņā gudras idejas pārvērst reālistiskās, konkrētai saimniecībai piemērotās un ekonomiski pamatotās darbībās.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Many farms still receive advice from single experts, which often leads to fragmented recommendations, conflicting priorities, and low confidence in implementation. The Incubator model, tested within Latvian Community of Practice in ClimateSmartAdvisors project, addresses this by supporting the farm through a coordinated group of advisors instead of one consultant only. The core team usually includes an economist, business management specialist, agronomist, psychologist, and project leader. Additional experts can be involved when needed, for example in soil biology, composting, plant nutrition, or climate risk management.

This model helps farmers assess climate-smart practices in a whole-farm context. Measures such as compost-based soil management, soil aeration, or plant-health-focused strategies are discussed not only in terms of technical feasibility, but also cash flow, labour, investment capacity, farmer motivation, and long-term business goals. The psychologist supports behavioural change, stress management, and communication, while the project leader ensures structure, coordination, and follow-up.

In practice, this reduces contradictory advice and helps farmers make more informed decisions. Climate-smart actions are no longer treated as isolated measures, but as part of a

strategy to improve resilience, productivity, and profitability. The main benefits are stronger uptake of climate-smart practices, better alignment between environmental and economic goals, and greater farmer confidence. Although the model requires more coordination and involvement of several experts, it offers a more effective pathway for turning climate-smart ideas into realistic, farm-specific, and economically sound action.

ADDITIONAL INFORMATION

This advisory system was tested during the first wave of the project and proved to be a practical way to deliver more coordinated and farm-specific support. Based on this experience, the approach has already been integrated into LLKC customer services. Its early use showed that farmers benefit from receiving aligned advice from different experts, which improves decision-making and supports the adoption of climate-smart and economically viable solutions.

The Incubator advisory process was tested during the first project wave using a structured, multi-step approach. The first meeting took place on the farm, where the farmer presented the farm as a whole system, including production activities and the family's social engagement. This helped advisors understand how the farm is embedded in the local community and its cooperation with neighbors on top of usual farm activities. During this visit, advisors had one opportunity to ask open questions and take notes based on the farmer's input.

In the following stages, the Community of Practice (CoP) met several times to reflect on the farm's development. Each participant was encouraged to develop their own perspective on how the farm could evolve as a "farm organism," based on their expertise. These ideas were then discussed collectively to build a more integrated view.

A final meeting was planned to present and align the proposals with the farmer. While the full process was not completed as originally intended due to limited participation, long travel distances, and restricted resources, valuable lessons were learned about the importance of team continuity and engagement in multi-actor advisory settings.

Importantly, the experience has already led to practical uptake: the Incubator approach has been adapted and implemented at company level within LLKC as a coordinated support system for clients, demonstrating its relevance and applicability beyond the project context.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Latvian CSA Community of Practice - Integrated Farm Advisory Based on Soil Health

URL:

<https://augsmc.llkc.lv/>

Title/Description

Long-term consulting to promote the competitiveness and efficiency of the company, helping to develop data-driven ideas, ensure growth, and support significant changes in business.

URL:

<https://augme.llkc.lv/>

Title/Description

LLKC's multi-year consulting service – an incubator that helps rural entrepreneurs build – Facebook video

URL:

<https://www.facebook.com/watch/?v=1743427602996906>

Title/Description

LLKC's multi-year consulting service – an incubator that helps rural entrepreneurs build – Facebook video

URL:

<https://www.facebook.com/watch/?v=601972296241133>

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PRACTICE ABSTRACT NUMBER #69

TITLE IN NATIVE LANGUAGE

How to Build Technical Capacity and Skills of Advisors through Training Events

TITLE IN ENGLISH

How to Build Technical Capacity and Skills of Advisors through Training Events

GEOGRAPHICAL LOCATION (IF RELEVANT)

Scotland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Rebecca Audsley - rebecca.audsley@sac.co.uk

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Identify knowledge needs
2. Develop technical knowledge
3. Build dissemination and delivery skills

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Training events, one of the approaches used through the ClimateSmartAdvisors (CSA) project to build advisors' capacity, provide an opportunity for advisors to identify and develop their technical knowledge and skills. Training should be bespoke, favoring an interactive, peer-led approach, using specialist speakers and/or trainers to deliver training on key topics of interest to support delivery and implementation of climate smart advice.

Training events could be used to build skills around:

- a **technical topic**, e.g. use of biochar or cover crop establishment
- practical **use of a tool**, e.g. a farm carbon calculator or Visual Evaluation of Soil Structure (VESS)
- **softer skills**, e.g. communication or dissemination of climate smart techniques or meeting facilitation.

Ideas to **build technical capacity or skills** through training events could include:

- **Facilitation** skills - can you guide and engage farmers to consider adopting climate smart farming techniques?
- **Communication** skills - how do you effectively engage with other advisers and farmers to share knowledge and help deliver change?
- New **technical knowledge** - are there new developments or products which could benefit farm climate change mitigation or adaptation?
- **Financial literacy** - help to build a business case for a change in practice to support climate resilience at the farm level?
- **"Hot topics"** - what challenges are being faced by your agricultural community; what skills do you need to help them adapt?
- **Policy drivers** - are farmers going to be asked to make changes due to new policy? Is additional knowledge needed to support this transition?

There are a range of capacity-building opportunities and events available through other providers once additional training needs, support and/or skills have been identified. The **CSA network** connects technical specialists across Europe and partner countries, giving an excellent opportunity to identify new speakers or trainers within your chosen specialism.

ADDITIONAL INFORMATION

- **Taking a co-design approach** to your training event could help you meet your group's needs more effectively.
- It's widely acknowledged that people have different **learning preferences** (what people like) and **strategies** (effective ways to learn). Active learning, engaging participants through discussion, problem-solving, and projects are considered far more effective for long-term retention and developing critical thinking, rather than passive learning (lectures). Discuss with your trainer how they will **deliver training in a way that suits your group and achieves your learning outcomes**. This could be classroom based with exercises, or through demonstration or 'hands on' activities at a farm or research facility

TRAINING AND CAPACITY BUILDING

- To show that your training has been effective, and/or identify improvements for future training delivery, you will need to have a way to **document and evaluate your training** experience. What would you change next time?
- Following the training, identify ways you can **put your new skills or knowledge into action**. This will help you consolidate knowledge, build on your training and identify any gaps that could be built into future training events.
- **Use your networks!** From farmers to advisors to technical specialists, there are a host of talented and knowledgeable people working in the climate and agriculture space. Reach out, see what others have done and how they can help you build your knowledge and network, both individually and as part of a wider training group.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

The Visual Evaluation of Soil Structure (VESS) is contained as a Field Sheet at the end of the Valuing Your Soils brochure

URL:

www.farmingandwaterscotland.org/soil-nutrients/valuing-your-soils/

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PRACTICE ABSTRACT NUMBER #70

TITLE IN NATIVE LANGUAGE

Uporaba brezpilotnih letalnikov v kmetijstvu.

TITLE IN ENGLISH

Usage of Drones in Agriculture: Inputs from Slovenian ClimateSmartAdvisors Community of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

Slovenia

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS *

1. Connecting theory and practice
2. Holistic approach to precision agriculture
3. Strengthening advisors knowledge and competencies

THEMATIC AREA

Crop management

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Delovna skupina, ustanovljena v okviru projekta Climate Smart Advisors (CSA), se osredotoča na raziskovanje in razumevanje možnosti uporabe brezpilotnih letalnikov (dronov) ter sorodnih digitalnih tehnologij v slovenskem kmetijstvu. Naš cilj je pridobiti celovit vpogled v tehnološke, zakonodajne in praktične vidike uporabe dronov ter ovrednotiti njihov potencial za bolj učinkovito, natančno in trajnostno kmetijsko pridelavo.

Ob začetku delovanja smo določili ključna vsebinska področja dela, ki vključujejo pregled trga dronov, zakonodajni okvir, uporabo dronov za spremljanje stanja posevkov, nanos fitofarmacevtskih sredstev in gnojil ter primerjavo s klasično kmetijsko mehanizacijo. Vzpostavili smo sodelovanje med člani iz različnih območnih kmetijsko-gozdarskih zavodov ter skupni prostor za izmenjavo znanj in dobrih praks.

Pomemben del našega dela namenjamo razumevanju zakonodaje, ki ureja uporabo brezpilotnih letalnikov, zlasti z vidika varnosti, licenciranja in zakonite uporabe v kmetijski praksi. Hkrati obravnavamo širši koncept sodobnega in preciznega kmetijstva, kjer droni predstavljajo del celostnega sistema podpore odločanju, skupaj z daljinskim zaznavanjem, analizo podatkov, coniranjem površin in ciljno prilagojeno rabo kmetijskih vložkov. Ugotavljamo, da droni prinašajo pomembne prednosti pri monitoringu posevkov, natančnosti in hitrem odzivanju, hkrati pa imajo tudi omejitve, kot so visoki začetni stroški, tehnične omejitve in občutljivost na vremenske razmere. Klasična kmetijska mehanizacija ostaja nepogrešljiva, zato poudarjamo dopolnjevanje obeh pristopov.

Posebno pozornost namenjamo uporabi digitalnih orodij, vegetacijskih indeksov in praktičnim primerom povezovanja podatkov dronov z vzorčenjem tal. Naše delo potrjuje, da imajo droni velik potencial kot podporno orodje v sodobnem kmetijskem svetovanju, ob pogoju ustreznega znanja, zakonitega delovanja in povezovanja z drugimi tehnologijami.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The Slovenian Community of Practice established within the ClimateSmartAdvisors project focuses on exploring the potential of unmanned aerial vehicles (drones) and digital technologies in agriculture. The goal is to better understand the technological, regulatory, and practical aspects of drone use to assess their potential for more efficient, precise, and sustainable agricultural production.

At the start of the work, several key thematic areas were identified, including an overview of the drone market, the regulatory framework for drone operation, the use of drones for crop monitoring, and the application of plant protection products. Cooperation was established among members along with a shared platform for exchanging knowledge and good practices.

A significant part of the work focused on understanding the legislation governing the use of drones, particularly regarding safety requirements, licensing procedures, and lawful use of drones in agricultural practice. At the same time, the group explored the broader concept of precision agriculture, in which drones function as part of an integrated decision-support

system together with remote sensing, data analysis, field zoning, and site-specific application of agricultural inputs.

Discussions within the community highlighted several advantages such as improved crop monitoring and rapid response to field conditions, though limitations like high initial costs and sensitivity to weather conditions were also noted. Conventional agricultural machinery therefore remains essential, and the community emphasises the complementary role of both approaches.

Particular attention has been given to digital tools, vegetation indices, and practical examples of linking drone-generated data with soil sampling. The work of the community confirms that drones have significant potential as a support tool for modern agricultural advisory services, provided that advisors and farmers have adequate knowledge.

Title/Description

Slovenian ClimateSmartAdvisors Community of Practice

URL:

<https://climatesmartadvisors.eu/cops/usage-of-drones-in-agriculture/>

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PRACTICE ABSTRACT NUMBER #81

TITLE IN ENGLISH

Strengthening Advisor Participation in Communities of Practice: Lessons from ClimateSmartAdvisors

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Martin Javornicky

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

Improved participation in CoP leads to:

1. **Improved advisor confidence and competence** - Enhanced professional skills and knowledge in climate-smart agriculture through peer learning and practical training
2. **Stronger professional networks** - Building connections across organizations and countries that support ongoing knowledge exchange and reduce professional isolation
3. **More effective knowledge transfer** - Practical, co-designed content that advisors can directly apply in their work with farmers Add text here

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Communities of Practice (CoPs) established within ClimateSmartAdvisors project face challenges in maintaining active, consistent participation from advisors. Key barriers include time constraints, logistical difficulties, uneven engagement, and competing professional priorities. This Practice Abstract addresses how to enhance participation and sustain momentum in CoPs.

Analysis of CoP evaluation reports reveals that successful participation depends on several interconnected factors:

- **Inclusive design and planning:** CoPs that included all members at design and planning stages of the CoP lifespan tend to report higher participation
- **Strong facilitation and clear goals:** CoPs with well-defined shared objectives and supportive facilitation maintained higher engagement. Unclear or fragmented goals weakened commitment
- **Practical, relevant content:** When topics were directly aligned with the needs of CoP members, participation increased. Farm visits, demonstrations, and applied workshops were consistently rated as most valuable
- **Regular, well-structured meetings:** Frequent meetings (including shorter online check-ins) maintained continuity and momentum. Long gaps between sessions led to disengagement. Coherent scheduling strengthened participation
- **Peer-to-peer learning:** Interactive formats fostered engagement. Lecture-style sessions often left members disengaged, while collaborative approaches encouraged active contribution

To strengthen CoP participation, advisors are encouraged to:

- Include all CoP members early in planning the CoP activities
- Schedule meetings in coherent blocks with shorter intervals
- Prioritize co-designed, practice-based content over abstract discussions
- Balance online accessibility with in-person sessions
- Create tangible outputs to make results of participation visible and valuable
- Recognize professional development value explicitly, as this motivates advisors without direct financial incentives

8.6 Innovation and Multi-Actor Engagement

This cluster focuses on collaborative and innovation-oriented approaches that involve multiple actors in the development, testing and uptake of knowledge and solutions. It includes content related to innovation brokerage, multi-actor interaction, connections between practice, research and policy, and formats that help actors work together around shared challenges. PAs in this cluster highlight the importance of co-creation, interaction and collaborative problem-solving within AKISs.



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PRACTICE ABSTRACT NUMBER #1

TITLE IN NATIVE LANGUAGE

La evolución del papel de los asesores y de los servicios de asesoramiento en la agricultura climáticamente inteligente.

TITLE IN ENGLISH

The Evolving Role of Advisors and Advisory Services in Climate Smart Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Isabel Torres-Quezada (itq655@ual.es); Cynthia Giagnocavo (cgiagnocavo@ual.es)

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Enhanced advisory skills
2. Accelerated CSF adoption
3. Improved co-creation

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Los asesores agrícolas están cobrando cada vez más importancia en la agricultura europea, y su función va ahora mucho más allá de ofrecer recomendaciones técnicas. A menudo actúan como facilitadores, conectores e intermediarios, así como socios de confianza que ayudan a los agricultores a comprender los retos, explorar soluciones y poner en práctica sus ideas. Esta evolución es especialmente relevante en el contexto del cambio climático, donde las decisiones agrícolas son más complejas y la incertidumbre es mayor.

La experiencia práctica demuestra que los asesores agrícolas son más eficaces a la hora de apoyar la agricultura climáticamente inteligente cuando participan activamente en los procesos de innovación junto a los agricultores. Mediante la experimentación en las explotaciones, las iniciativas con múltiples actores y la resolución de problemas del mundo real, los asesores ayudan a traducir los riesgos climáticos y los conceptos abstractos en soluciones adaptadas al contexto local. Esta implicación práctica refuerza la confianza, favorece el aprendizaje en condiciones de incertidumbre y acelera la adopción de prácticas climáticamente inteligentes en diversos contextos agrícolas.

El análisis en curso de las iniciativas de innovación climáticamente inteligentes en las que participan múltiples actores está aportando información sobre cómo están evolucionando las funciones de asesoramiento en los procesos de diseño conjunto y experimentación. Los primeros resultados indican que situar a los asesores en el centro de las actividades de innovación refuerza su contribución como facilitadores, mediadores del conocimiento y promotores de la resolución colectiva de problemas. Este análisis también ayuda a identificar qué funciones de asesoramiento están ya bien consolidadas y en qué ámbitos siguen siendo necesarias habilidades, herramientas o apoyo adicionales.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Farm advisors are becoming increasingly important in European agriculture, and their role now goes far beyond giving technical recommendations. They often act as facilitators, connectors and intermediaries, as well as trusted partners who help farmers understand challenges, explore solutions, and turn ideas into practice. This evolution is especially relevant in the context of climate change, where farming decisions are more complex and uncertainty is higher.

Practical experience shows that farm advisors are most effective in supporting Climate-Smart Farming when they are actively involved in innovation processes alongside farmers. By working through on-farm experimentation, multi-actor initiatives and real-world problem solving, advisors help translate climate risks and abstract concepts into locally adapted solutions. This hands-on engagement strengthens trust, supports learning under uncertainty, and accelerates the adoption of climate-smart practices in diverse farming contexts.

Ongoing analysis of climate-smart multi-actor innovation initiatives within ClimateSmartAdvisors project, is generating insights into how advisory roles are evolving in co-design and experimentation processes. Early findings indicate that placing advisors at the

centre of innovation activities strengthens their contribution as facilitators, knowledge brokers and supporters of collective problem-solving. This analysis also helps identify which advisory roles are already well established and where additional skills, tools, or support are still needed.

ADDITIONAL INFORMATION

Insights based on an analysis of 147 multi-actor innovation projects across Europe, show that advisors are particularly active in awareness raising knowledge sharing, and the co-creation of innovative ideas with farmers. However, advisors are less involved in institutional aspects such as regulation, certification, funding opportunities, and the scaling up of innovations. This highlights the need to better support advisors in their evolving roles and to strengthen their contribution to climate-smart transitions within Agricultural Knowledge and Innovation Systems (AKIS).

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PRACTICE ABSTRACT NUMBER #2

TITLE IN NATIVE LANGUAGE

Brechas y "white spots" en la investigación sobre asesoramiento agrícola climático:
identificando oportunidades para el futuro

TITLE IN ENGLISH

Gaps and "White Spots" in Climate Farm Advisory Research - Identifying Opportunities for
the Future

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS *

1. Identification of gaps
2. Better-targeted advice
3. Informed experimentation

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

El análisis de “white spots” es un método ampliamente utilizado para detectar elementos que faltan, una cobertura insuficiente o tendencias dentro de un conjunto de actividades, y sirve de base para la toma de decisiones y la mejora. En el contexto de ClimateSmartAdvisors, un análisis de puntos blancos complementó las evaluaciones de 147 proyectos de innovación multiactor (MIP) de agricultura climáticamente inteligente. Utilizando una matriz de criterios y una escala de semáforo, las variables se clasificaron en puntos blancos pequeños, medianos o grandes. Estos puntos blancos señalan áreas con atención limitada que pueden presentar oportunidades de innovación.

El análisis reveló importantes carencias en los conocimientos especializados de asesoramiento relacionados con la gestión del agua, la agrosilvicultura, la biodiversidad, la agricultura de precisión y la gestión del estiércol. Sectores como la acuicultura y la agrosilvicultura fueron los menos representados. Los mecanismos de recompensa, los aditivos para la reducción del metano entérico, la producción de biogás y los impactos relacionados con la calidad del agua, el uso eficiente del agua y la seguridad alimentaria también mostraron una baja inclusión en los MIP. Entre los impactos previstos que los socios consideraron prioritarios se encontraban la biodiversidad, las mejoras socioeconómicas para los agentes rurales y un mejor uso de la tierra.

El análisis ayudó a identificar dónde es más necesario el apoyo de asesoramiento en los procesos de innovación climáticamente inteligente. Estas carencias son especialmente evidentes en las primeras etapas de la innovación, como la inspiración, la exploración y la planificación, sobre todo en lo que respecta a las innovaciones económicas, de modelos de negocio, organizativas y relacionadas con los servicios. Al vincular estos “white spots” directamente con el diseño de los Experimentos de Innovación de Codiseño (CoDIEs), el proyecto se centra en reforzar la capacidad de los asesores para apoyar a los agricultores más allá de las soluciones técnicas, incluyendo el pensamiento estratégico, la planificación empresarial y el cambio organizativo.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

White spot analysis is a widely used method to detect missing elements, low coverage, or trends within a set of activities, serving as a basis for decision-making and improvement. In the ClimateSmartAdvisors context, a white spot analysis complemented the assessments of 147 Climate Smart Farming Multi-Actor Innovation Projects (MIPs). Using a criteria matrix and a traffic-light scale, variables were classified into small, medium, or large white spots. These white spots point to areas with limited attention that may present opportunities for innovation.

The analysis showed significant gaps in advisory expertise related to water management, agroforestry, biodiversity, precision farming, and manure management. Sectors such as aquaculture and agroforestry were least represented. Rewarding mechanisms, enteric methane reduction additives, biogas production, and impacts related to water quality, efficient water use, and food security also showed low inclusion in MIPs. Expected impacts prioritised by partners included biodiversity, socio-economic improvements for rural actors, and better

land use.

The analysis of white spots helped identify where advisory support is most needed within climate-smart innovation processes. These gaps are particularly evident in the early stages of innovation, such as inspiration, exploration and planning, especially for economic, business models, organisational and service-related innovations. By linking these white spots directly to the design of Co-Design Innovation Experiments (CoDIEs), the project focuses on strengthening advisors' capacity to support farmers beyond technical solutions, including strategic thinking, business planning and organisational change.

ADDITIONAL INFORMATION

While the type and number of climate-smart multi-actor innovation projects included in the analysis may have influenced the results, all projects met clear inclusion criteria, including a multi-stakeholder approach, innovative elements, a climate-smart focus and the active involvement of advisors. Although the sample does not represent all such projects across Europe, it provides a robust and informative starting point, offering one of the most comprehensive overviews available at this stage. The findings should therefore be seen as an initial picture that does not capture full national realities but already delivers valuable insights to support reflection and decision-making in climate-smart innovation processes.

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PRACTICE ABSTRACT NUMBER #3

TITLE IN NATIVE LANGUAGE

Experimentos de co-diseño e innovación en la agricultura climáticamente inteligente

TITLE IN ENGLISH

Co-Design Innovation Experiments: Transitions in Climate Smart Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS *

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Adoption of CSF practices
2. Stronger advisory capacity
3. Improved scaling and policy links

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Los experimentos de codiseño e innovación (CoDIEs) son procesos prácticos multiactor y que convierten las ideas de la agricultura climáticamente inteligente (CSF) en acciones concretas. En el marco del proyecto ClimateSmartAdvisors, los CoDIEs crean espacios estructurados y seguros en los que los asesores, los agricultores y otros actores del sistema de información y conocimiento agrícola (AKIS) codiseñan, prueban y aplican soluciones que abordan los retos locales, al tiempo que contribuyen a un cambio sistémico más amplio. Los CoDIEs se utilizan para comprender cómo los asesores agrícolas pueden actuar como agentes de cambio en las transiciones multinivel hacia la CSF, apoyando la cocreación, el intercambio de conocimientos y la coordinación a nivel de explotación, de sistema y de políticas. El primer grupo de CoDIEs se seleccionó para abordar las lagunas existentes en las actividades de innovación y asesoramiento en materia de CSF.

Estos muestran la diversidad de retos y vías de innovación en toda Europa. En Serbia, la atención se centra en la gestión de huertos respetuosa con la biodiversidad, donde los asesores ayudan a los fruticultores y apicultores a diseñar conjuntamente prácticas de gestión integrada de plagas y prácticas regenerativas que reducen el uso de plaguicidas y aumentan la resiliencia. En Eslovaquia, el CoDIE refuerza AKIS mediante un programa nacional de apoyo a granjas de demostración y una herramienta de asesoramiento digital, lo que ayuda a los asesores y a los agricultores a compartir prácticas regenerativas y a conectar la experiencia sobre el terreno con los procesos políticos. En Austria, el CoDIE apoya a las comunidades de energía renovable lideradas por agricultores, donde los asesores facilitan la coordinación técnica, jurídica y financiera para ampliar un sistema de calefacción cooperativo hacia la generación de electricidad renovable.

A pesar de sus diferentes contextos, todos los CoDIEs siguen una lógica común: ponen a prueba prácticas concretas a nivel de explotación agrícola o de comunidad, al tiempo que establecen vínculos con los sistemas de asesoramiento, las redes y los procesos políticos. De este modo, ofrecen un marco práctico para observar la evolución de las funciones de asesoramiento y comprender cómo los asesores pueden apoyar de manera eficaz las transiciones climáticamente inteligentes en diversos contextos agrícolas y territoriales.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Co-Design and Innovation Experiments (CoDIEs) are practical, multi-actor processes that turn Climate-Smart Farming (CSF) ideas into concrete action. Within the ClimateSmartAdvisors project, CoDIEs create safe structured spaces where advisors, farmers and other AKIS actors co-design, test and implement solutions that address local challenges while contributing to broader system change. CoDIEs are used to understand how agricultural advisors can act as change agents in multi-level transitions to CSF, supporting co-creation, knowledge exchange and coordination across farm, system and policy levels. The first group of CoDIEs was selected to address gaps in existing CSF innovation and advisory activities.

These first CoDIEs show the diversity of challenges and innovation pathways across Europe. In Serbia, the focus is on biodiversity-friendly orchard management, where advisors help fruit

growers and beekeepers co-design integrated pest management and regenerative practices that reduce pesticide use and increase resilience. In Slovakia, the CoDIE strengthens AKIS through a national demo-farm support scheme and a digital advisory tool, helping advisors and farmers share regenerative practices and connect field experience with policy processes. In Austria, the CoDIE supports farmer-led renewable energy communities, where advisors facilitate technical, legal and financial coordination to expand a cooperative heating system toward renewable electricity generation.

Despite their different contexts, all CoDIEs follow a shared logic - they test concrete practices at farm or community level while creating links to advisory systems, networks and policy processes. In this way, CoDIEs provide a practical framework to observe changing advisory roles and to understand how advisors can effectively support climate-smart transitions in diverse agricultural and territorial contexts.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Co-Design Innovation Experiments (CoDIEs): Catalyzing Change in Climate-Smart Farming

URL:

<https://climatesmartadvisors.eu/news/codies-catalyzing-change/>

Title/Description

Cynthia Giagnocavo: What are Co-Design Innovation Experiments (CoDIEs)?

URL:

https://www.youtube.com/watch?v=K_fmntSMh5g

Title/Description

Serbia: Biodiversity-Friendly Farming

URL:

https://www.linkedin.com/posts/aleksandar-ivezi%C4%87-204aab1a8_sa-zadovoljstvom-najavljujem-predstoje%C4%87i-activity-7404615413256638464-gaul?utm_source=share&utm_medium=member_desktop&rcm=ACoAABsbD6YBNCqEetFZUoOjdUDMjfJ33gFFzc

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PRACTICE ABSTRACT NUMBER #4

TITLE IN NATIVE LANGUAGE

Implementar transiciones en la agricultura climáticamente inteligente: el papel de los recursos y las capacidades

TITLE IN ENGLISH

Implementing Transitions in Climate Smart Farming-the Role of Resources and Capabilities

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Increased adaptive capacity
2. Better resource mobilisation
3. More targeted strategies

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Acelerar la transición hacia la agricultura climáticamente inteligente (CSF) requiere algo más que promover nuevas prácticas o tecnologías. Los asesores deben trabajar en múltiples niveles: con agricultores individuales y explotaciones agrícolas, con grupos y redes, y con empresas, responsables políticos e instituciones que configuran el entorno agrícola y de los sistemas de información agrícola (AKIS) en general. A través de estas interacciones, también contribuyen a redefinir la forma en que se entienden y aplican la CSF y la labor de asesoramiento.

Apoyar las transiciones climáticamente inteligentes requiere algo más que tecnologías individuales o prácticas aisladas. Una forma útil de comprender y fortalecer la innovación es mediante la combinación de recursos, capacidades, innovaciones y colaboraciones (RCCI). Los recursos incluyen activos tangibles e intangibles, como financiación, infraestructura, datos, conocimientos, habilidades y redes. Las capacidades son las habilidades individuales, organizativas y tecnológicas necesarias para movilizar estos recursos y adaptarlos a las condiciones locales. Los recursos y las capacidades son interdependientes: los recursos permiten la acción, mientras que las capacidades determinan cómo se combinan y utilizan. Las innovaciones y las colaboraciones pueden funcionar como ambos, lo que refleja la naturaleza dinámica de los procesos de transición.

Las capacidades dentro de estos procesos no son estáticas. En contextos de incertidumbre, las capacidades dinámicas son fundamentales, ya que permiten a los actores aprender, adaptarse y reconfigurar recursos y habilidades. Las investigaciones sobre la innovación orientada a la sostenibilidad demuestran que estas capacidades favorecen la experimentación, la coordinación y la ampliación, lo que ayuda a que las iniciativas pasen de la fase de pruebas locales a generar un impacto a nivel sistémico. Estas capacidades se desarrollan con el tiempo y en distintos niveles, desde la experimentación en las explotaciones agrícolas hasta el aprendizaje colectivo y la interacción con los contextos institucionales.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Accelerating the transition to Climate-Smart Farming (CSF) requires more than promoting new practices or technologies. Advisors need to work across multiple levels: with individual farmers and farm businesses, with groups and networks, and with enterprises, policymakers and institutions shaping the wider agricultural and AKIS environment. Through these interactions, they also help reshape how CSF and advisory work are understood and applied.

Supporting climate-smart transitions requires more than individual technologies or isolated practices. A useful way to understand and strengthen innovation is through the combination of Resources, Capabilities, Innovations and Collaborations (RCCIs). Resources include tangible and intangible assets such as funding, infrastructure, data, knowledge, skills and networks. Capabilities are the individual, organisational and technological abilities needed to mobilise these resources and adapt them to local conditions. Resources and capabilities are interdependent: resources enable action, while capabilities determine how they are combined

and used. Innovations and collaborations can function as both, reflecting the dynamic nature of transition processes.

Capabilities within these processes are not static. In uncertain contexts, dynamic capabilities are key because they enable actors to learn, adapt and reconfigure resources and skills. Research on sustainability-oriented innovation shows they support experimentation, coordination and scaling, helping initiatives move from local testing towards system-level impact. These capabilities develop over time and across levels, from on-farm experimentation to collective learning and engagement with institutional contexts.

ADDITIONAL INFORMATION

Analysing RCCIs has analytical and strategic value. Analytically, the framework explains how climate-smart transitions unfold as evolving combinations of assets, skills, innovation activities and collaboration patterns. Strategically, it offers advisors and other AKIS actors a practical lens to identify gaps, strengthen adaptive capacity and design targeted interventions that sustain transitions over time.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Microfoundations of dynamic capabilities enabling scaling pathways of sustainability-oriented innovation business models. From Mehrabi, S., Mahdad, M., Bijman, J., Cholez, C., Mesa, J. C. P., & Giagnocavo, C. (2025). Microfoundations of dynamic capabilities enabling scaling pathways of sustainability-oriented innovation business models. *Business Strategy and the Environment*, 34(1), 849–871. <https://doi.org/10.1002/bse.4004>

URL:

<https://onlinelibrary.wiley.com/doi/full/10.1002/bse.4004>

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PRACTICE ABSTRACT NUMBER #5

TITLE IN NATIVE LANGUAGE

¿Qué significa “escalar” la agricultura climáticamente inteligente?

TITLE IN ENGLISH

What Does it Mean to "Scale" Climate Smart Farming?

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Systemic transition perspective
2. Better scaling of innovations
3. Stronger multi-actor coordination

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Escalar la Agricultura Climáticamente Inteligente (CSF) no consiste solo en involucrar a más explotaciones o replicar prácticas exitosas. La experiencia de iniciativas europeas muestra que el escalado es un proceso sistémico que ocurre simultáneamente en varias dimensiones. Siguiendo a Moore et al. (2015), se produce a través de tres vías: scaling out (llegar a más usuarios y territorios), scaling up (influir en instituciones, normas y políticas) y scaling deep (cambiar valores, mentalidades y relaciones). La investigación sobre innovación orientada a la sostenibilidad explica cómo se posibilita en la práctica. Mehrabi et al. (2025) señalan que depende de capacidades dinámicas: aprender, reconfigurar recursos, coordinar redes y adaptarse a cambios, permitiendo que las iniciativas de CSF pasen de la experimentación local a impactos a nivel de sistema.

En Climate Smart Advisors (CSA) y su iniciativa hermana Climate Farm Demo (CFD), el escalado se entiende en este sentido amplio. CFD funciona como una red europea de fincas demostrativas donde las prácticas climáticamente inteligentes se prueban en condiciones reales. Mediante eventos en distintas zonas pedoclimáticas, agricultores y asesores intercambian experiencias y evalúan qué funciona en contextos similares, ilustrando el scaling out al difundirse y adaptarse las prácticas en lugar de copiarse.

Al mismo tiempo, CSA refuerza la base de asesoramiento necesaria para las transiciones climáticamente inteligentes, contribuyendo al scaling up. La evidencia de demostraciones, interacciones de asesoramiento y experimentos de innovación alimenta la gobernanza del asesoramiento, el desarrollo del AKIS y marcos políticos como los Planes Estratégicos de la PAC. Ambas iniciativas también contribuyen al scaling deep al fomentar cambios institucionales y culturales. La confianza, el aprendizaje compartido y comunidades de práctica más sólidas ayudan a integrar la CSF en la práctica cotidiana. En conjunto, escalar la CSF requiere acción coordinada entre prácticas, capacidades e instituciones, apoyada por estrategias integradas que impulsen difusión, cambio institucional y desarrollo de capacidades.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Scaling Climate-Smart Farming is not only about involving more farms or replicating successful practices. Experience from European initiatives shows that scaling is a systemic process occurring across several dimensions. Following Moore et al. (2015), scaling takes place through three pathways: scaling out (reaching more users and places), scaling up (influencing institutions, rules and policies), and scaling deep (changing values, mindsets and relationships). Research on sustainability-oriented innovation explains how scaling is enabled in practice. Mehrabi et al. (2025) show that scaling depends on dynamic capabilities: the ability to learn, reconfigure resources, coordinate across networks and adapt to changing conditions, allowing CSF initiatives to move from local experimentation to wider system impact.

In ClimateSmartAdvisors and its sister initiative Climate Farm Demo, scaling is understood in this broader sense. CFD operates as an EU-wide network of demonstration farms where climate-smart practices are tested under real conditions. Through demo events in different

pedo-climatic zones, farmers and advisors exchange experiences and assess what works in similar contexts, illustrating scaling out as practices are gradually adapted rather than copied.

In parallel, CSA strengthens the advisory backbone for climate-smart transitions, contributing to scaling up. Evidence from demos, advisory interactions and innovation experiments informs advisory governance, AKIS development and policy frameworks such as CAP Strategic Plans. Both initiatives also contribute to scaling deep by fostering institutional and cultural change. Trust-building, shared learning and stronger communities of practice help embed climate-smart approaches in everyday farming and advisory work. Overall, scaling CSF requires coordinated action across practices, capabilities and institutions, supported by integrated strategies for diffusion, institutional change and capacity development.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Giagnocavo, C.; de Cara-García, M.; González, M.; Juan, M.; Marín-Guirao, J.I.; Mehrabi, S.; Rodríguez, E.; van der Blom, J.; Crisol-Martínez, E. Reconnecting Farmers with Nature through Agroecological Transitions: Interacting Niches and Experimentation and the Role of Agricultural Knowledge and Innovation Systems. *Agriculture* 2022, 12, 137

URL:

<https://www.mdpi.com/2077-0472/12/2/137>

Title/Description

Microfoundations of dynamic capabilities enabling scaling pathways of sustainability-oriented innovation business models. From Mehrabi, S., Mahdad, M., Bijman, J., Cholez, C., Mesa, J. C. P., & Giagnocavo, C. (2025). Microfoundations of dynamic capabilities enabling scaling pathways of sustainability-oriented innovation business models. *Business Strategy and the Environment*, 34(1), 849–871. <https://doi.org/10.1002/bse.4004>

URL:

<https://onlinelibrary.wiley.com/doi/full/10.1002/bse.4004>

Title/Description

Moore, M.-L., Riddell, D., & Vocisano, D. (2015). Scaling out, scaling up, scaling deep: Strategies of non-profits in advancing systemic social innovation. *Journal of Corporate Citizenship*, 2015(58), 67–84. <https://doi.org/10.9774/gleaf.4700.2015.ju.00009>

URL:

<https://www.jstor.org/stable/jcorpciti.58.67?seq=1>

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PRACTICE ABSTRACT NUMBER #6

TITLE IN ENGLISH

Mapping and Classifying Multi-actor Innovation Projects in ClimateSmartAdvisors to Understand How Advisors Drive Climate-smart Innovations

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS *

1. Clear visibility of advisor roles in CSF
2. Identification of gaps
3. Evidence base for designing CoDIEs

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within the ClimateSmartAdvisors (CSA) project, a structured methodology was developed to map, classify, and analyse Multi-actor Innovation Projects (MIPs) related to Climate Smart Farming (CSF), with a specific focus on the roles, types, and functions of advisors. Using a common classification framework and a standardised EU-wide survey, a portfolio of 147 CSF-related MIPs implemented at regional, national, and European levels was compiled. This portfolio makes advisory involvement visible, comparable, and analysable across countries and project types, addressing a major gap in how advisory work is currently documented and valued.

CSA project partners identified relevant MIPs using clear eligibility criteria (multi-actor approach, innovation, CSF relevance, and advisor involvement). Project data was collected through a harmonised EU survey and validated through desk research. Each project was classified using a common matrix, enabling comparison across countries and project types. The resulting portfolio forms the basis for identifying patterns, gaps, and “white spots” in advisory involvement.

The classification system organises MIPs by project type, funding source, thematic focus, CSF objectives and impacts, innovation type and phase, geographical scale, and the types and roles of advisory services in innovation processes.

For practitioners and decision-makers, the key message is clear: climate-smart innovation is more effective when advisors are involved early, have clearly defined roles, and are supported beyond purely technical tasks. A harmonised mapping and classification approach provides a practical tool for the more strategic use of advisory services in future CSF initiatives and policies.

ADDITIONAL INFORMATION

The MIP portfolio was developed in close collaboration with CSA project partners across 27 European countries, based on agreed eligibility criteria and data collected through a common EU Survey questionnaire, complemented by desk research. Reported projects were categorised by type, funding source, sector, thematic focus, farm size, actors involved and innovation characteristics. This classification supports comparison of projects and analysis of climate-smart farming objectives, impacts, advisory roles and innovation processes.

Some limitations were identified, including fragmented reporting on advisory roles, differences in national advisory systems, and varying levels of project documentation. Advisory contributions related to facilitation, networking, and coordination are still often under-reported. The results informed the design of Co-Design Innovation Experiments (CoDIEs) within CSA, which test targeted approaches to strengthen advisory involvement where gaps were identified.

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PRACTICE ABSTRACT NUMBER #7

TITLE IN NATIVE LANGUAGE

Adviseurs empoweren: het potentieel van innovatietools maximaliseren

TITLE IN ENGLISH

Empowering Advisors: Maximizing the Potential of Innovation Tools

GEOGRAPHICAL LOCATION (IF RELEVANT)

Not relevant.

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Innovation tools
2. Adaptation of tools
3. Using tools is challenging

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Innovatietools spelen een cruciale rol bij het ondersteunen van adviseurs bij de ontwikkeling en verspreiding van klimaatslimme innovaties. Binnen het Climate Smart Advisors project werden deze instrumenten toegepast in coaching sessies om hiaten in adviesactiviteiten binnen Multi-actor Innovation Projects (MIP's) aan te pakken. Ze omvatten praktische methoden, instrumenten en digitale hulpmiddelen zoals apps voor besluitondersteuning, checklists, sjablonen, diagnostische protocollen, workshops, participatieve benaderingen, planningskaders en online toolkits. Hun doelstellingen variëren: van het beheren van werkbelastingen met planningstools, tot het gezamenlijk ontwerpen van strategieën via routekaarten en kaders, tot het bevorderen van sociale cohesie en het mogelijk maken van betrokkenheid van meerdere actoren. Belangrijk is dat de tools moeten worden aangepast aan de specifieke context waarin ze worden gebruikt (zie Figure1).

Adviseurs krijgen doorgaans toegang tot innovatietools door deel te nemen aan internationale projecten, trainingen en workshops bij te wonen of online repositories en toolkits te doorzoeken, steeds vaker met behulp van AI. Er zijn echter verschillende belemmeringen die een effectief gebruik in de weg staan: het doorzoeken van meerdere repositories is tijdrovend; Engelstalige beschrijvingen kunnen moeilijk te begrijpen zijn voor adviseurs die in een lokale context werken; korte samenvattingen geven vaak niet weer of een tool aan specifieke behoeften voldoet; en inconsistente metadata tussen repositories maakt vergelijkingen moeilijk. Hoewel AI grote hoeveelheden content kan scannen, blijft het verfijnen van zoekopdrachten om aan precieze behoeften te voldoen een uitdaging. Om deze uitdagingen het hoofd te bieden, raden adviseurs aan om één centraal opslagplaats te creëren, zoals het EU Farm Book, speciale medewerkers aan te wijzen om hulpmiddelen te identificeren en aan te passen, en prioriteit te geven aan eenvoudige, gebruiksvriendelijke hulpmiddelen. Uiteindelijk kunnen innovatieve hulpmiddelen het vermogen van adviseurs om klimaatvriendelijke landbouw te stimuleren aanzienlijk versterken, maar hun impact hangt af van verbetering van de toegankelijkheid, relevantie en bruikbaarheid.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Innovation tools play a vital role in supporting advisors in the development and dissemination of climate smart innovations. Within the ClimateSmartAdvisors project, these tools were applied in coaching sessions to address gaps in advisory activities across Multi-actor Innovation Projects (MIPs). They include practical methods, instruments, and digital resources. Their aims vary from managing workloads, to co-designing strategies through frameworks, to fostering social cohesion, and enabling multi-actor engagement. Importantly, tools must be adapted to the specific context in which they are used. An example of this is a goose board game adapted to the local working context of advisors. It simulates the barriers to overcome and reflections to make when supporting farmers in implementing climate adaptation measures.

Advisors typically access innovation tools by participating in international projects, attending trainings and workshops, or searching online repositories and toolkits, increasingly with the support of AI. However, several barriers hinder effective use:

browsing multiple repositories is time-consuming; English descriptions can be difficult for advisors working in local contexts; brief summaries often fail to show whether a tool meets specific needs; and inconsistent metadata across repositories makes comparison challenging. While AI can scan large volumes of content, refining queries to match precise needs remains demanding.

To overcome these challenges, the MIPs advisors recommend integrating the Farming for Climate platform in a centralized repository such as the EU Farm Book, assigning dedicated staff to identify and adapt tools, and prioritizing simple, easy-to-use resources. Ultimately, innovation tools can significantly strengthen advisors' capacity to drive climate-smart farming, but their impact depends on improving accessibility, relevance, and usability.

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PRACTICE ABSTRACT NUMBER #8

TITLE IN NATIVE LANGUAGE

Hoe service blueprints adviseursactiviteiten kunnen versterken.

TITLE IN ENGLISH

How Service Blueprints Strengthen Advisory Work

GEOGRAPHICAL LOCATION (IF RELEVANT)

Not relevant.

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Innovation tools
2. Adaptation of tools
3. Service Blueprint

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Innovatietools zijn praktische methoden, instrumenten en digitale hulpmiddelen die adviseurs helpen bij het begeleiden van de transitie naar klimaatsslimme landbouw. In het ClimateSmartAdvisors-project werden deze tools geïntroduceerd in coachingsessies met adviseurs van Multi-actor Innovation Projects om hiaten in adviesactiviteiten aan te pakken.

Een van deze tools is de service blueprint, een visuele methode die in kaart brengt hoe een dienst wordt geleverd vanuit het perspectief van de boer, inclusief alle actoren, stappen en ondersteunende middelen. Voor adviseurs betekent dit dat ze elke fase van een adviesdienst of innovatieproces gedetailleerd in kaart moeten brengen. Een service blueprint maakt het onzichtbare zichtbaar door rollen, contactmomenten, beslissingsmomenten, afhankelijkheden en mogelijke faalpunten weer te geven in één overzichtelijk diagram.

Het diagram omvat:

- Customer journey en contactmomenten: acties van boeren en interacties met adviseurs.
- Acties op de voorgrond: directe activiteiten van adviseurs, zoals bezoeken, workshops, demonstraties of telefoongesprekken.
- Acties op de achtergrond: coördinatie, gegevensverwerking, ontwerp van trainingen en communicatie ter ondersteuning van de dienstverlening.
- Ondersteunende systemen en middelen: digitale tools, budgetten en indicatoren.

Adviseurs kunnen service blueprints gebruiken om adviesdiensten te ontwerpen, acties te plannen voor de introductie van klimaatvriendelijke praktijken en de coördinatie tussen actoren te verbeteren (bijvoorbeeld gemeenten voor vergunningen of subsidieaanvragen). De tool helpt ook om te bepalen welke ondersteunende middelen bij elke stap worden gebruikt of nodig zijn. Het kan dienen als een trainingsvorm voor nieuwe adviseurs om gestandaardiseerde processen te garanderen en, met eenvoudige meetcriteria gekoppeld aan belangrijke contactmomenten, fungeren als een monitoringtool om de acceptatie, belemmeringen en effecten in de loop van de tijd bij te houden.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Innovation tools are practical methods, instruments, and digital resources that help advisors guide the transition to climate-smart agriculture. In the **ClimateSmartAdvisors project**, these tools were introduced in coaching sessions with advisors of Multi-actor Innovation Projects to address gaps in advisory activities.

One such tool is the **service blueprint**, a visual method that maps how a service is delivered from the farmer's perspective, including all actors, steps, and supporting resources. For advisors, this means detailing every stage of an advisory service or innovation process—from farmer needs and frontstage interactions to backstage processes, digital tools, physical inputs, and indicators of success. A service blueprint makes the invisible visible by showing roles,

touchpoints, decision moments, dependencies, and possible failure points in a single, easy-to-read diagram.

A typical blueprint diagram includes:

- **Customer journey and touchpoints:** farmer actions and interactions with advisors.
- **Frontstage actions:** direct advisor activities such as visits, workshops, demonstrations, or calls.
- **Backstage actions:** coordination, data processing, training design, and communication supporting delivery.
- **Supporting systems and resources:** digital tools, templates, budgets, living labs, equipment, and partners.

Advisors can use service blueprints to design advisory services, plan clear actions for introducing climate-smart practices, and improve coordination between actors (e.g., municipalities for permits or grant applications). The tool also helps identify which supporting resources are in use or needed at each step. It can serve as a training map for new advisors to ensure standardized processes and, with simple metrics attached to key touchpoints, act as a monitoring tool to track adoption, barriers, and impacts over time.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description:

What is a service blueprint

URL:

<https://essense.eu/wat-is-een-service-blueprint/>

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PRACTICE ABSTRACT NUMBER #9

TITLE IN NATIVE LANGUAGE

Scenario's: een innovatietool dat adviseurs kan inspireren tot strategisch denken

TITLE IN ENGLISH

Scenarios - Innovation Tool that can Inspire Advisors in Strategic Thinking

GEOGRAPHICAL LOCATION (IF RELEVANT)

Not relevant.

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Innovation tools
2. Strategic tools
3. Scenarios

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Innovatietools zijn praktische methoden, instrumenten en digitale hulpmiddelen die adviseurs kunnen ondersteunen bij de transitie naar klimaatslimme landbouw door de ontwikkeling en verspreiding van klimaatslimme innovaties. In het Climate Smart Advisors-project werden deze tools tijdens coaching sessies aan adviseurs van multi-actor innovatieprojecten gepresenteerd om hiaten in adviesactiviteiten aan te pakken.

Scenario's zijn een innovatietool die adviseurs en belanghebbenden helpt bij strategische planning door mogelijke toekomstige trajecten voor hun innovatieactiviteiten te verkennen en te bekijken hoe deze hen kunnen beïnvloeden.

Het proces bestaat uit vier hoofdstappen:

1. **Identificeer drivers** – zoals demografische veranderingen, marktveranderingen, technologische vooruitgang, verschuivingen in de politiek of klimaatpatronen, die adviseurs in scenario's kunnen integreren om ervoor te zorgen dat deze realistisch zijn.
2. **Identificeer impactvolle onzekerheden** – Kies de twee belangrijkste onbekende factoren die de grootste impact zullen hebben op de innovatieactiviteiten.
3. **Ontwikkel scenario's** – Gebruik deze twee onzekerheden in een 2x2-matrix met de kritieke onzekerheden als as (zie figuur 1). Afhankelijk van de richting van de onzekerheden (positief of negatief op de as) kunnen vier mogelijke toekomstscenario's worden gecreëerd.
4. **Bespreek de gevolgen** – Bespreek wat elk scenario zou betekenen en pas de doelstellingen en strategieën van de innovatieactiviteiten dienovereenkomstig aan. Binnen elk scenario kan een SWOT-benadering worden gebruikt om de sterke en zwakke punten, kansen en bedreigingen in kaart te brengen. Dit leidt tot de ontwikkeling van belangrijke aanbevelingen voor elk scenario om een brug te slaan tussen de beschreven toekomst en de huidige strategische uitdagingen.

Innovatie-instrumenten zoals scenarioplanning versterken de capaciteit van adviseurs om te anticiperen op onzekerheden en veerkrachtige strategieën voor klimaatslimme landbouw te ontwerpen. Door deze tools toe te passen binnen het Climate Smart Advisors-project kunnen adviseurs en belanghebbenden toekomstige uitdagingen koppelen aan huidige strategieën, waardoor effectievere innovatieactiviteiten in multi-actorprojecten worden gewaarborgd.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Innovation tools are practical methods, instruments, and digital resources that can support advisors in the transition to climate smart agriculture by the development of climate smart innovations. In the ClimateSmartAdvisors project, these tools were presented to advisors of Multi-actor Innovation Projects in coaching sessions to address gaps in advisory activities.

Scenarios is an innovation tool that helps advisors and stakeholders in strategic planning by exploring possible future pathways for their innovation activities and how these might affect them.

The process has **four main steps**:

1. **Identify driving forces** - such as demographic changes, market changes, technological advances, shifts in politics or climate patterns, which advisors can integrate into scenarios to ensure they are grounded in reality.
2. **Identify critical uncertainties** - Choose the two most important unknowns that will have the biggest impact on innovative activities.
3. **Develop scenarios** - Use those two uncertainties in a 2x2 matrix with the critical uncertainties as axis (see Figure1). Depending on the direction of the uncertainties (positive or negative on the axis) four possible future situations can be created
4. **Discuss implications** - Talk about what each scenario would mean and adjust the goals and strategies of the innovative activities accordingly. A SWOT approach within each scenario to identify its strengths, weaknesses, opportunities, and threats could be used. This leads to developing main recommendations for each scenario to create a bridge between the future described and present strategy challenges.

Innovation tools such as scenario planning strengthen advisors' ability to anticipate uncertainties and design resilient strategies for climate smart agriculture. By applying these tools within the ClimateSmartAdvisors project, advisors and stakeholders can bridge future challenges with present strategies, ensuring more effective innovation activities in Multi-actor projects.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description:

Literature review about Scenario planning

URL:

https://www.researchgate.net/publication/343722823_Scenario_Planning_A_Literature_Review

Title/Description:

A worksheet for implementation of the scenarios tool

URL:

<https://www.gov.uk/government/publications/scenarios-facilitation-worksheet/scenarios-facilitation-worksheet>

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PRACTICE ABSTRACT NUMBER #62

TITLE IN NATIVE LANGUAGE

Additifs alimentaires destinés à réduire les émissions de méthane dans l'élevage laitier : témoignages sur les approches soutenues par l'industrie

TITLE IN ENGLISH

Feed Additives for Methane Reduction in Dairy Farming: Testimonials from Industry-Supported Approaches

GEOGRAPHICAL LOCATION (IF RELEVANT)

France and Switzerland

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Benoît Rouillé (Idele) - benoit.rouille@idele.fr

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Use of feed additives to reduce methane emissions
2. Rewarding their use in a global strategy
3. Bringing official and concrete testimonials to the debate

THEMATIC AREA

Additives for reducing methane emissions

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Ce webinaire CSA-CFD répond au défi de réduire les émissions de méthane entérique des vaches laitières sans compromettre la productivité ni la durabilité économique des exploitations. Il apporte des témoignages précieux et met en avant une opportunité concrète pour les éleveurs : s'engager dans des démarches utilisant des additifs alimentaires, soutenue par les entreprises laitières et intégrée dans des filières valorisant le lait à plus faible impact climatique.

Le projet montre, à travers les témoignages de deux entreprises laitières en France et en Suisse, que la réduction du méthane peut être facilitée par des dispositifs d'accompagnement portés par les acteurs de la filière. Ces dispositifs reposent notamment sur le financement direct des additifs ou sur une meilleure rémunération du lait liée à sa valeur environnementale. Les deux démarches poursuivent le même objectif : diminuer les émissions de méthane des élevages laitiers grâce à des solutions concrètes, déjà mobilisables sur le terrain.

En pratique, cette expérience montre que l'adoption de ces solutions est d'autant plus possible qu'elle s'inscrit dans une action collective entre éleveurs, laiteries et autres acteurs de la chaîne de valeur. Pour les praticiens, l'intérêt principal réside dans l'accès à des leviers opérationnels de réduction des émissions, compatibles avec le maintien des performances. Les bénéfices attendus sont une amélioration de la performance environnementale des élevages, une possible valorisation économique du lait et un renforcement de l'engagement des filières dans la transition climatique. Les principales contraintes concernent le coût des additifs, les modalités de financement, l'acceptabilité des solutions et leur adaptation aux contextes locaux.

Ce travail leur permet de mieux appréhender, pour les différentes cibles, l'utilisation des compléments alimentaires dans les élevages de ruminants, ainsi que les conditions de leur mise en œuvre dans des démarches de réduction des émissions de méthane.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This ClimateSmartAdvisors and Climate Farm Demo thematic webinar "Feed additives for methane reduction -Testimonials from dairy industries" addressed the challenge of reducing enteric methane emissions from dairy cows without compromising farm productivity or economic sustainability. It provides valuable testimonials and highlights a concrete opportunity for farmers: engaging in approaches based on feed additives, supported by dairy companies and integrated into value chains that promote milk with a lower climate impact.

Through testimonials from two dairy companies in France and Switzerland, the project shows that methane reduction can be facilitated by support schemes developed by value chain stakeholders. These schemes include direct funding for feed additives or higher milk prices linked to the environmental value of lower-emission milk. Both approaches pursue the same objective: reducing methane emissions from dairy farming through concrete solutions that are already applicable on farms.

In practice, this experience shows that the adoption of these solutions is all the more feasible when it is part of collective action involving farmers, dairy companies and other value chain

actors. For practitioners, the main interest lies in access to operational mitigation measures that are compatible with maintaining performance. Expected benefits include improved environmental performance of farms, possible added economic value for milk, and stronger engagement of the dairy sector in the climate transition. The main constraints relate to the cost of additives, funding mechanisms, acceptance of the solutions, and their adaptation to local contexts.

This work helps the different target groups to better understand the use of feed supplements in ruminant farming systems, as well as the conditions for their implementation in methane mitigation strategies.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

“Feed additives for methane reduction -Testimonials from dairy industries” thematic webinar

URL:

<https://www.youtube.com/watch?v=oTS8XednMxM&t=133s>

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PRACTICE ABSTRACT NUMBER #77

TITLE IN NATIVE LANGUAGE

Integrarea măsurilor climatice de și a celor de natură economică într-un singur obiectiv – inovarea în fermele de păsări.

TITLE IN ENGLISH

Integrate Climate-Friendly and Economic-Driven Actions into a Common Goal - Innovation in Poultry Farms

GEOGRAPHICAL LOCATION (IF RELEVANT)

South-East Romania

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS *

1. Maintain engagement
2. Stimulate innovation
3. Compensate the insufficiency of rewarding mechanisms

THEMATIC AREA

Rewarding mechanisms, herd management.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Discuțiile din cadrul Comunităților de Practici care activează în România în cadrul proiectului Climate Smart Advisors au relevat că lipsa/insuficiența mecanismelor de recompensare pentru fermieri și gradul scăzut de conștientizare a consumatorilor cu privire la problemele legate de schimbările climatice pot afecta serios adoptarea unor practici prietenoase din punct de vedere climatic de către fermele zootehnice din unele țări. De asemenea, au evidențiat faptul că gradul ridicat de concurență din unele sectoare, cum ar fi industria avicolă, poate juca un rol important.

În acest context, consultanții agricoli cu preocupări în domeniu agriculturii inteligente climatic se confruntă cu dificultăți în a-i convinge pe fermieri să implementeze practici de management al fermelor direcționate exclusiv către obiective legate de climă, în special atunci când costurile suplimentare sunt suportate doar de către fermieri - deoarece nu există mecanisme directe de recompensare, iar eventualul succesul al produselor alimentare (ouă/carne) etichetate “cu emisii reduse de carbon” pe piață este incert.

Pe de altă parte, dintre potențialele acțiuni prietenoase din punct de vedere climatic ce ar putea fi implementate într-o fermă avicolă, unele pot avea beneficii duble (atât din punct de vedere climatic, cât și economic), cum ar fi investițiile în instalații de biogaz sau în instalații fotovoltaice, valorificarea superioară a gunoiului de grajd, implementarea nutriției de precizie etc.

Cu toate acestea, în zonele în care cultura inovării este mai puțin dezvoltată, unii manageri de ferme sunt mai puțin dispuși să schimbe practicile de management agricol care s-au dovedit a fi eficiente și care asigură profitabilitatea, mai ales atunci când schimbarea/inovarea implică noi investiții sau riscuri potențiale asociate implementării rezultatelor cercetării cu un TRL mai mic de 8-9.

Pe de altă parte, în multe țări există programe locale, finanțate public, cu implicarea mai multor actori, care consultanții agricoli cu preocupări în domeniu agriculturii inteligente climatic au oportunitatea de a acționa ca facilitatori, de exemplu, bazându-se pe activitatea Comunităților de Practici (CoP) din cadrul proiectului Climate Smart Advisors, pentru a pune în legătură cercetătorii, producătorii de furaje, crescătorii de animale, procesatorii de alimente etc.

În contextul menționat, astfel de activități au șanse mari de a stimula constituirea de consorții și implementarea de proiecte CDI (de cercetare-dezvoltare-inovare) ce conduc la inovare durabilă - de exemplu, prin utilizarea resurselor furajere locale și implementarea nutriției de precizie în scopul de a diversifica produse alimentare puse pe piață de fermele avicole, ținând seama atât obiectivele economice, cât și de cele legate de climă.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Discussions within the Romanian Communities of Practice in the ClimateSmartAdvisors project highlighted that weak farmer incentives and low consumer awareness of climate change can seriously hinder the uptake of climate-friendly practices in livestock farming. They also showed that strong competition in sectors such as poultry plays an important role.

In this context, climate smart advisors have difficulties in persuading farmers to implement farm management practices that are directed toward climate-related objectives only, especially when supplementary costs are supported by the farmers only - as no direct rewarding mechanisms are available and the potential success of low-carbon products (eggs/meat) on the market is uncertain.

Poultry farms can adopt a range of climate-friendly actions, some of which offer both environmental and economic benefits. Examples include investing in biogas facilities or photovoltaics, improving manure valorisation, and implementing precision feeding.

In areas where innovation culture is less developed, some farm managers are less willing to change farm management practices that proved to be efficient and ensure profitability, especially when the change implies new investments or potential risks associated to the implementation of R&D results having TRL lower than 8-9.

In many countries, publicly funded multi-actor programs aim to stimulate innovation. In this context, climate-smart advisors can play an important facilitation role, for example by building Communities of Practice (CoPs) to connect researchers, feed producers, livestock farmers, food processors, and other relevant actors. Such collaboration can help form consortia and develop RDI projects that drive sustainable innovation, such as the use of local feed resources and precision feeding to diversify poultry products while addressing both economic and climate objectives.

ADDITIONAL INFORMATION

Take Home Messages for potentially interested actors:

- the specific R&D risk is covered by the public financing;
- innovation can be implemented gradually, minimizing the farmers' risks;
- (climate smart) advisors will assist the farmers all through the process;
- innovation boost competitiveness;
- such projects are a practical-level validation of the research results.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Romanian ClimateSmartAdvisors Community of Practice - Climate Smart Practices for Poultry Sector

URL:

<https://climatesmartadvisors.eu/cops/climate-smart-practices-for-poultry-sector/>

8.7 Embedding Climate Action into AKIS

This cluster includes PAs that address the wider integration of climate action into AKIS. It covers approaches related to institutional development, governance models, actor engagement, strategic embedding and strengthening the enabling environment for climate-smart advisory work. The cluster is relevant for outputs that move beyond individual practices and contribute to more systemic change in advisory structures and support mechanisms.



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The logo graphic for Climate Smart Advisors features several concentric, overlapping circular arcs in shades of teal, blue, and yellow, creating a sense of motion and connectivity.

PRACTICE ABSTRACT NUMBER #51

TITLE IN NATIVE LANGUAGE

Van mapping naar actie: een 6-stappenaanpak voor het verankeren van klimaatslim advies in AKIS

TITLE IN ENGLISH

From Mapping to Action: A 6-step Approach to Embed Climate-smart Advice in AKIS

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Marleen Gysen - marleen.gysen@boerenbond.be

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS.

1. Ensures all relevant actors are mapped and engaged.
2. Focuses resources on the most influential and interested stakeholders.
3. Provides a clear, repeatable process for national and regional coordinators.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Betrokkenheid van sleutelactoren binnen het nationale Klimaatslim Agrarische Kennis- en Innovatiesysteem (CS-AKIS) —zoals boeren, adviseurs, onderzoekers, beleidsmakers, technologieaanbieders en het brede publiek— is essentieel voor de effectieve implementatie van klimaatslim advies en klimaatslimme landbouw. Deze betrokkenheid bevordert co-creatie, wederzijds leren en kennisuitwisseling, en versterkt zo de capaciteit van adviseurs om klimaatslim advies te geven. Bovendien faciliteert het de opschaling van de resultaten van het CSA-project en draagt het bij aan de inbedding van het CSA-netwerk en de resultaten binnen CS-AKIS, zowel tijdens als na afloop van het project.

Het CSA-project ontwikkelde daarom een 6-stappenplan voor Nationale Coördinatoren en Klimaatslimme Coaches om CS-AKIS actoren te activeren en engageren. Eerst worden hefboomen en barrières geanalyseerd met tools zoals PESTLE om de factoren te begrijpen die klimaatactie in de landbouw beïnvloeden. Dan worden CS-AKIS-actoren—individuen en organisaties die invloed hebben op of beïnvloed worden door klimaatslimme landbouw—geïdentificeerd en geregistreerd. Deze actoren worden gecategoriseerd en geprioriteerd met behulp van een Stakeholder Analyse Matrix, met de focus op degenen met de meeste interesse en invloed. Daarna wordt een op maat gemaakt communicatie- en engagementplan ontwikkeld, met passende activiteiten en kanalen voor elke groep, zoals workshops voor sleutelfiguren en nieuwsbrieven voor passieve stakeholders. Tot slot worden deze activiteiten gemonitord en geëvalueerd, en wordt het plan aangepast op basis van feedback en veranderende omstandigheden.

Deze gestructureerde aanpak gaat verder dan het enkel in kaart brengen van CS-AKIS-actoren. Het gaat om het analyseren en begrijpen van deze actoren, wat cruciaal is voor het ontwikkelen van gerichte communicatie- en engagementstrategieën. Het ondersteunt ook het risicomanagement door het proactief aanpakken van zorgen en het benutten van kansen.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Engagement with key actors within the national Climate Smart Agricultural Knowledge and Innovation System (CS-AKIS), including farmers, advisors, researchers, policy makers, technology providers, and the general public, is essential for the successful implementation of climate-smart advising and farming. It fosters co-creation and mutual learning, thereby strengthening advisors' capacity to provide climate-smart advice.

The CSA project therefore developed a 6-step approach for National Coordinators and Climate Smart Coaches to activate and engage CS-AKIS actors.

1. Levers and barriers: First, analyse levers and barriers using tools like PESTLE to understand the enabling and limiting factors for climate action in agriculture. This precedes actor identification, as it clarifies the context in which CS-AKIS actors operate and helps determine which actors are most relevant to engage.
2. Identification: Next, identify CS-AKIS actors - individuals and organisations who influence or are impacted by climate-smart farming.
3. Registration: Register their contact and expertise details.
4. Categorisation and prioritisation: Categorise and prioritise these actors using a Stakeholder Analysis Matrix, focusing resources on those with the highest interest and

influence.

5. Communication and engagement plan: Develop a tailored plan, selecting appropriate activities and channels for each actor group, such as workshops for key influencers and newsletters for passive stakeholders.
6. Monitoring and evaluation: Finally, monitor and evaluate engagement activities, adapting the plan based on feedback and changing circumstances.

This structured approach goes beyond merely listing CS-AKIS actors. It involves analysing and understanding them, which is crucial for developing tailored communication and engagement strategies. Additionally, this approach aids in risk management by anticipating stakeholder impacts, allowing proactive addressing of concerns, and leveraging opportunities.

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PRACTICE ABSTRACT NUMBER #52

TITLE IN NATIVE LANGUAGE

Barrières en hefboomen voor klimaatslim advies in kaart brengen met PESTLE

TITLE IN ENGLISH

Spotting Barriers and Enablers for Climate-Smart Advice with PESTLE

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS.

1. Identifies policy, financial, and knowledge barriers for climate-smart advice.
2. Highlights concrete opportunities to integrate climate action in AKIS.
3. Guides the selection of relevant stakeholders and engagement strategies.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Het betrekken van sleutelactoren binnen het nationale Klimaatslim Agrarische Kennis- en Innovatiesysteem (CS-AKIS) —zoals boeren, adviseurs, onderzoekers, beleidsmakers, technologieaanbieders en het brede publiek—is essentieel voor effectief klimaatslim advies en klimaatslimme landbouw. Het CSA-project ontwikkelde daarom een 6-stappenplan voor Nationale Coördinatoren en Klimaatslimme Coaches om CS-AKIS-actoren te activeren en te engageren.

Voordat actoren worden geïdentificeerd, is een grondige analyse -door de CSA partners en CoP leden- van het huidige landschap rond klimaatmitigatie en -adaptatie in de landbouw nodig. Dit omvat het signaleren van kansen voor klimaatslimme praktijken en het aanpakken van barrières zoals beleidsbeperkingen, financiële beperkingen en kennishiaten. Welke externe factoren moeten worden meegenomen? Welke factoren beïnvloeden het stimulerende klimaat?

Gezien de complexiteit van deze externe factoren is het Politiek, Economisch, Sociaal, Technologisch, Legaal en Ecologisch (PESTLE) raamwerk een handige tool om de analyse te structureren. PESTLE richt zich op het identificeren van externe elementen—politiek, economisch, sociaal, technologisch, legaal en ecologisch—waar vaak weinig controle over is, maar die een grote invloed kunnen hebben op klimaatslimme praktijken. Je maakt een matrix met elke PESTLE-categorie als kolom en je lijst systematisch de relevante factoren, barrières en kansen onder elke hoofding op. Dit visuele overzicht helpt om de belangrijkste externe invloeden op klimaatslim advies en landbouw te bespreken, prioriteren en aanpakken.

Een zorgvuldige analyse maakt proactief handelen mogelijk om valkuilen te vermijden en nieuwe kansen te benutten. Door een PESTLE-analyse uit te voeren, worden elementen geïdentificeerd die een duidelijker beeld geven van de factoren die klimaatslimme praktijken beïnvloeden. Deze kennis helpt om de voorwaarden en CS-AKIS actoren te bepalen die nodig zijn om klimaatacties in CS-AKIS te verankeren.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Engaging key actors within the national Climate Smart Agricultural Knowledge and Innovation System (CS-AKIS), such as farmers, advisors, researchers, policy makers, technology providers, and the general public, is vital for effective climate-smart advising and climate-smart farming. The CSA project developed a 6-step approach for National Coordinators and Climate Smart Coaches to activate and engage CS-AKIS actors.

Before identifying these actors, a careful analysis of the current landscape for climate change mitigation and adaptation in agriculture should be carried out by the national CSA project partners, together with the CoPs and CODIES actors. This includes spotting opportunities for climate-smart practices and addressing barriers like policy constraints, financial limitations, and knowledge gaps. What external factors should be taken into account? What factors impact the enabling environment?

Given the complexity of these external factors, the Political, Economic, Social, Technological, Legal and Environmental (PESTLE) framework is a helpful tool for structuring the analysis. PESTLE focuses on identifying key external elements - political, economic, social, technological, legal and environmental - over which there is little control, but which may

EMBEDDING CLIMATE ACTION INTO AKIS

significantly impact CS practices. To apply the PESTLE analysis, create a matrix with each PESTLE category as a column and systematically list the relevant factors, barriers, and opportunities under each heading. This visual overview helps teams discuss, prioritise, and address the most important external influences on climate-smart advising and farming.

Careful analysis enables proactive action to avoid potential pitfalls and seize new opportunities. By conducting a PESTLE analysis, elements are identified that provide a clearer view of the factors affecting CS practices. Knowing them helps to identify and select the conditions and stakeholders needed to embed climate practices in CS-AKIS.

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PRACTICE ABSTRACT NUMBER #53

TITLE IN NATIVE LANGUAGE

Warme netwerken, echte mensen: gebruik van de Netwerkanalysetool om CS-AKIS actoren te mobiliseren

TITLE IN ENGLISH

Warm Networks, Real people: Using Network Analysis to mobilise CS-AKIS actors

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Targeted engagement focuses on the right people for maximum impact.
2. Stronger networks build connections that unlock resources and expertise.
3. Risk management anticipates reactions and reduces potential obstacles.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Het betrekken van sleutelactoren binnen het nationale Klimaatslim Agrarische Kennis- en Innovatiesysteem (CS-AKIS)—zoals boeren, adviseurs, onderzoekers, beleidsmakers, technologieaanbieders en het brede publiek—is vitaal voor effectief klimaatslim advies en klimaatslimme landbouw. Het CSA-project ontwikkelde daarom een 6-stappenplan voor Nationale Coördinatoren (NCs) en Klimaatslimme Coaches (CSCs) om CS-AKIS-actoren te activeren en te engageren.

Het identificeren van actoren betekent het herkennen van individuen of organisaties die betrokken zijn bij praktijken, onderzoek of beleid rond klimaatslimme landbouw. Wie moeten we activeren? Welke actoren kunnen bijdragen of invloed uitoefenen op CSA-activiteiten?

De Netwerkanalysetool helpt om diverse actoren te visualiseren die essentieel zijn voor een succesvolle uitvoering van klimaatslimme advisering en landbouw ("het initiatief"):

1. Plaats het initiatief in het midden van een groot blad.
2. Trek hier een cirkel rond en noteer factoren die cruciaal zijn voor succes (bijv. financiering, regelgeving, expertise, publieke opinie). Tip: gebruik de PESTLE-analyse (PA60) als input.
3. Noteer de actoren die deze factoren kunnen beïnvloeden (bijv. eindgebruikers, regelgevende instanties, kennisinstellingen, journalisten). Deze kunnen actief bijdragen (leveranciers van financiering, expertise) of profiteren van het initiatief (gebruikers). Focus op individuen, niet op instellingen—mensen zorgen voor vooruitgang.
4. Plaats partners rond het initiatief die zich eigenaar voelen en verantwoordelijkheid nemen (zoals NCs, CSCs).
5. Identificeer verbindende personen die je toegang kunnen geven tot andere actoren, ook als ze nog niet betrokken zijn. Stel jezelf de vragen: Wie kan verbindingen leggen? Welke verbindingen moeten versterkt worden?
6. Maak een actieplan: wie neemt contact op met wie?

De Netwerkanalyse voor CSA-AKIS heeft als doel warme netwerken op te bouwen—relaties tussen mensen die dingen in beweging kunnen zetten.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Engaging key actors within the national Climate Smart Agricultural Knowledge and Innovation System (CS-AKIS), such as farmers, advisors, researchers, policy makers, technology providers, and the general public, is vital for effective climate-smart advising and climate-smart farming. The CSA project developed a 6-step approach for National Coordinators (NCs) and Climate Smart Coaches (CSCs) to activate and engage CS-AKIS actors.

Identifying actors means recognising individuals or organisations involved in practices, research, or policies that promote climate-smart farming. Who needs to be activated? Which actors can contribute or influence CSA activities?

The Network Analysis tool helps the NCs and CSCs to visualise and identify diverse actors essential for successful implementation of climate-smart advising and farming ("the initiative"). To apply it:

1. Put the initiative in the centre of a large sheet,.

EMBEDDING CLIMATE ACTION INTO AKIS

2. Draw a circle around it and list factors crucial for success (e.g., funding, regulation, expertise, public opinion). Tip: use PESTLE analysis (PA60) for input.
3. For each factor, record actors who can manage or influence it (e.g., end-users, regulatory authorities, knowledge institutions, journalists). These actors can contribute actively (suppliers providing finance, expertise) or benefit from the initiative (users). Who should be involved? Who may be impacted or have influence? Whose reactions matter? Focus on individuals, not institutions-people drive progress.
4. Place partners around the initiative who feel ownership and responsibility (such as NCs, CSCs).
5. Identify connectors who can link you to other actors, even if not yet involved. Who can make connections? Which connections should be improved?
6. Make an action plan: who will contact whom?

The Network Analysis for CSA-AKIS aims to build warm networks - relationships between people who can make things happen.

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PRACTICE ABSTRACT NUMBER #54

TITLE IN NATIVE LANGUAGE

Stakeholderanalyse-matrix: Prioriteren van betrokkenheid voor klimaatactie

TITLE IN ENGLISH

Stakeholder Analysis Matrix: Prioritising Engagement for Climate Action

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

Marleen Gysen - marleen.gysen@boerenbond.be

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS.

1. Helps focus engagement efforts on the most important and influential stakeholders.
2. Improves resource allocation by identifying which groups need more attention.
3. Supports risk management by making it easier to anticipate stakeholder reactions and plan accordingly.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Het betrekken van sleutelactoren binnen het nationale Climate-Smart Agricultural Knowledge and Innovation System (CS-AKIS), zoals landbouwers, adviseurs, onderzoekers, beleidsmakers, technologieaanbieders en het brede publiek, is essentieel voor effectieve klimaatslimme advisering en landbouw. Het CSA-project ontwikkelde daarom een 6-stappenaanpak voor Nationale Coördinatoren en Climate Smart Coaches om CS-AKIS-actoren te activeren en te betrekken.

Om de betrokkenheid doeltreffend te organiseren, is het nodig deze actoren te categoriseren en te prioriteren op basis van hun relevantie voor klimaatslimme advisering en landbouw. Stakeholderbetrokkenheid is resource-intensief en niet alle actoren hebben dezelfde mate van interesse in of invloed op klimaatactie. De Stakeholderanalyse-matrix (matrix van Mendelow) is een praktisch hulpmiddel om dit proces te ondersteunen.

De matrix helpt om CS-AKIS-actoren - geïdentificeerd via de Netwerkanalyse (Practice Abstract 61) - te positioneren op basis van twee criteria: **interesse** en **invloed**. In de context van klimaatslimme advisering verwijst *interesse* naar de motivatie om zich in te zetten voor klimaatactie (bv. mitigatie, adaptatie of weerbaarheid), terwijl *invloed* slaat op het vermogen om beslissingen, beleid, investeringen of adviesprioriteiten met betrekking tot klimaatslimme landbouw te sturen.

Op basis hiervan worden vier prioritaire groepen onderscheiden:

1. **Sleutelactoren:** hoge interesse, hoge invloed — nauwe betrokkenheid en partnerschap.
2. **Influencers:** hoge invloed, lage interesse —tevreden en geïnformeerd houden.
3. **Geïnteresseerde actoren:** hoge interesse, lage invloed — informeren en waar mogelijk betrekken.
4. **Passieve actoren:** lage interesse, lage invloed —minimale maar respectvolle communicatie.

Deze oefening maakt zichtbaar welke actoren cruciaal zijn, welke nog onvoldoende betrokken zijn en ondersteunt risicobeheer en samenwerking.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Engaging key actors within the national Climate-Smart Agricultural Knowledge and Innovation System (CS-AKIS), such as farmers, advisors, researchers, policy makers, technology providers, and the general public, is vital for effective climate-smart advising and farming. The CSA project developed a 6-step approach for National Coordinators and Climate Smart Coaches to activate and engage CS-AKIS actors.

To ensure effective engagement, these actors need to be categorised and prioritised according to their relevance for climate-smart advising and farming. Stakeholder engagement is **resource-intensive**, and not all actors have the same level of interest in or influence on climate action. The Stakeholder Analysis Matrix (Mendelow's matrix) is a practical tool to support this process.

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This matrix helps **assess and plot** CS-AKIS actors-identified through the Network Analysis (Practice Abstract 61)-according to two key criteria: **interest** and **influence**. In the context of climate-smart advising, *interest* refers to an actor's motivation to engage with climate action (e.g. mitigation, adaptation, or resilience), while *influence* refers to their ability to shape decisions, policies, investments, or advisory priorities related to climate-smart farming.

By mapping actors on the matrix, four priority groups emerge:

1. **Key stakeholders**: high interest, high influence - these require close engagement and partnership.
2. **Influencers**: high influence, low interest - these should be kept satisfied and informed.
3. **Interested stakeholders**: high interest, low influence - these should be kept informed and involved where possible.
4. **Passive stakeholders**: low interest, low influence - these require minimal but respectful communication.

This exercise makes visible who the most important and influential actors are and highlights those who are important but not yet engaged. It also supports risk management by anticipating potential reactions and identifying opportunities for collaboration.

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PRACTICE ABSTRACT NUMBER #55

TITLE IN NATIVE LANGUAGE

Opstellen en monitoren van een Communicatie- en Engagementplan voor CS-AKIS

TITLE IN ENGLISH

Building and Monitoring a CS-AKIS Communication & Engagement Plan

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Engages the most relevant stakeholders for greater project impact.
2. Improves communication and builds trust within the network.
3. Allows quick adjustments to address challenges and opportunities.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Het betrekken van sleutelactoren binnen het nationale Klimaatslim Agrarische Kennis- en Innovatiesysteem (CS-AKIS)—zoals boeren, adviseurs, onderzoekers, beleidsmakers, technologieaanbieders en het brede publiek—is vitaal voor effectief klimaatslim advies en klimaatslimme landbouw. Het CSA-project ontwikkelde daarom een 6-stappenplan voor Nationale Coördinatoren (NCs) en Klimaatslimme Coaches (CSCs) om CS-AKIS-actoren te activeren en te engageren.

Een gestructureerd Communicatie- en Engagementplan is essentieel voor het beheren van het engagement van deze actoren tijdens het CSA-project. Na het in kaart brengen en prioriteren van de actoren (PA61 en PA62), is de volgende stap het ontwikkelen van een strategisch plan dat beschrijft hoe elke groep wordt betrokken en via welke kanalen.

Belangrijke stappen bij het opstellen van het plan:

- Bepaal doelstellingen: geef duidelijk aan wat je met elke stakeholdergroep wilt bereiken, op basis van hun interesse en invloed.
- Maak activiteiten op maat: ontwerp activiteiten en kies communicatiekanalen die aansluiten bij de behoeften en rollen van elke groep. Nodig bv. sleutelactoren uit voor workshops of demo-events, terwijl passieve actoren voldoende hebben aan regelmatige updates via nieuwsbrieven.
- Wijs verantwoordelijkheden toe: geef aan wie (NC's, CSC's of partners) verantwoordelijk is voor wat.
- Plan activiteiten: zet ze op een tijdlijn, zodat ze aansluiten bij de projectmijlpalen en deadlines.
- Monitoren en evalueren: Beoordeel regelmatig of de juiste stakeholders worden bereikt, of de prioritering moet worden aangepast en of er nieuwe externe factoren zijn ontstaan. Werk het plan bij waar nodig om effectief te blijven.

Het plan moet een levend document zijn, jaarlijks geactualiseerd en aangepast aan veranderende omstandigheden. Monitoring en evaluatie zijn cruciaal om ervoor te zorgen dat de betrokkenheid doelgericht en effectief blijft, en dat de communicatiedoelstellingen van het project worden behaald.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Engaging key actors within the national Climate Smart Agricultural Knowledge and Innovation System (CS-AKIS), such as farmers, advisors, researchers, policy makers, technology providers, and the general public, is vital for effective climate-smart advising and climate-smart farming. The CSA project developed a 6-step approach for National Coordinators (NCs) and Climate Smart Coaches (CSCs) to activate and engage CS-AKIS actors.

A well-structured Communication and Engagement Plan is essential for managing the involvement of these actors throughout the CSA project lifecycle. This plan supports the overall national CSA Communication and Dissemination Plan. Following the mapping and prioritisation of stakeholders (Practice Abstracts 61 and 62), the plan translates insights into targeted engagement actions for each stakeholder group.

Key steps for building the plan:

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- Define objectives: Clearly state what you want to achieve with each stakeholder group, based on their interest and influence.
- Tailor engagement activities: Design specific activities and select communication channels that match the needs and roles of each group. For example, key actors may require invitations to workshops or demo events, while passive actors might only need regular updates via newsletters.
- Assign responsibilities: Specify who (NCs, CSCs, or partners) will be responsible for each engagement activity.
- Schedule activities: Plan engagement activities on a timeline, ensuring alignment with project milestones and deadlines.
- Monitor and evaluate: Regularly assess whether the right stakeholders are being reached, if prioritisation needs adjustment, and whether new external factors have emerged. Update the plan as needed to remain effective.

The plan should be a living document, updated annually and adapted to changing circumstances. Monitoring and evaluation are crucial to ensure that engagement remains targeted and effective, and that the project's communication goals are met.

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The logo for Climate Smart Advisors features the text "CLIMATE SMART ADVISORS" in a teal, sans-serif font. To the right of the text is a stylized graphic consisting of several concentric, overlapping arcs in shades of teal and yellow, resembling a sun or a stylized 'C' shape.

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PRACTICE ABSTRACT NUMBER #56

TITLE IN NATIVE LANGUAGE

CS-AKIS találkozók alkalmazása stratégiai beavatkozásként a nemzeti szaktanácsadási rendszerek megerősítésére

TITLE IN ENGLISH

Using CS-AKIS Meetings as Strategic Interventions to Strengthen National Advisory Systems

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe – national CS-AKIS meetings across multiple countries

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

András Vér

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Stronger collaboration among AKIS actors
2. Better alignment of advisory services with climate challenges
3. Actionable outcomes beyond single events

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

A klímatudatos mezőgazdasági átállás nem valósítható meg kizárólag technikai megoldásokkal; ehhez hatékony együttműködésre van szükség a szaktanácsadók, gazdálkodók, kutatók, szakpolitikai szereplők és más AKIS szereplők között. A ClimateSmartAdvisors projekt keretében megvalósuló CS-AKIS találkozók olyan közös alkotásra épülő műhelyek, amelyek célja a nemzeti szaktanácsadási rendszerek működésének megerősítése.

A CS-AKIS találkozók nem önálló eseményként, hanem stratégiai beavatkozásként kerülnek megszervezésre, meglévő nemzeti folyamatokhoz – például Community of Practice (CoP) találkozókhoz vagy éves nemzeti rendezvényekhez – kapcsolódva. A fókusz nem az információátadáson, hanem az együttműködési lehetőségekre, kihívásokra, szükségletekre és működő gyakorlatok közös azonosításán van.

A megközelítés egyik kulcseleme a résztvevők tudatos kiválasztása az AKIS-ben betöltött funkciójuk alapján (pl. tudásteremtés, tanácsadás, szakpolitikai kapcsolódás, finanszírozás, hálózatépítés), nem pusztán intézményi hovatartozás szerint. Az interaktív, facilitált módszerek – mint a kiscsoportos munka, brainstorming vagy hálózatelemzés – elősegítik az aktív részvételt és a kölcsönös tanulást.

A tapasztalatok azt mutatják, hogy a CS-AKIS találkozók hozzájárulnak az AKIS szereplők közötti jobb koordinációhoz, a klímamódosítások erősebb beépüléséhez a szaktanácsadási gyakorlatba, valamint konkrét, továbblépést támogató eredmények megszületéséhez. A legfontosabb tanulság, hogy a valódi hatás nem magán az eseményen, hanem a tudatos előkészítésen és az utókövetésen múlik.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Climate-smart transitions in agriculture cannot be achieved through technical solutions alone; they require effective collaboration between advisors, farmers, researchers, policymakers and other AKIS actors. Within the ClimateSmartAdvisors project, national CS-AKIS meetings have been developed as co-creation workshops to strengthen collaboration and improve the functioning of national advisory systems.

Rather than being organised as stand-alone events, CS-AKIS meetings are designed as strategic interventions embedded in existing national processes, such as Communities of Practice (CoPs) or National Annual Meetings. Their main objective is to jointly identify cooperation opportunities, challenges, needs and good practices related to climate-smart advisory services.

A key element of the approach is the targeted selection of participants based on their function within the AKIS, rather than institutional labels alone. Interactive and facilitated formats - including structured group discussions, brainstorming and network analysis - are used instead of one-way presentations to ensure active engagement and mutual learning.

Experiences from several countries show that CS-AKIS meetings can lead to tangible

outcomes, such as improved coordination between advisory actors, better integration of climate topics into advisory practice, identification of missing actors or capacities, and concrete follow-up actions linked to ongoing CoP activities. Meaningful documentation and follow-up are essential to ensure that insights from the meetings contribute to longer-term learning and system development.

For practitioners, the key lesson is that impact starts before the meeting and continues after it. Clear objectives, functional actor engagement and facilitated interaction help ensure that CS-AKIS meetings strengthen collaboration and support climate-smart transitions within national AKIS.

ADDITIONAL INFORMATION

Several facilitating elements support the effective organisation and impact of CS-AKIS meetings.

1. Existing national networks, Communities of Practice (CoPs) and trust-based relationships between AKIS actors provide a strong foundation for collaboration.
2. Linking CS-AKIS meetings to established national events or processes helps increase participation and relevance. Clear objectives, skilled facilitation and the use of interactive methods further enhance engagement and shared ownership of outcomes.

At the same time, some obstacles can limit impact if not addressed.

1. Time constraints and competing priorities of key AKIS actors may reduce availability or continuity.
2. Differences in institutional mandates, expectations or levels of engagement can make collaboration challenging.
3. Without clear follow-up planning, there is also a risk that outcomes remain at the level of discussion rather than leading to concrete action.

To maximise impact, future actions should focus on:

1. strengthening follow-up mechanisms, clarifying roles and responsibilities after the meeting, and ensuring that results are fed back into ongoing advisory and policy processes.
2. Further research could explore how different facilitation approaches or actor configurations influence long-term collaboration and learning within national AKIS.

For end-users, the main message is that CS-AKIS meetings are most effective when treated as part of a longer process rather than a one-off event. Investing time in preparation, facilitation and follow-up helps turn dialogue into sustained collaboration and tangible change.

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The logo graphic for Climate Smart Advisors features several concentric, overlapping arcs in shades of teal, blue, and yellow, creating a sense of movement and connectivity.

PRACTICE ABSTRACT NUMBER #72

TITLE IN NATIVE LANGUAGE

Utilizar los espacios AKIS para conectar y diseminar practicas reales que promuevan la acción climática y las practicas eficientes

TITLE IN ENGLISH

Use AKIS Spaces to Connect and Disseminate Real Practices that Promote Climate Action and Efficient Practices

GEOGRAPHICAL LOCATION (IF RELEVANT)

Basque country - north Spain

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Hands-on learning from real-world practices
2. Fostering critical thinking and context-specific adaptation
3. Strengthening AKIS networks and peer-to-peer knowledge exchange

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

La agricultura europea se enfrenta a retos cada vez mayores relacionados con el cambio climático, la presión sobre los recursos naturales y la necesidad de garantizar la sostenibilidad tanto económica como medioambiental. Este resumen de buenas prácticas aborda la necesidad de acelerar la adopción de prácticas climáticamente inteligentes mediante el uso de AKIS como entornos de aprendizaje en los que agricultores, asesores, investigadores, autoridades públicas y otros actores puedan intercambiar conocimientos y explorar soluciones adaptadas a cada contexto.

Esta iniciativa dinamiza los espacios AKIS mediante prácticas climáticamente inteligentes visibles y observables, así como mediante el aprendizaje en las propias explotaciones. Se reconoce que no todas las prácticas son directamente replicables en todos los territorios, sistemas de producción o contextos socioeconómicos, pero que todas pueden inspirar soluciones adaptadas cuando los participantes pueden observarlas en condiciones reales. La observación directa, la interacción con los agricultores y los asesores, y el debate sobre los resultados prácticos refuerzan la comprensión y fomentan el aprendizaje entre pares... La observación directa, la interacción con los agricultores y los asesores, y el análisis de los resultados prácticos refuerzan la comprensión y fomentan el aprendizaje entre pares.

El enfoque se articula en torno a tres pilares metodológicos; para más información, consulte la sección de información adicional. Las prácticas se seleccionan por su contribución a la mitigación del cambio climático, la adaptación al mismo, la eficiencia en el uso de los recursos, la resiliencia o la biodiversidad, así como por su visibilidad y observabilidad. Las visitas organizadas a explotaciones de demostración, los talleres y las jornadas de campo se complementan con seminarios web, vídeos de demostración y fichas técnicas, lo que permite revisar, compartir y adaptar los conocimientos posteriormente. Los asesores, los agricultores y los facilitadores de AKIS colaboran para identificar elementos transferibles, apoyar la adaptación al contexto y reforzar el aprendizaje colectivo.

Ventajas: un aprendizaje experiencial más profundo, un intercambio de conocimientos más sólido, el fomento del pensamiento crítico y la diversidad de soluciones, y una integración más eficaz de la acción climática en los espacios de AKIS. Los costes se refieren principalmente a la coordinación, la facilitación, la organización de visitas y la preparación de materiales de apoyo. Este enfoque se ha puesto a prueba en los proyectos ClimateSmartAdvisors y Climate Farm Demo.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

European agriculture faces increasing challenges linked to climate change, pressure on natural resources, and the need to ensure both economic and environmental sustainability. This Practice Abstract addresses the need to accelerate the uptake of climate-smart practices by using AKIS as learning environments where farmers, advisors, researchers, public authorities, and other actors can exchange knowledge and explore context-specific solutions.

The practice activates AKIS spaces through visible and observable climate-smart practices and on-farm learning. It recognizes that not all practices are directly replicable across

territories, production systems, or socio-economic contexts, but that all can inspire adapted solutions when participants are able to observe them in real-life conditions. Direct observation, interaction with farmers and advisors, and discussion of practical results strengthen understanding and encourage peer-to-peer learning.

The approach is structured around **three methodological pillars**, see more in additional information section. Practices are selected for their contribution to climate mitigation, adaptation, resource efficiency, resilience, or biodiversity, and for their visibility and observability. Organized visits to demonstration farms, workshops, and field days are complemented by webinars, demonstration videos, and technical sheets, allowing knowledge to be reviewed, shared, and adapted later. Advisors, farmers, and AKIS facilitators work together to identify transferable elements, support contextual adaptation, and strengthen collective learning.

Benefits: deeper experiential learning, stronger knowledge exchange, promotion of critical thinking and diversity of solutions, and more effective integration of climate action into AKIS spaces. Costs mainly relate to coordination, facilitation, organization of visits, and preparation of supporting materials. The approach has been tested in ClimateSmartAdvisors and Climate Farm Demo projects.

ADDITIONAL INFORMATION

The **first methodological pillar, identification of climate-smart practices**, starts with a preliminary assessment of participating farms. It identifies practices that contribute to climate mitigation, such as greenhouse gas reduction, soil carbon sequestration, and energy efficiency; improve climate adaptation, such as resilience to droughts, floods, and extreme events; and enhance resource efficiency, including water, fertilizers, animal feed, and functional biodiversity. Selected practices are chosen for their visibility and observability so participants can directly appreciate results and processes.

The **second methodological pillar, on-farm learning and field visits**, includes organized visits to demonstration farms, workshops, and field days. These activities allow participants to observe climate-smart practices in action, interact with farmers and advisors implementing them, analyze effects on production, soil, biodiversity, and emissions, and discuss adaptability and replication potential in different local contexts. Face-to-face experiences generate connection, trust, and understanding that are difficult to achieve through digital formats alone.

The **third methodological pillar, complementary digital tools**, broadens reach and accessibility through webinars explaining each practice, demonstration videos of processes and outcomes, and technical sheets with implementation guidelines and contextual considerations. This hybrid approach combines the impact of on-farm observation with digital dissemination, ensuring that knowledge can be reviewed and adapted later.

Climate action is further integrated through the selection of practices with proven climate impact, the use of simple and observable performance indicators such as biomass recovered, fertilizer reduction, or increased soil cover, contextual adaptation to different farms and territories, co-creation with advisors and farmers, and dissemination supported by digital tools and feedback sessions.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Spanish ClimateSmartAdvisors Community of Practice - Sustainable Manure and Slurry Management

URL:

<https://climatesmartadvisors.eu/cops/sustainable-manure-and-slurry-management/>

Title/Description

AKISConnect

URL:

<https://akisconnect.eu/en>

Title/Description

AKISConnect - AKIS in Practice

URL:

<https://akisconnect.eu/en/akis-in-practice>

8.8 Monitoring, Learning and Evaluation (ME&L)

This cluster covers PAs related to methods and approaches for assessing progress, capturing learning and supporting reflective improvement within the project and beyond. It includes capacity assessment, monitoring tools, learning-oriented frameworks and evaluation approaches that can help actors better understand progress and adapt their work accordingly. This cluster plays an important role in linking implementation with reflection, evidence and continuous improvement.



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PRACTICE ABSTRACT NUMBER #10

TITLE IN ENGLISH

How do (Climate Smart) Advisors see Themselves?

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Help understanding advisor's role, needs and challenges
2. Open about challenges
3. Exploring skills needed for advisory role

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

This question “*how do participants see themselves as advisors?*” was asked to advisors and other participants in focus groups held in 10 different European countries, where the ClimateSmartAdvisors (CSA) project is active. The purpose of the focus groups was to gain an overview of the experience and the needs of the CSA in their respective contexts regarding their practice of advising Climate Smart Farming (CSF) strategies to the farmers. Here, we summarize the common views, the skills that advisors highlighted as relevant to fulfill their roles and the challenges they encounter in different contexts.

Across countries, farm advisors share a common role: they support farmers but face limited time and tools, and they all need strong communication and up-to-date climate knowledge. See national differences in Additional information section.

Overall, countries differ mainly in how climate advice is delivered (integration vs persuasion vs collaboration) and whether the main barrier is knowledge, tools, time, or farmer engagement.

Common Perceptions Across Countries:

- Advisors see themselves primarily as **supporters of farmers**, not enforcers.
- All make emphasis on **continuous learning** and staying updated on climate-smart practices.
- The need for **soft skills** (empathy, trust-building) alongside technical expertise.
- Challenges include **time constraints, lack of practical tools, and difficulty communicating climate benefits**.

Overall, the focus groups show that farm advisors across Europe share a common understanding of their role as trusted supporters of farmers in the transition toward Climate Smart Farming. While national contexts differ in how climate advice is delivered and what barriers are most prominent, advisors consistently highlight the importance of combining technical climate knowledge with strong communication and relationship-building skills.

ADDITIONAL INFORMATION

Focus group discussion is a qualitative research method where a small group of people discuss a topic, guided by a facilitator. This provides an added dimension of interaction, encouraging them to communicate with each other, exchanging ideas and comments on each other's experiences or points of view. The aim is to obtain knowledge, perspectives, and attitudes from the participants and to understand their perspectives and dynamics. This approach helps researchers to tap in more spontaneous forms of communication, which often show dimensions of understanding inaccessible in other forms of data collection. In this case, the focus groups in each country gave an overview of the experience and the needs of the climate-smart advisors in their respective contexts regarding their practice of advising CSF strategies to the farmers.

Difference across countries:

- **France & UK** focus on understanding farmers' goals first. Main challenge: keeping up with information and regulations, so listening skills and evidence-based advice are central.

MONITORING, LEARNING & EVALUATION (MLE)

- **Italy** highlights the challenge of farmer resistance to change. Advisors need psychological approaches and training in new tools to support adoption of practices.
- **Denmark** integrates climate advice into general farm guidance. The key issue is making the climate benefits of practice changes clearer.
- **Estonia** emphasizes trust-building with farmers but struggles with limited user-friendly information and tools.
- **Germany** centers on one-to-one consulting, with time pressure on public advisors as the main constraint. Methodological consulting skills are a priority.
- **Spain** frames advisors as “sustainability builders.” The challenge is explaining climate obligations clearly and integrating tools into advice.
- **Croatia** shows strong readiness for new challenges but reports a clear need for more training on climate transition.
- **Ireland** stands out for a team-based advisory approach, with collaboration across advisory roles needed to balance business and climate goals.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Focus group discussion: a tool for health and medical research

URL:

[4903me1.pdf](#)

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PRACTICE ABSTRACT NUMBER #11

TITLE IN ENGLISH

How Much are Climate Smart Advisors Aware of Climate Smart Farming and How They Define it?

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Creating a common understanding of what climate change means to different countries and communalities among countries
2. Identify key challenges of climate change as defined by the FG participants
3. Identify weaknesses and strength for what concerns awareness on climate change

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

A key challenge in climate-smart farming advisory work is that, although advisors are familiar with the topic, their understanding of what "climate-smart farming" means is not always aligned. ClimateSmartAdvisors explored this as an opportunity to better understand how advisors across Europe interpret the concept in practice. The findings are based on a synthesis of discussions from 10 groups: Croatia, Denmark, Estonia, France, Germany (Bavaria), Greece, Ireland, Italy, Spain, and the UK.

The synthesis showed that advisors were generally very aware of climate-smart farming, which is expected given their professional background, but important differences appeared in how they defined and prioritised the concept. In Croatia, advisors struggled to provide a precise definition, while all other groups proposed at least one, and often several, definitions. Four main interpretations emerged: reducing GHG emissions (Ireland, Germany); adapting to climate change (Spain); combining mitigation and adaptation (Italy, Denmark, France); and a broader sustainability perspective including environmental impact, biodiversity, soil quality, economic viability, and social relevance (Spain, Estonia, France). CSA uses a broad definition linking sustainable productivity, resilience, adaptation, and mitigation. Group discussions showed that this definition is comprehensive but not always straightforward. The UK group proposed a shorter, practice-oriented version focused on farm viability, climate measures in decision-making, food production efficiency, and resilience.

The findings show that advisors may share a common interest in climate-smart farming while emphasising different dimensions of it. Training and advisory materials should avoid assuming one fixed interpretation, but should support a shared understanding while allowing adaptation to national and regional contexts. Clearer formulations can help advisors communicate the concept more effectively to farmers and other stakeholders.

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PRACTICE ABSTRACT NUMBER #12

TITLE IN NATIVE LANGUAGE

Quels sont les éléments essentiels du conseil agricole et quels en sont les principaux succès et difficultés?

TITLE IN ENGLISH

What is the Most Important When Advising and What are the Main Successes/Difficulties?

GEOGRAPHICAL LOCATION (IF RELEVANT)

Add text here.

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Active listening
2. Co-construction
3. Demonstrations

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Dans le cadre du projet ClimateSmartAdvisors, des groupes de discussion ont été organisés afin de comprendre comment les services de conseil agricole aident les agriculteurs à adopter des pratiques agricoles adaptées au changement climatique, en s'appuyant sur des expériences concrètes recueillies auprès de conseillers dans 10 pays européens.

Les résultats montrent que l'efficacité du conseil repose avant tout sur une relation de confiance entre conseiller et agriculteur ainsi que sur une compréhension globale de l'exploitation (aspects techniques, économiques, sociaux et environnementaux). Les conseillers soulignent que les approches les plus efficaces consistent à proposer des solutions adaptées aux besoins des agriculteurs et générant des bénéfices visibles à court terme, notamment économiques (réduction des intrants, amélioration de l'efficacité). Les démonstrations au champs, l'apprentissage entre pairs et les outils d'aide à la décision apparaissent comme des leviers essentiels pour faciliter l'appropriation des pratiques.

Cependant, plusieurs freins persistent : manque de temps, outils insuffisants ou hétérogènes, difficulté à démontrer les bénéfices économiques des pratiques climatiques. Les réticences des agriculteurs sont souvent liées aux risques financiers, à l'incertitude des résultats à long terme et à la complexité des cadres politiques et des marchés. La communication autour du climat reste également complexe et nécessite des compétences renforcées.

En pratique, le projet recommande de co-construire des plans d'action adaptés à chaque exploitation, d'utiliser des outils simples et fiables, et d'associer les pratiques climatiques à des bénéfices concrets. Malgré des coûts initiaux possibles, les gains attendus concernent la résilience, l'efficacité et la durabilité. Ces résultats s'adressent aux agriculteurs, conseillers, décideurs et chercheurs souhaitant améliorer les systèmes de conseil et accélérer la transition agricole.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

As part of the ClimateSmartAdvisors project, focus groups were organized to understand how agricultural advisory services help farmers adopt farming practices adapted to climate change, drawing on concrete experiences gathered from advisors in 10 European countries.

The results show that effective advisory relies primarily on building a trust-based relationship between advisor and farmer combined with a comprehensive understanding of the farm system (technical, economic, social and environmental). Advisors highlighted that successful support occurs when proposed measures are tailored to farmers' needs and deliver clear short-term benefits, especially economic ones (e.g. reduced inputs or improved efficiency). Demonstrations, peer-to-peer learning and decision-support tools were identified as key to facilitate adoption of climate smart farming practices.

However, several difficulties limit advisory effectiveness. Advisors face lack of time, insufficient tools or inconsistent methodologies, and challenges in proving the economic benefits of climate practices. Farmers' reluctance is often linked to financial risks, uncertainty about long-term outcomes, and complex policy or market environments.

MONITORING, LEARNING & EVALUATION (MLE)

Additionally, climate concepts can be difficult to communicate and advisory services require stronger coordination and continuous training.

In practice, the project highlights that advisory should focus on co-constructing farm-specific action plans, using simple and reliable tools, and linking climate measures to tangible benefits. Investing in training, networks, and demonstration systems can significantly improve adoption. While implementation may involve initial costs (time, data collection, investments), benefits include improved resilience, efficiency and long-term sustainability.

This knowledge is particularly relevant for farmers, advisors, policymakers and researchers seeking to enhance advisory systems and accelerate the transition to climate-smart agriculture.

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PRACTICE ABSTRACT NUMBER #13

TITLE IN NATIVE LANGUAGE

Quels outils pour une agriculture intelligente face au climat les conseillers agricoles connaissent-ils et utilisent-ils?

TITLE IN ENGLISH

Which Climate Smart Farming Tools do Advisors Know and Use?

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Carbon tools
2. Climate smart farming advice
3. CSF tools

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Dans le cadre du projet Climate Smart Advisors (CSA), des conseillers issus de 10 pays européens ont été interrogés au sein de groupes de discussion. L'un des objectifs de cette étude était d'évaluer leur niveau de connaissance et leur utilisation des outils de conseil en matière d'agriculture intelligente face au climat.

Dans la plupart des pays (France, Irlande, Danemark, Espagne, Allemagne et Italie), les conseillers ont indiqué qu'ils utilisaient régulièrement un large éventail d'outils. Les outils mentionnés, bien que non exhaustifs, couvrent un large éventail d'objectifs. Les outils les plus cités concernent les diagnostics carbone et divers outils d'aide à la décision, couvrant une diversité de sujets: l'économie agricole, la gestion des nutriments, la santé des sols, l'évaluation de la biodiversité et les diagnostics globaux des exploitations agricoles. Le niveau d'utilisation des outils spécifiques au carbone varie entre ces pays. Il est lié à l'intérêt des agriculteurs et de l'industrie agroalimentaire pour la réalisation de bilans carbone. Enfin, les outils permettant la certification carbone sont peu répandus.

À l'inverse, en Croatie, Estonie et Grèce, les conseillers ne disposent actuellement d'aucun outil pour calculer l'empreinte carbone et sont peu expérimentés sur l'utilisation de ces nouvelles technologies. Leur participation au projet Climate Farm Demo devrait faciliter l'utilisation progressive d'outils spécifiques tels que CAP2ER ou Agrecalc.

À l'initiative du projet CSA (en lien avec les projets CFD et Clienfarms) a été créé une plateforme de référence (Farming for Climate) qui centralise tous les outils disponibles pour le conseil en matière de climat, tant pour les outils d'adaptation que d'atténuation. L'objectif est de que chaque conseiller trouve l'outil le plus pertinent qui réponde à ses besoins, au niveau de spécialisation attendu et adapté à son secteur.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

As part of the Climate Smart Advisors (CSA) project, advisors from 10 European countries were interviewed in national focus groups. One of the objectives of this study was to ascertain their level of knowledge and use of advisory tools for climate-smart agriculture. This summary outlines the main findings of this work.

In most of the countries concerned (France, Ireland, Denmark, Spain, Germany and Italy), advisors indicated that they regularly use a wide range of tools. The tools mentioned by the focus groups, while not exhaustive, cover a wide range of objectives. The most frequently cited tools relate to carbon diagnostics and various decision support tools, covering a diversity of topics, such as agricultural economics, nutrient management, soil health, biodiversity assessment and overall farm diagnostics. The level of use of carbon-specific tools varies between these countries. It is linked to the interest shown by farmers and the agri-food industry in carrying out carbon assessments. Finally, tools enabling carbon certification are not widely available.

Conversely, in Croatia, Estonia and Greece, advisors do not currently have tools available to calculate carbon footprints and therefore advisors have no experience handling these new

technologies. However, their participation in the Climate Farm Demo project should facilitate the introduction and gradual use of specific tools such as CAP2ER or Agrecalc for example.

Initiated by the CSA project (in collaboration with the Climate Farm Demo and ClieNfarms projects), there is now a reference platform, Farming for Climate, which centralizes all the tools available for advice on CCS, both for adaptation and mitigation tools. The aim is to enable each advisor to find the most relevant tool that meets their needs, at the expected level of specialization, and tailored to their sector.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Farming for Climate web platform

URL:

<https://www.farmingforclimate.eu/>

Title/Description

Farm Carbon Calculator - Agricalc

URL:

<https://www.agrecalc.com/>

Title/Description

CAP2ER Article

URL:

<https://idele.fr/detail-article/cap2err>

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The logo for Climate Smart Advisors features the text "CLIMATE SMART ADVISORS" in a teal, sans-serif font. To the right of the text is a stylized graphic consisting of several concentric, overlapping curved lines in shades of teal and yellow, resembling a sun or a stylized 'C' shape.

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PRACTICE ABSTRACT NUMBER #14

TITLE IN ENGLISH

Strengthening Advisory Services to Better Support Climate-Smart Farming

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Effective climate advice
2. Faster adoption of climate smart farming practices
3. Strong local networks

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH *

This practice abstract describes how advisory services can be strengthened to support climate-smart farming (CSF), based on insights from advisors in France, Ireland, Denmark, Croatia, Spain, Germany, Italy, Estonia, Greece, and the United Kingdom. It outlines a replicable approach to improve advisory capacity by integrating knowledge of resources, advisory methods, and coordination across advisory structures.

Advisory services can more effectively promote climate-smart farming by implementing a coordinated advisory model built on three pillars:

1. Develop a shared knowledge base for advisors and farmers

Create a central, easy-to-use resource that:

- provides hands-on descriptions of CSF practices across farm types
- provides access to research and routinely incorporates new findings
- offers transparent comparisons of climate calculation tools and guidance on how to interpret results
- This shared knowledge base can support advisory services at national level by ensuring consistent, accessible information for advisors and farmers.

2. Strengthen advisory approaches through skill development and interdisciplinary support

At regional level, advisory teams can strengthen their approaches and support farmers by:

- building communication and social skills needed to motivate behaviour change
- using interdisciplinary knowledge to provide holistic climate advice
- breaking climate-smart farming actions into small, achievable steps
- allocating time for follow-up and monitoring, ensuring commitment to agreed plans

3. Improve coordination across advisory structures and align with policy supports

At national and regional level, stronger coordination mechanisms can support advisors through:

- regular meetings, such as monthly Communities of Practice, to ensure common messaging and shared learning
- communication channels and local networks connecting advisors, farmers, and regional actors
- policy mechanisms that reward farmers for adopting climate-smart farming practices

ADDITIONAL INFORMATION

Strengthening advisory services to better support climate-smart farming can be enhanced through existing advisory networks and digital platforms that provide shared knowledge resources, such as the *farmingforclimate.eu* platform. Although it does not currently include interactive exchange functions, it already serves as a valuable central source of information and a foundation for more coordinated knowledge sharing across advisory systems.

Collaboration between research, advisory services and policy actors is also important to ensure that climate-smart farming information remains current, practical and aligned with policy developments. Improving communication pathways between these actors will help build more robust and responsive advisory services.

MONITORING, LEARNING & EVALUATION (MLE)

Key challenges include limited advisor time for training, follow-up and coordination, as well as the coexistence of multiple climate calculation tools with differing methodologies, which can create confusion. Funding constraints and fragmented advisory structures may also hinder the development of interdisciplinary, farmer-focused climate advisory work.

Future progress would be supported by harmonising standards for climate calculation tools, expanding research on context-specific practices and piloting structured advisory workflows that combine communication skills, stepwise planning and regular follow-up. Strengthening local advisory networks and testing coordination models will help identify what best supports consistent, farmer-centred advice. Overall, coordinated and well-supported advisory practices, built on clear communication, shared knowledge and enabling policies such as funding for training, incentives and clarity on legal obligations, are essential to helping farmers adopt climate-smart practices in a practical and lasting way.

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PRACTICE ABSTRACT NUMBER #42

TITLE IN ENGLISH

Building Blocks of the ClimateSmartAdvisors Theory of Change

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS *

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Jorieke Potters – jorieke.potters@wur.nl,

Ellen Bulten - ellen.bulten@wur.nl

3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Add text here
2. Add text here
3. Add text here

THEMATIC AREA

Add text here.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

A Theory of Change (ToC) is a simple expression of the expected sequence of actions or events leading to outcomes. In ClimateSmartAdvisors (CSA), the ToC provides the basis for identifying the effects of key activities and for defining the focus and learning questions of the Monitoring, Evaluation and Learning (ME&L) framework. As the project progresses, the ToC may be refined to reflect insights generated through ME&L.

Within CSA, project activities are designed to strengthen the advisory community's capacity to provide targeted climate-smart advice. These include networking and peer learning, training of trainers and advisors, strengthening the role of advisors, developing knowledge repositories of methods, tools and practices, supporting AKIS, and reinforcing collaboration with Projects, Initiatives and Policies (PIPs). Together, these interventions are intended to improve advisors' ability to deliver targeted climate-smart advice, support the implementation of climate-smart approaches and solutions, and ultimately contribute to accelerating the adoption of climate-smart farming practices.

For operational purposes, the CSA ToC is structured around three core building blocks that form the basis of the ME&L framework: **Capacity Development**, **Role of Advisor**, and **Climate Action**. These blocks reflect the project's intervention logic. Capacity development strengthens advisors' knowledge, skills, practices, and enabling environment. This reinforces the role of advisors in supporting and influencing farm-level decision-making. A stronger advisory role is then expected to contribute to climate action through the uptake of climate-smart approaches and practices. In this way, the three building blocks provide a clear structure for monitoring progress, reflecting on learning, and assessing how CSA supports transitions towards climate-smart farming.

ADDITIONAL INFORMATION

In CSA, capacity development is understood as a continuous process of learning and strengthening the knowledge, skills, attitudes, practices, tools, networks, and resources needed by the agricultural advisory community to support climate action in context. It goes beyond one-off training or transfer of "best practices" and includes the ability to understand individual farm situations, choose suitable advisory methods, motivate and collaborate with farmers and other advisors, assess climate-smart tools and practices, and respond to farmer decisions in context.

The role of the advisor is shaped not only by individual capacities, but also by organisational conditions and the wider regional and national agricultural context. The ME&L framework therefore considers these different levels and examines how they enable or constrain advisors in supporting transitions to climate-smart farming.

Climate action in this context includes both mitigation and adaptation efforts, such as reducing emissions or supporting the use of drought-resistant crops, recognising that no single solution is sufficient for the complex challenges climate change creates in agriculture

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PRACTICE ABSTRACT NUMBER #43

TITLE IN NATIVE LANGUAGE

Leren in grote netwerken: een dynamische leeragenda voor klimaatadviseurs

TITLE IN ENGLISH

Learning in Large Networks: Developing a Dynamic Learning Agenda for ClimateSmartAdvisors

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Stimulate social learning
2. Facilitate peer-to-peer learning
3. Improve climate smart advice

THEMATIC AREA

NA

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Innovaties voor klimaatslimme landbouw vereisen samenwerking en gezamenlijk leren. Het is een uitdaging om dit leren binnen grote netwerken op een effectieve en impactvolle manier vorm te geven. In het EU-project ClimateSmartAdvisors (CSA) gebruiken we de Dynamische Leeragenda (DLA) als instrument om het leren over klimaatadvies in een groot netwerk van klimaatadviseurs te ondersteunen. In de DLA verzamelen we leervragen en geleerde lessen rond de centrale vraag: Hoe kunnen we de adviesgemeenschap versterken en mobiliseren zodat zij boeren kunnen ondersteunen in het implementeren van klimaatslimme landbouw? De DLA is gestructureerd langs drie hoofdonderwerpen:

1. Capaciteitsontwikkeling
2. Klimaatslimme adviespraktijk
3. Klimaatslimme landbouwpraktijk

De online DLA is een instrument om leren te structureren en vast te leggen en kennisuitwisseling in grote netwerken te faciliteren. Het dient een praktisch doel: het bieden van een interactieve en toegankelijke plek voor leren en uitwisseling van ervaringen tussen klimaatadviseurs. Voor effectief en impactvol leren voor klimaatvriendelijke landbouw is aanvullende begeleiding nodig dat de DLA in een breder leerproces plaatst. In CSA doen we dit via trainingen en leer- en uitwisselingssessies rond leervragen.

Enkele voorbeelden van leervragen zijn:

1. Welke strategieën kunnen worden toegepast om succesvolle praktijken op het gebied van waterbeheer uit te breiden naar andere regio's?
2. Hoe kunnen boeren worden gemotiveerd om klimaatslim te gaan boeren?

We zien vijf manieren waarop de DLA van toegevoegde waarde kan zijn: 1) het leerproces richten op de grotere doelstelling van het netwerk; 2) mensen die geïnteresseerd zijn in dezelfde leervraag met elkaar in contact te brengen; 3) ruimte creëren voor diepgaander leren; 4) de mogelijkheid om resultaten en inzichten uit verschillende sessies te documenteren en te delen; en 5) overzicht bieden van alle leervragen in het netwerk die extra aandacht en ondersteuning vereisen, maar ook van witte vlekken: onderwerpen die juist te weinig aandacht krijgen.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Innovations for climate smart agriculture require cooperation and collective learning of all relevant actors. It can be a challenge to facilitate learning within large networks in an effective and impactful way. In ClimateSmartAdvisors (CSA), we explore a Dynamic Learning Agenda (DLA) as a tool to support learning among agricultural advisors on climate smart agriculture in a large network.

We collect learning questions and lessons around the central question: How to strengthen and mobilize the advisory community so they can support farmers in implementing climate-smart agriculture? The DLA is structured around three main topics:

1. Capacity development

2. Climate-smart advisory practice
3. Climate-smart agricultural practice

The online DLA is an emerging tool to structure and capture learning and facilitate knowledge exchange in large networks. It serves a practical goal of providing an interactive, accessible space for learning and exchange to shape and be shaped by advisors' climate smart experiences and practices. Facilitation which situates the DLA in a wider learning process is required for effective and impactful climate smart learning. In CSA, we do so by organising training, learning, and exchange sessions around learning questions.

Examples of learning questions:

1. What strategies can be implemented to scale up successful water management practices in other regions?
2. How to motivate farmers for Climate Smart Farming?

There are five ways in which the DLA can be of added value: 1) focus the learning process in the context of the overall project objective; 2) possibility to connect people who are interested in the same learning question; 3) possibility to create focused spaces for more in-depth learning; 4) possibility to document and share results and insights from different learning spaces (e.g. workshops); 5) provide an overview of all learning questions and topics that require additional attention and support but also white spots: topics that are neglected.

ADDITIONAL INFORMATION

In the CSA project, we were able to design the Dynamic Learning Agenda as an online tool, which greatly facilitates its use in a large international network. This tool is for internal use only, as it is available to project participants on the project's website back-office. This way, the DLA provides a safe space for exchanging learning questions and lessons and insights as they emerge from the different parts of the network.

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PRACTICE ABSTRACT NUMBER #44

TITLE IN NATIVE LANGUAGE

Balanceren tussen vertrouwen en verandering: een reflectiematrix voor klimaatadviseurs

TITLE IN ENGLISH

Balancing Trust and Transformation: A Reflection Matrix for ClimateSmartAdvisors

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

- Create awareness of advisor's position between trust-building and driving change.
- Shared language to articulate tensions, doubts and trade-offs in advisory practice.
- Enable advisors to navigate complex tension fields and make context-sensitive choices.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Klimaatadviseurs krijgen vaak een voortrekkersrol toebedeeld in duurzaamheidstransities in de landbouw, terwijl hun dagelijkse werk draait om vertrouwen en aansluiting bij de directe vragen en zorgen van boeren. Dit kan leiden tot een spanningsveld: focussen op huidige prioriteiten helpt vertrouwen op te bouwen, maar kan betekenen dat langere termijn klimaat- en systeemvraagstukken blijven liggen. De vraag is hoe adviseurs en coaches hier constructief mee kunnen omgaan.

De Vertrouwen-Verandering Matrix is een praktisch reflectiemiddel, ontwikkeld op basis van de ervaringen in het Climate Smart Advisors netwerk. De matrix helpt adviseurs om hun positie, rol en keuzes te onderzoeken aan de hand van twee kernvragen:

- **X-as Gerichtheid:** Is mijn advies vooral gericht op de prioriteiten van boeren, of meer op beleids- en projectdoelen?
- **Y-as Adviseursrol:** Treed ik vooral op als neutrale serviceprovider, of als aanjager van verandering?

Samen vormen deze vragen vier kwadranten met herkenbare oriëntaties waarin adviseurs zich in de praktijk bewegen. In een Community of Practice kan de matrix dienen als gezamenlijk reflectiekader. Adviseurs plaatsen een recente adviespraktijk in de matrix, lichten toe waarom zij die positie kiezen, en verkennen de voor- en nadelen van die positie en welke andere posities mogelijk waren. Het doel is niet om één 'juiste' rol vast te stellen, maar om te leren van verschillen in ervaringen en strategieën.

Voor CoP-coaches biedt de matrix een eenvoudige structuur om dialoog en onderling leren te faciliteren rond twijfels, spanningen en afwegingen in klimaatadvies. Het werken met de matrix helpt adviseurs bewuster om te gaan met de balans tussen vertrouwen en verandering, geeft taal om onzekerheden te bespreken en kan hun handelingsrepertoire vergroten. Het centrale inzicht is dat vertrouwen en transformatie geen tegenpolen zijn, maar aspecten van een dynamisch veld dat klimaatadviseurs moeten navigeren om een passende invulling te geven aan hun rol als klimaatadviseur in hun eigen context.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

ClimateSmartAdvisors (CSA) are often expected to contribute to sustainability transitions in agriculture, while their daily work is rooted in trust and responsiveness to farmers' immediate questions and concerns. This sometimes leads to a tension: focusing on farmers' current priorities helps build trust but may leave longer-term climate challenges unaddressed. A key question is how advisors and coaches can work with this tension in a constructive way.

The Trust-Transformation Matrix is a practical reflection tool developed from learning in the ClimateSmartAdvisors network. It enables advisors to explore their position, roles and choices by positioning themselves along two axes with the guiding questions:

- **X-axis Orientation:** Is my advice mainly oriented towards farmers' priorities, or towards policy/project objectives?
- **Y-axis Advisory role:** Do I mainly act as a neutral service provider, or as a driver of change?

Together, these questions create four quadrants with recognisable advisory orientations that Climate Smart Advisors navigate in practice. In a Community of Practice (CoP), the matrix can be used as a shared reflection canvas. Advisors can position their role in a recent

advisory interaction in the matrix, explain why this position made sense in their context, and explore what alternative positions might have been possible. The aim is not to define a 'right' role, but to learn from differences in experience and strategy.

For CoP coaches, the matrix offers a simple structure to facilitate dialogue and peer learning around doubts, tensions and trade-offs in climate advisory work. Working with this tool may help advisors become more aware of how they balance trust and change, develop language to articulate uncertainties, and expand their advisory repertoire by exploring alternative advisory orientations. The key insight is that trust and transformation are not opposing goals, but aspects of the dynamic field that Climate Smart Advisors need to navigate.

ADDITIONAL INFORMATION

The Trust-Transformation Matrix can be used in different ways within Communities of Practice, training settings or individual reflection. The key is that hesitation and doubt is not taken as signs of resistance, but as a fruitful starting point for trust-building and learning in climate advisory capacity development. Below are several practical entry points to work with the matrix, depending on the learning goals and context.

1. **Explore experience per quadrant**

Advisors reflect on concrete situations in which they acted from each of the four quadrants. By unpacking the situation, actions taken and underlying attitudes, the matrix helps to make implicit advisory choices visible and discussable.

2. **Identify your natural tendency**

Participants explore which quadrant they naturally gravitate towards in their advisory work. This supports reflection on personal preferences, associated strengths, and also enables the advisor to freely explore blind spots and unseen opportunities.

3. **Explore your discomfort zone**

The matrix can be used to identify quadrants that feel unfamiliar or uncomfortable. This opens conversations about new roles, discomfort, learning potential and the conditions needed to stretch into other advisory orientations in a safe and meaningful way.

4. **Reflect on flexibility and learning**

Rather than fixing roles, the matrix supports dialogue on when different positions may be appropriate or helpful. This fosters learning about flexibility, situational judgement and adaptability in climate advisory practice.

Facilitating conditions include a trusted learning environment, use of real-life cases, and explicit attention to context. The matrix works best when used as a reflective and dialogical tool, not as an assessment or normative framework. Its main value lies in supporting awareness, shared language and learning across differences in advisory practice.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Rethinking advisory capacities and roles: Fostering learning and change for Climate Smart Farming. A paper written for the ESEE conference 2025 Portugal.

URL:

<https://www.esee2025.utad.pt/>

TOWARDS
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PRACTICE ABSTRACT NUMBER #45

TITLE IN ENGLISH

Integrating Process and Outcome Evaluation in ClimateSmartAdvisors' Communities of Practice

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. **Deeper understanding of success factors** - Reveals why some CoPs achieve better outcomes than others
2. **Enabling mid-cycle improvements** - Process insights generated in vivo during the CoP cycle allow for adjustments to CoP activities and methods that enable the CoPs to address shortcomings and stay on track of achievement of their goals.
3. **Transferable lessons & network-wide learning** – Documenting lessons in what works (or does not) contribute to collective knowledge across all CoPs and enables sharing best practices, even to already running CoPs.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Effective evaluation is essential for understanding whether Communities of Practice (CoPs) within ClimateSmartAdvisors project delivered meaningful capacity development for ClimateSmart Advisors. However, focusing evaluation solely on outcomes (measuring accomplishments and achievements) risks overlooking important insights into how Communities of Practice function (drivers, barriers, participation etc.), as well as missing opportunities to adjust while they are still running. This Practice Abstract demonstrates the value of evaluating both process (how the CoP functions) and outcomes (what it achieves) to strengthen advisory capacity development in CoPs.

Process evaluation enables CoPs to periodically examine their functioning and identify drivers and barriers influencing progress towards goals. It occurs mid-way (after one year) and at the end of the CoP cycle, using evaluation surveys and in-person reflexive sessions focused on: Content relevance; effectiveness of the methods; Participation and engagement; Group dynamics; Organizational aspects.

Outcome evaluation, then, focuses on understanding results in three areas: Changes in capacity of CoP members; Changes in advisory practice; Changes in farming practice. These changes are assessed in final evaluation session.

Evaluating process alongside outcomes transforms evaluation from measurement into a learning tool. Process evaluation answers "how and why" while outcome evaluation addresses "what changed." Together, they create feedback loops that enable understanding which processes produce desired outcomes allows facilitators to replicate success and address challenges proactively. This integrated approach builds causal understanding supporting knowledge transfer-other CoPs can adopt effective processes, not just aspire to similar outcomes.

ADDITIONAL INFORMATION

Difference in focus between process and outcome evaluation

Process evaluation is focused on:

- Content relevance and alignment with advisors' needs
- Methods effectiveness (farm visits, peer learning, expert sessions)
- Participation patterns and engagement drivers
- Group dynamics: trust, collaboration, motivation
- Organization: meeting frequency, communication quality

Outcome evaluation focuses on understanding results in three areas:

- Changes in capacity of CoP members: knowledge, skills, and confidence. Assessed at beginning and end using the CSA Capacity Assessment Tool (CAT).
- Advisory practice: integration of climate-smart perspectives into daily work (assessed in final evaluation session and in CSA CAT)
- Farming practice: on-farm changes resulting from improved advice. Assessed in final evaluation session.

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PRACTICE ABSTRACT NUMBER #46

TITLE IN NATIVE LANGUAGE

Leervragen als instrument om leren in grote netwerken te verdiepen

TITLE IN ENGLISH

Learning Questions as a Tool to Deepen Learning in Large Networks

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

AUTHOR'S NAME, SURNAME AND EMAIL ADDRESS

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Turns scattered experiences into shared knowledge that benefits the whole network
2. Keeps Communities of Practice focused on real challenges instead of loose discussions
3. Make it easier to exchange lessons across regions, topics and time

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

In grote netwerken met meerdere Communities of Practice (CoP's) raakt leren makkelijk versnipperd: iedereen doet waardevolle ervaringen op, maar inzichten blijven lokaal. Werken met leervragen helpt om dit leren te verbinden en te verdiepen.

Binnen het ClimateSmartAdvisors netwerk gebruiken we een Dynamic Learning Agenda (DLA): een levend leerarchief waarin leervragen en de antwoorden die in de praktijk ontstaan worden verzameld.

De leervragen kunnen op verschillende manieren worden ingezet om leren actief te stimuleren, afhankelijk van het leerdoel en de context:

1. Als richtinggever in CoP-planning

Door aan het begin gezamenlijke leervragen te formuleren, ontstaat focus op wat deelnemers echt willen leren. Het helpt om activiteiten te verbinden aan leerdoelen en maakt voortgang zichtbaar.

2. Als kapstok voor gezamenlijke verdieping

In uitwisselingsessies rond één leervraag delen deelnemers ervaringen en formuleren zij samen antwoorden. Dit transformeert individuele ervaringen in gedeelde kennis die breder toepasbaar is.

3. Als brug tussen praktijk en andere expertise

Door externe experts uit te nodigen rond een concrete leervraag ontstaat dialoog in plaats van eenzijdige kennisoverdracht, waardoor de expertise beter aan kan sluiten bij de praktijkuitdagingen.

4. Als focusinstrument tijdens veldbezoeken

Leervragen helpen deelnemers gericht observeren en reflecteren. Door ervaringen uit te wisselen met een leermaatje worden verschillende perspectieven geïntegreerd.

5. Als motor voor gezamenlijke reflectie en vervolgstappen

Aan het einde van sessies nodigen de oorspronkelijke leervragen uit te delen wat is geleerd en waar verdere verdieping nodig is, wat richting geeft aan volgende acties en experimenten.

Door leervragen steeds centraal te stellen, ontstaat focus, samenhang en continue kennisontwikkeling in het netwerk. Niet losse activiteiten staan centraal, maar gezamenlijke leerprocessen rond echte praktijkvragen.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In large networks with multiple Communities of Practice (CoPs), learning easily becomes fragmented: many valuable experiences are generated, but insights remain local and disconnected. Working with learning questions helps to connect and deepen collective learning.

Within ClimateSmartAdvisors network, learning questions and emerging answers are captured in a Dynamic Learning Agenda (DLA): a shared and evolving overview of what the

network is trying to learn and what has already been discovered in practice. This makes learning visible, cumulative and transferable.

Learning questions can be used in different ways to stimulate learning, depending on the learning objective and context:

1. **As a guiding focus in CoP planning**
Formulating shared learning questions at the start helps clarify what participants want to learn together and connects activities to learning goals. Through the DLA others can contribute to learning.
2. **As a framework for collective deepening**
Exchange sessions built around one learning question enable participants to share experiences and jointly develop practical answers, turning individual insights into shared knowledge.
3. **As a bridge between practice and other expertise**
Inviting external experts to reflect on a concrete learning question creates dialogue rather than one-way knowledge transfer, ensuring relevance to real challenges.
4. **As a focusing tool during field visits**
Formulating learning questions in advance and exchanging them in pairs guide observation and reflection. By exchanging experiences in the same duo afterwards, it helps integrate multiple perspectives into concrete learning outcomes.
5. **As a driver for collective reflection and next steps**
Using learning questions at the end of sessions makes learning explicit and helps identify priorities for further exploration and action.

By consistently working with learning questions, networks strengthen focus, coherence and continuous knowledge development around real-world challenges.

ADDITIONAL INFORMATION

Many practitioners are more familiar with objectives than with learning questions. While objectives focus on achievement and evaluation (Did we reach our goal?), learning questions focus on discovery and harvesting learning (What did we learn from practice?).

A learning question expresses what a person or a group genuinely wants to understand better, often formulated as a simple “How to...?” question. For example:

- How to keep advisors engaged in a Community of Practice?
- How to show the benefits of climate-smart farming to farmers?
- How to choose the most suitable practice for a specific farm context?

This format stimulates curiosity and makes it easy to exchange experiences: “How do you do this in your situation?” It lowers the threshold for participation and turns individual experiences into collective learning.

Different types of learning questions can be used (practical, reflective, strategic or transformative) depending on the depth of learning desired. Learning questions tend to open curiosity and connection at the same time, an inspiring foundation for capacity development in large networks.

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PRACTICE ABSTRACT NUMBER #78

TITLE IN ENGLISH

Monitoring, Evaluation & Learning: Experiences of using a Community of Practice for Capacity Development of Climate Smart Advisors

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe, worldwide

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Create awareness of the role of CoPs as an approach to improve advisor's capacity
2. Gain insights into CoP functioning, content and activities to improve advice
3. Enable advisors to understand the practical advantages and challenges of using CoPs

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Communities of Practice (CoPs) are used in the ClimateSmartAdvisors project as a dynamic and adaptive approach to engage with advisors to improve and transform climate smart advisory knowledge, identities and practices. Monitoring, evaluation and learning from the first wave of 40 CSA CoPs reveal that there are many positive aspects and challenges concerning the functioning, content and methods of CoPs.

CoP Functioning

CoPs were generally experienced as learning communities rather than formal meetings. When they function as trusted and safe spaces, advisors are more willing to discuss and learn about difficult or complex topics. At the same time, CoPs require time, energy, and organisation. Challenges include logistics, varying participation, and turnover of members. To address this, CoPs need pragmatic organisation, well-planned meetings, and clear documentation.

CoP Content

The findings also showed that CoP content should be member-led and co-designed rather than imposed. Topics need to be professionally useful, technically sound, and relevant to advisors' needs and context. Challenges arise when content becomes too theoretical, overly technical, policy-driven, or disconnected from practical advisory work. Science remains important, but it needs to be balanced with advisory practice and a farmer-centred perspective.

CoP Methods & Activities

CoP methods work best when they include practical demonstrations, field-based examples, structured interactive activities, and simple, usable tools. A balance between expert input and peer exchange, together with documentation and follow-up, helps maintain focus and supports learning over time.

Overall, the survey findings from the CoPs suggest they are a useful approach and mechanism to shape agendas, surface learning needs, and strengthen advisory capacity for sustainability transitions. The lessons learned from the first wave can be used by all practitioners seeking to use CoPs in agricultural and other contexts.

ADDITIONAL INFORMATION

The first wave also highlighted that formal support could strengthen CoPs, including external endorsement, financial contributions, or facilitation support. Exchange of experiences and lessons with other CoPs can also motivate members and improve continuity. In terms of methods, practical toolkits and approaches were found to be especially valuable when combined with peer exchange and expert knowledge. Documentation and follow-up were important not only for organisation, but also for tracking progress, maintaining continuity despite participant turnover, and avoiding activities becoming unfocused or overly abstract.

This Practice Abstract is **complementary to Practice Abstracts 45, 36, 79 and 81**, so make sure to read those and learn more about Communities of Practice functioning.

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PRACTICE ABSTRACT NUMBER #79

TITLE IN ENGLISH

CoP Working Principles for Advisory Success: Lessons from the First ClimateSmartAdvisors CoP Wave

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Improved advisory competence
2. Higher relevance of CoP exchanges
3. Stronger adoption support for climate-smart farming

THEMATIC AREA

All

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

ClimateSmartAdvisors addressed the challenge of making Communities of Practice (CoPs) genuinely useful for agricultural advisors working on climate-smart farming. Although CoPs are recognised as valuable spaces for exchange and learning, their success depends on whether they reflect and meet advisors' real needs, priorities and working conditions. The first CoP wave therefore offered an opportunity to assess what makes these groups effective in practice.

The evaluation showed strong overall satisfaction, with 82% of respondents reporting they were satisfied or very satisfied with being part of their CoP. Participants also gave high ratings to the relevance and quality of the content, the overall functioning of the CoPs, and the extent to which participation helped them better understand climate-smart farming practices and climate-smart advice. Based on the CoPs experiences and survey findings, the project derived

a set of practical working principles for advisory success, that were derived from a combination of survey and distilling.

The main suggested principles are:

1. lead with economic and operational benefits;
2. make learning tangible through practical demonstrations;
3. prioritise simple and adaptable tools;
4. recognise that repeated engagement with a topic builds competence;
5. create space for peer-to-peer exchange;
6. connect discussions to policy and market realities;
7. and strengthen process design and facilitation.

In practice, these principles can help advisors, facilitators and organisers improve CoP design, process and delivery of better outcomes. Climate-smart advice should be framed around issues that matter in daily farm decision-making, such as costs, productivity, risk reduction and feasibility. Sessions should include practical examples, repeated engagement and strong dialogue among peers. This approach can help to strengthen advisor confidence, improve the quality of exchange and support the uptake of context relevant climate-smart practices.

ADDITIONAL INFORMATION

Practical implications include limiting long theoretical presentations and giving greater space to dialogue, peer learning and practical demonstrations. CoPs should also be linked more clearly to local policy frameworks, carbon markets and real implementation opportunities for advisors. The main benefits for end-users are more relevant and applicable learning, stronger advisory competence and better translation of knowledge into action. The main costs or drawbacks relate primarily to facilitation time, preparation of practical content, and the coordination needed to organise repeated and well-structured learning cycles.

This Practice Abstract is **complementary to Practice Abstracts 45, 36, 78 and 81**, so make sure to read those and learn more about Communities of Practice functioning.

8.9 Other Cross-cutting Topics

The final cluster was reserved for relevant PAs that did not fit clearly within the other six thematic areas but still offered practical value for the project's target groups. This category makes it possible to include cross-cutting or hybrid topics without forcing them into an unsuitable thematic area, while still maintaining the overall logic of the classification system.



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PRACTICE ABSTRACT NUMBER #34

TITLE IN NATIVE LANGUAGE

Do Plano à Ação: Como estabelecer Sinergias e promover colaborações com outros Projetos e Iniciativas

TITLE IN ENGLISH

From Plan to Action: How to Promote Synergies with Other Projects and Initiatives

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Expands advisors' access to relevant, up-to-date knowledge
2. Creates meaningful and high-impact collaboration opportunities
3. Increases the visibility and relevance of CoPs and/or National Networks within the wider AKIS

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Criar sinergias entre as Comunidades de Prática (CoPs), as Redes Nacionais do Projeto e outros Projetos, Iniciativas e Políticas (PIPs) é uma forma simples e eficaz de trazer conhecimento atualizado, integrar diferentes perspetivas, discutir desafios comuns e aumentar a visibilidade do trabalho desenvolvido no ClimateSmartAdvisors. Estas colaborações ajudam as CoPs a responder às suas learning questions, desenvolver novas atividades e identificar oportunidades de colaboração estratégica. Para as Redes Nacionais, estas sinergias reforçam a coordenação entre profissionais do setor, facilitam o acesso a informação relevante e apoiam a criação de ligações duradouras entre projetos, organizações e decisores a nível nacional.

1. Começar pelo grupo-alvo: quais as necessidades da CoP ou da Rede Nacional?

A CoP e a rede nacional do Projeto é o ponto de partida para criar sinergias eficazes sendo essencial antes de procurar parceiros externos grupo ter clareza sobre o seu enquadramento e objetivos. Assim, deverão refletir sobre:

- qual é o objetivo principal do grupo;
- quais são os seus pontos fortes e capacidades presentes;
- quais são as suas learning questions da CoP e/ou prioridades da Rede Nacional;
- que lacunas de conhecimento precisam de ser colmatadas para apoiar o trabalho da CoP e o funcionamento da Rede Nacional no AKIS.

Esta análise inicial ajuda não só a orientar a CoP, mas também a fortalecer o papel das Redes Nacionais, uma vez que lhes permite identificar temas prioritários, alinhar atores e melhorar a coordenação entre projetos e stakeholders do AKIS. Consequentemente, permite refletir em como é que uma colaboração externa poderá acrescentar valor.

2. Identificar possíveis parceiros: que PIPs podem acrescentar valor?

Com o contexto claro, torna-se mais simples identificar PIPs relevantes que possam contribuir de forma imediata ou estratégica. O grupo pode procurar:

- Experiência ou conhecimento na área prioritária ou considerado relevante para o grupo;
- Métodos, ferramentas ou abordagens úteis desenvolvidas por outros PIPs;
- PIPs com desafios semelhantes e que por isso poderão beneficiar de uma troca de aprendizagem.

3. Escolher métodos simples e eficazes de colaboração

- A colaboração deve ser simples, objetiva e orientada para resultados. Alguns exemplos de interação entre o CSA e outros PIPs a nível nacional são: convidar o PIP para participar numa reunião da CoP ou da Rede Nacional, presencial ou online, cujo tema lhe interesse/este consiga contribuir ativamente
- solicitar uma curta sessão de formação sobre um tópico ou ferramenta específica útil para a CoP ou para a Rede Nacional, convidando o PIP para ser o formador;
- partilhar outputs do grupo (por exemplo, resultados, metodologias, testemunhos, materiais de trabalho), recolhendo feedback que apoie tanto a CoP como a Rede Nacional;

- organizar um momento conjunto de discussão ou análise de boas práticas, envolvendo membros da CoP, da Rede Nacional e o PIP para promover a troca de experiências e alinhamento.

Em qualquer um dos casos, a presença do PIP deverá ter valor acrescentado para ambas as partes, sendo essencial identificá-lo antes da reunião ou evento e preparar as metodologias adequadas para que o PIP possa intervir ativamente.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Creating synergies between Communities of Practice (CoPs), National Networks, and other Projects, Initiatives and Policies (PIPs) is a simple and effective way to bring updated knowledge into the advisory system, integrate perspectives, address common challenges, and increase the visibility of work carried out within ClimateSmartAdvisors. These connections help CoPs answer learning questions, develop new activities, and identify opportunities for strategic collaboration. For National Networks, they strengthen coordination, improve access to relevant information for AKIS implementation, and support lasting links between projects, initiatives, organisations, and policymakers.

1. Start with the group: what does the CoP or National Network need?

Before approaching external partners, the group should clarify:

- its main purpose
- its strengths and existing capacities
- its learning questions or priorities
- its key knowledge gaps

This helps identify what kind of external input is needed and strengthens coordination within the National Network.

2. Identify potential partners: which PIPs can add value?

Once the context is clear, relevant PIPs can be identified by looking for:

- practical knowledge in the priority area
- useful methods, tools, or approaches
- actors facing similar challenges

3. Choose simple and effective collaboration methods

Collaboration should be simple, focused, and useful. Examples include:

- inviting a PIP to a CoP or National Network meeting
- requesting a short training session on a relevant topic or tool
- sharing outputs and collecting feedback
- organising a joint discussion or good-practice exchange

The external contribution should bring added value to both sides and be prepared in advance so the PIP can actively contribute.

ADDITIONAL INFORMATION

Practical collaboration formats may include participation of PIPs in CoP or National Network meetings, either in person or online, short training sessions on specific topics or tools, sharing outputs such as results, methodologies, testimonials, or working materials, and organising joint exchange sessions. To make these synergies effective, it is important to prepare the collaboration in advance, clarify the expected added value for both sides, and use facilitation

OTHER CROSS CUTTING TOPICS

methods that allow the external actor to participate actively. Such exchanges can also support stronger and longer-lasting links between projects, initiatives, organisations, and policymakers at national level.

Several factors can facilitate the implementation of this practice. CoPs and National Networks benefit from access to lists of relevant projects, existing contacts within national AKIS structures and the interest of many PIPs in collaborating, sharing tools and exchanging knowledge. Clear communication, realistic objectives and early alignment of expectations are essential elements for successful cooperation and help ensure that both sides understand the purpose and added value of the collaboration.

Common obstacles include uncertainty about where to begin, difficulties in identifying the right contact person, limited time availability and misaligned timelines between projects. Starting with a small, manageable pilot activity helps reduce these barriers, allowing both parties to test the collaboration with minimal effort and quickly assess its relevance and usefulness.

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PRACTICE ABSTRACT NUMBER #35

TITLE IN NATIVE LANGUAGE

Kohti euroopanlaajuista ilmastoviisaan maatalouden neuvontaverkoston opit
ClimateSmartAdvisors -kyselystä

TITLE IN ENGLISH

Towards a Europe-wide Network for Climate-Smart Agriculture Advisory: Lessons from the
ClimateSmartAdvisors Baseline Survey

GEOGRAPHICAL LOCATION (IF RELEVANT)

Pan-Europe

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Climate-smart advice barriers; Identifies barriers limiting uptake of climate-smart advice across the EU
2. Advisor capacity-building; Provides targeted capacity-building to address real advisory knowledge gaps
3. EU-wide advisory alignment; Builds a stronger, more consistent climate-smart advisory network across Europe

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

ClimateSmartAdvisors-hankkeessa toteutettiin selvitys eri maiden ilmastoneuvonnan tilasta. Siinä tarkasteltiin maatalousneuvojen tietoja, osaamista, asenteita ilmastonmuutokseen sekä sitä, millaisissa organisaatioissa he työskentelevät. Tulokset antoivat hyvän kokonaiskuvan hankkeen alussa sen hetken tilanteesta ja siitä, mitä tarvitaan, jotta Eurooppaan voidaan rakentaa ilmastoälykkääseen maatalouteen keskittyvä neuvontaverkosto.

Ilmastoälykäs viljely edellyttää neuvontaa, joka pystyy muuttamaan ilmastotiedon ja erilaiset hillintä- ja sopeutumiskeinot käytännön ratkaisuuksi maataloilla. Selvitys kuitenkin osoittaa, että EU-maiden neuvontajärjestelmät eroavat paljon toisistaan. Neuvojen osaaminen, käytettävissä olevat työkalut ja valmiudet vaihtelevat. Siksi on tärkeää tunnistaa nämä lähtökohdat ja ne aukot, jotka tällä hetkellä hidastavat ilmastoälykkäiden ratkaisujen käyttöönottoa.

Keskeiset havainnot:

- Motivaatiota löytyy, mutta osaaminen vaihtelee: Neuvojat haluavat tukea ilmastoälykästä viljelyä, mutta heidän tietonsa käytännön menetelmistä ja työkaluista eivät aina ole samalla tasolla.
- Eri maiden neuvonta eroaa paljon: Järjestelmät voivat olla julkisia, yksityisiä tai niiden yhdistelmiä, mikä vaikuttaa siihen, millaista koulutusta ja tukea on saatavilla.
- Tieto ei liiku riittävästi: Neuvoilla ei aina ole hyviä mahdollisuuksia vaihtaa kokemuksia muiden alueiden tai sektorien kanssa, eikä tutkimustietoa saada tarpeeksi hyvin käytäntöön.
- Tarvitaan pitkäjänteistä tukea: Neuvojat toivovat yhtenäisiä koulutuksia, yhteisiä työkaluja ja pysyviä yhteistyörakenteita, jotta ilmastoneuvontaa voidaan antaa tehokkaasti eri maissa.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

The ClimateSmartAdvisors project conducted a comprehensive cross-country assessment of advisory services, analysing advisors' knowledge, competencies, attitudes toward climate change, and the institutional environments in which they operate.

The results provide a comparative picture of the current state of play and highlight needs and opportunities for forming a pan-European advisory community focused on Climate-smart farming (CSF). CSF requires advisory services that can translate climate science, mitigation, and adaptation strategies into practical on-farm decisions. However, advisory systems across EU Member States and Associated Countries differ significantly in structure, capacity, and readiness. To design a functional EU-wide advisory network, it is essential to understand these baseline conditions and identify the gaps that prevent advisors from effectively supporting farmers in the transition to climate-smart agriculture.

Key findings:

- **High motivation but uneven capacity:** Advisors across countries generally recognise the importance of climate change and express willingness to support CSF, but their knowledge of specific CSF practices, tools, and decision-support methods varies widely.

OTHER CROSS CUTTING TOPICS

- **Significant institutional heterogeneity:** Advisory services operate within very different national structures—public, private, mixed, and market-based—creating unequal access to resources, training and knowledge exchange mechanisms.
- **Gaps in collaboration and knowledge flow:** Many advisors report limited opportunities to share CSF knowledge across regions or sectors, and a lack of clear channels for connecting research outputs to practice.
- **Need for structured, long-term support:** Advisors highlight the need for standardised training, harmonised tools, and stable cooperation structures to enable CSF advice to be delivered consistently across EU territories.

ADDITIONAL INFORMATION

Based on the survey, several elements can help support implementation of the results:

- A pan-EU network of Climate-Smart Advisors can address fragmentation by creating shared training modules, common terminology, and cross-country learning pathways.
- Opportunities for peer-learning to connect advisors with varying backgrounds, encourage peer-to-peer learning, and support the co-creation of context-specific CSF solutions.
- Strengthening links between research, advisory services, and farmers improves the relevance and uptake of climate-smart practices.
- Long-term cooperation frameworks and stable institutional support are essential to ensure continuity beyond project cycles.

Outcome / Added Value

The survey results offer a solid foundation for designing an EU-wide advisory infrastructure that is inclusive, scalable, and responsive to regional diversity. By addressing knowledge gaps, harmonising training, and fostering collaboration across borders, the emerging ClimateSmartAdvisors network will help accelerate the transition to climate-smart farming across Europe. However, it should be noted that the number of responses from most of the countries was relatively low and the answers most likely represent the opinions of climate-motivated advisors. The survey results were further split and presented to the national contexts and discussed and analysed among the respective national stakeholders.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Link to the survey report: State-of-play, gaps, barriers and drivers of CS-AS across member states and associated countries;

URL:

https://climatesmartadvisors.eu/wp-content/uploads/2024/12/D1.1_State-of-play-gaps-barriers-drivers-of-CS-AS-across-MS-AC_WP1_V1.0.pdf

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PRACTICE ABSTRACT NUMBER #63

TITLE IN NATIVE LANGUAGE

Impliquer les laiteries et les politiques dans l'aventure méthane.

TITLE IN ENGLISH

Involving Industries and Politics in the Methane Journey

GEOGRAPHICAL LOCATION (IF RELEVANT)

Europe

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. Direct view of the stakeholders
2. Exchange during professional shows
3. Use of feed additives to reduce methane emissions

THEMATIC AREA

Additives for reducing methane emissions

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN NATIVE LANGUAGE

Dans le cadre du projet ClimateSmartAdvisors, les additifs alimentaires visant à réduire les émissions de méthane sont étudiés du point de vue des praticiens, en particulier des conseillers CSA, en mettant l'accent sur leur pertinence pratique, leur efficacité perçue et les conditions nécessaires à leur adoption sur le terrain.

Le principal enseignement issu des revues scientifiques (lien ci-dessous) et des activités de la Communauté de pratique (CoP) sur le méthane en France – vague 1 est que les additifs alimentaires peuvent contribuer de manière significative à la réduction du méthane lorsqu'ils sont intégrés dans des stratégies agricoles plus larges dites « climate-smart », aux côtés de la gestion du troupeau, de la sélection génétique et de l'optimisation des rations. Toutefois, leur adoption reste limitée en raison de plusieurs obstacles identifiés par les praticiens,

Un aspect innovant important pour l'ensemble de la filière bovine en Europe (et dans le monde) réside dans les modèles de soutien émergents autour de ces additifs. Ceux-ci incluent des mécanismes financiers tels que des financements directs, des incitations basées sur le marché ou une meilleure valorisation du lait associée à une réduction de l'empreinte méthane. Ces approches permettent de déplacer une partie de la responsabilité et du risque hors des exploitations agricoles et favorisent une adoption plus large grâce à une action collective impliquant conseillers, entreprises laitières et acteurs de la chaîne de valeur.

Dans l'ensemble, ces travaux soulignent que le déploiement réussi d'additifs alimentaires réducteurs de méthane nécessite non seulement des solutions techniques, mais aussi des dispositifs de conseil coordonnés, des signaux économiques clairs et une communication transparente à destination des agriculteurs et des consommateurs. Cette approche intégrée est essentielle pour accélérer le déploiement de solutions « climate-smart » dans les systèmes de production de ruminants.

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within the ClimateSmartAdvisors project, feed additives for reducing methane emissions are examined from a practitioner's perspective, especially by Climate Smart Advisors, focusing on their practical relevance, perceived effectiveness, and conditions for adoption in the field. The main finding based on scientific reviews (link below) and on the activity of French Community of Practice about methane is that feed additives can significantly contribute to methane mitigation when integrated into broader climate-smart farming strategies, alongside herd management, genetic selection, and ration optimization. However, their uptake remains limited due to several barriers identified by practitioners, including:

1. economic uncertainty,
2. lack of clear incentives,
3. operational constraints on farms,
4. and questions related to long-term effectiveness and consumer acceptance.

An important innovative aspect for all cattle sector across Europe (and worldwide) lies in the emerging support models surrounding these additives. These include financial mechanisms such as direct funding, market-based incentives, or enhanced milk valorisation linked to reduced methane footprints. Such approaches shift part of the responsibility and risk away

from farmers and encourage wider adoption through collective action involving advisors, dairy companies, and value-chain stakeholders.

Overall, the work emphasizes that successful deployment of methane-reducing feed additives requires not only technical solutions, but also coordinated advisory frameworks, clear economic signals, and transparent communication towards farmers and consumers. This integrated approach is key to scaling up climate-smart solutions in ruminant production systems.

ADDITIONAL INFORMATION

These findings are based on interviews conducted within the French Community of Practice on methane. The interviews showed that the **main barrier is economic**: feed additives create extra costs for farmers without direct productivity gains, while cost-sharing across the value chain - dairies, processors, retailers, and consumers - remains limited. In some countries, such as Denmark, public support partly compensates these costs, but this is not easily transferable everywhere.

Interviewees also identified **technical and institutional barriers**. Some mitigation solutions are not yet recognised in carbon accounting or sustainability assessment tools, which reduce credibility and uptake. Certain options, especially plant-based ones, also still lack scientific visibility despite promising results.

Cultural and behavioural barriers were highlighted as well. Some farmers are reluctant to use additives seen as “chemical”, consumer awareness of methane mitigation remains low, and many advisors still lack training or confidence to promote these solutions.

To address these constraints, interviewees stressed the need for a **value-chain approach** to share costs more fairly. They also pointed to better communication and training for advisors, farmers, and consumers, stronger knowledge-sharing platforms, and improved integration of methane mitigation into sustainability assessment frameworks. Economic incentives, such as climate-related milk premiums or self-financing mechanisms linked to productivity gains, were identified as important drivers.

Stakeholders also expect **stronger regulation** in the future, alongside rapid progress in research and innovation, including new ingredients, grazing trials, and combined mitigation strategies. Wider uptake will depend largely on dairy company leadership and growing investor pressure for credible climate commitments.

ADDITIONAL DISSEMINATION AND COMMUNICATION MATERIAL(S)

Title/Description

Mitigation strategies for methane emissions in ruminant livestock: a comprehensive review of current approaches and future perspectives.

URL:

<https://doi.org/10.3389/fanim.2025.1610376> (PA#69)

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PRACTICE ABSTRACT NUMBER #66

TITLE IN ENGLISH

From Results to Reach: Effective Dissemination Strategies for Advisors and AKIS Stakeholders

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. **Better understanding by farmers and other end-users**
Advisors can turn technical results into clear, relevant and practical messages that are easier for non-specialist audiences to understand and use.
2. **Stronger engagement and wider reach**
By choosing the right story angle and the right communication channel, advisors can reach more people and encourage greater interest in climate-smart farming solutions.
3. **Greater uptake and impact of advisory work**
More effective communication helps useful knowledge, recommendations and experiences move into practice, increasing the long-term value of advisory services and project results.

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

In ClimateSmartAdvisors (CSA), advisors are testing a practical approach for moving from results to reach, which helps them communicate climate-smart farming knowledge more clearly and effectively to farmers and other non-specialist audiences. The challenge addressed is that valuable advisory knowledge, project results and field experiences are often too technical, while end-users need messages that are engaging, understandable and relevant to their daily work.

To amplify your communication efforts, follow these key steps:

1. create a newsworthy story,
2. understand your audience,
3. prepare your story-narrative,
4. structure the story - keep your readers in mind,
5. use effective writing strategies to clearly communicate ideas,
6. and maximize your promotion through social media and channels that farmers you are working with are using.

A key lesson in CSA is to avoid relying only on a “knowledge-deficit” approach. Instead, advisors should use framing that helps farmers connect results to their own work and decisions. Instead of presenting a technical explanation of a methane-reducing feed additive, a CSA advisor might frame it as: “What can this mean for feed efficiency, farm emissions, and future market expectations on your dairy farm?” Similarly, instead of describing a cover crop trial only through scientific indicators, an advisor might frame it as: “How can this practice help protect your soil, reduce erosion, and improve resilience during dry periods?” In both cases, the message links project knowledge to practical farm concerns.

In practice, this approach can be used to communicate demonstration results, advisory recommendations, climate-smart solutions, event outcomes, and farmer experiences through presentations, articles, websites, and social media.

ADDITIONAL INFORMATION

In the world of social media, strengthening communication skills supports the uptake of climate-smart farming knowledge. A useful starting point is to ask not only what I want to say? but also what does my audience wants to know. This helps advisors move from simply sharing information to building messages that are relevant, accessible and actionable.

- When selecting a topic, advisors can look for elements that make **a story more newsworthy**, such as relevance, interest, uniqueness, topicality and strong images.
- To prepare the message, advisors can use **scoping** to understand what is already being said about the issue, what concerns and assumptions exist, what conflicting information may be present, and which terms or evidence are most useful.
- They can then apply **framing** to connect the message with audiences through angles such as sustainability and resilience, economic viability or co-benefits.
- For written or online communication, advisors are encouraged to use an **attention-grabbing lede**, a clear and concise main message, and a short ending that encourages reflection or action, for example through a “What’s next” element.

OTHER CROSS CUTTING TOPICS

- Present demonstration results, farmer testimonials, event outcomes, training opportunities, and practical recommendations through newsletters, websites, advisory materials and social media.
- If there are any, use your organisation's channels and networks to distribute your message.

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PRACTICE ABSTRACT NUMBER #67

TITLE IN ENGLISH

Tailoring Communication to Strengthen Climate-Smart Knowledge Exchange

GEOGRAPHICAL LOCATION (IF RELEVANT)

N/A

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3 BENEFITS OF THE PRACTICE – ADD KEYWORDS

1. More relevant communication for each stakeholder group
2. Stronger engagement and better collaboration
3. Greater impact of project results

THEMATIC AREA

N/A

SUMMARY FOR PRACTITIONERS ON THE MAIN FINDING(S)/INNOVATIVE SOLUTION(S) – IN ENGLISH

Within a ClimateSmartAdvisors workshop, project partners tested an approach for tailoring messages to different stakeholder groups at national and European levels, while also training Climate Smart Coaches to apply and pass on this knowledge in their own contexts. The challenge addressed is that climate-smart farming results, training activities, and project outputs do not create impact automatically. To be useful, messages must match the needs, interests, and level of engagement of the target audience, since the same content does not work equally well for all groups, sectors, or countries.

A first step is to understand the target audience. The workshop distinguished between key actors, influencer actors, interested actors, and passive actors, each requiring a different communication objective and action. Key actors need collaboration and regular updates, influencer actors should be informed and consulted on specific interests, interested actors need clear benefits highlighted to spark engagement, while passive actors may need only light-touch communication through broad channels such as newsletters.

The workshop also highlighted the importance of defining a key message for each role. While Climate Smart Coaches and Thematic Leaders may share a common strategy, their communication focus differs, for example between innovation-related messages and training-related messages.

At European level, participants identified project outputs, target groups, and channels where synergies could be created. At national level, they found that one single strategy was not appropriate, since each country has different constraints and needs its own approach.

In practice, advisors should adapt both the message and the communication channel to the stakeholder group and context to improve relevance, clarity, engagement, understanding, and measurable outcomes.

ADDITIONAL INFORMATION

The workshop also used a concrete scenario in which a Climate Smart Coach (advisor) organizes training workshops on sustainable agricultural practices in a rural area, leading to increased crop yields and reduced water usage through new irrigation techniques. From one result, different communication products can be developed for different audiences, such as **documentation and reporting, testimonials and case studies**, or a **policy brief**. This shows that tailoring is not only about wording, but also about choosing the right format, level of detail and purpose for each stakeholder group. The workshop highlighted several benefits of **role-specific messaging**, including **relevance, productivity, professional growth, clarity, synergy, understanding, innovation, engagement, measurable outcomes, efficiency** and **collaboration**.



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