AgriGreenSkills Empowering Farmers and Trainers for the European Green Deal

Innovative Training Methods Guide

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1. Introduction

The *Innovative Training Methods Guide* has been developed within the framework of the Erasmus+ KA220-VET project AgriGreenSkills: Empowering Farmers and Trainers for the European Green Deal. The project responds to one of the most pressing challenges facing European agriculture today: ensuring that farmers possess the competences, knowledge, and practical tools required to actively contribute to the ecological and digital transition promoted by the European Green Deal and the Common Agricultural Policy (CAP) reform.

Agriculture is at the center of Europe's sustainability agenda. Farmers are expected to reduce environmental pressures, improve soil and water management, enhance biodiversity, implement climate-smart practices, and comply with increasingly complex regulatory frameworks. At the same time, they must maintain farm profitability and economic resilience in volatile markets. This dual pressure – ecological responsibility combined with economic survival – creates a significant skills demand across the sector.

However, the structure of European agriculture presents important educational challenges. In many regions, farming is dominated by small and medium-sized family farms. A large proportion of farm holders are over 50 years old, and many have limited formal vocational education. Digital literacy levels vary considerably, particularly in rural areas where access to structured lifelong learning opportunities remains uneven. For these groups, participation in traditional training formats – especially those heavily reliant on online platforms or theoretical instruction – can be intimidating, time-consuming, or perceived as irrelevant to everyday farm realities.

Traditional e-learning models, while scalable and cost-effective, often assume stable internet access, strong digital navigation skills, and high levels of self-directed learning capacity. In agricultural contexts, these assumptions do not always hold true. Farmers typically operate under seasonal workloads, unpredictable weather conditions, and strong reliance on experiential knowledge developed over generations. As a result, long theoretical modules or abstract policy-based content frequently fail to generate meaningful behavioral change.

Moreover, sustainability in agriculture is inherently practical. Concepts such as soil regeneration, integrated pest management, carbon sequestration, biodiversity corridors, or water efficiency cannot be effectively understood through theory alone. They require contextual adaptation, observation of long-term effects, peer comparison, and advisory interpretation. Therefore, innovative training must move beyond information transmission toward competence-building embedded in real farming environments.

The purpose of this Guide is to systematically identify, analyze, and evaluate innovative training methods that address these realities. Rather than focusing exclusively on formal vocational education systems, this research explores practice-oriented, advisory-led, peer-supported, and digitally facilitated approaches that are already functioning in partner countries. These methods are examined not only for their pedagogical value but also for their inclusiveness, scalability, and transferability within the AgriGreenSkills framework.

The Guide specifically addresses the following target groups:

- Small-scale and family farmers who may lack access to structured VET programmes
- Older farmers with limited digital confidence

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- Farmers in remote or rural regions
- Low-skilled or low-qualified agricultural workers
- Agricultural trainers and advisors who require adaptable methodologies to support sustainability transitions

Particular attention is given to farmers who are at risk of being excluded from the green transition due to educational, generational, or digital barriers. If sustainability measures are not accompanied by accessible learning pathways, there is a risk of widening inequality between highly innovative farms and those unable to adapt.

In this context, innovation in training does not necessarily mean technological sophistication. Instead, it refers to pedagogical adaptation: designing learning experiences that are flexible, modular, experiential, trusted, and accessible. Innovation may take the form of demonstration farms, peer-to-peer exchanges, micro-learning via smartphones, advisory-based tutoring, hybrid field-digital models, or decision-support tools embedded in daily practice.

This Guide therefore serves three strategic purposes within the AgriGreenSkills project:

1. To provide evidence-based insight into effective training practices across partner countries.
2. To inform the pedagogical design of the AgriGreen Hub and its digital learning modules.
3. To ensure that the project's training model is inclusive, practice-oriented, and aligned with real agricultural contexts rather than abstract educational assumptions.

The innovative methods identified here provide a strong foundation for achieving that goal and ensuring long-term impact beyond the lifetime of the project.

2. Methodology

The development of this Guide followed a structured and collaborative methodology under WP2-A4, aligned with the broader project design described in the application. PFA designed a common template for all partners to ensure consistency in data collection and analysis. Each partner identified innovative agricultural training methods implemented at national or regional level and documented them according to the same structure:

- Description of the method
- Target group suitability
- Evidence or case studies
- Strengths and weaknesses
- Practical recommendations

This ensured comparability across countries and facilitated the development of a coherent cross-national framework.

Partners focused on methods that go beyond traditional classroom-based training. Particular attention was given to approaches that:

- Support farmers with low digital literacy
- Combine experiential and digital learning
- Promote behavioural change rather than theoretical knowledge only
- Align with EU sustainability and Green Deal priorities

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Methods were selected from advisory systems, farmer networks, demonstration farms, digital platforms, peer-learning initiatives, and tutoring models.

To ensure analytical depth, PFA developed an evaluation framework based on six key criteria:

1. **Accessibility** – Is the method reachable by farmers with limited digital or formal education?
2. **User-friendliness** – Is the approach intuitive and easy to understand?
3. **Cost-efficiency** – Can the method be implemented without excessive financial burden?
4. **Scalability** – Can it reach a large number of farmers?
5. **Engagement** – Does it actively involve learners and encourage participation?
6. **Inclusiveness** – Does it reduce barriers for older, small-scale, or digitally excluded farmers?

Each partner assessed their national methods against these criteria, allowing both qualitative comparison and strategic reflection.

The final step consisted of synthesising national findings into a comparative framework. Rather than ranking countries, the objective was to identify transferable elements that can inform:

- The pedagogical design of the AgriGreen Hub
- The development of digital training modules
- The blended learning approach combining field practice and online content

The methodology therefore bridges research and implementation, ensuring that innovative practices identified at national level directly inform the design of scalable and inclusive European training solutions.

3. Catalogue of Innovative Methods

3.1 Innovative Methods in Belgium

Introduction

To the country's political structure, both agriculture and adult education are regional matters in Belgium. Therefore, the training opportunities collected here are in French and only apply to Wallonia. The research showed a lack of fully online sources in the region (the only one collected here is actually from France), with training opportunities usually associating courses and field practices. For this research, we have searched outside the official education system, focussing mostly on private and peer-to-peer resources.

Catalogue of Innovative Methods in Belgium

Method 1: On-site and Face-to-Face Training

Training courses provided by public operators or private farms. They include theoretical courses on a variety of topics – from specific farming techniques to legal issues, management or G license for tractors – along with visits of farms, and practical training. Some on a specific topic lasts just a few days, while others can extend over months.

Target group suitability:

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There are courses for all adult audiences. Some are only open to unemployed people, others let beginning or experienced farmers acquire new skills or transition from traditional to organic agriculture.

Evidence/Case Study:

The Provincial Centre for Training in Agriculture and Rurality (CPFAR) offers programs that combine theoretical courses, site visits, and practical training.

Le Potager du Gailleroux, sessions are held on-site, allowing for direct field illustrations of the topics covered, such as forest-garden management.

Strengths and Weaknesses

Strengths	Weaknesses
• Open to multiple audiences • Broad range of topics • Mix of theoretical courses and on-field practice	• With the exception of one course on smart farming by CPFAR, technology is not a focus of these courses.

Practical Recommendations:

This type of training is more comprehensive than what AgriGreenSkills can provide, however they do not offer ICT courses (farming specific software or apps). AgriGreenSkills can be used as a complement to those courses.

Method 2: Peer-to-Peer Learning and Technical Exchanges

Sessions to provide opportunities for exchange and on-site technical advice directly on producer farms. These are organised by sector (arable crops, livestock, market gardening) to facilitate specialised peer sharing.

Target group suitability:

Farmers who are already active.

Evidence/Case Study:

Biowallonie, a non-profit support by the Region of Wallonia organise those sessions. They take place on a producer's farm during three periods of the year: April–May, June–July, and September–October. This represents a minimum of 3 × 3 field sessions per year, depending on the cropping season.

Strengths and Weaknesses

Strengths	Weaknesses
• Choice between on-demand courses and preset calendar • Taking place on a farm during several seasons • Free webinars on YouTube	

Practical Recommendations:

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Biowallonie's webinar can be used as extra resources. Peer-to-peer is also relevant to the AgriGreen Hub as a forum is planned.

Method 3: Online Training and Digital Resources

There are few options of full online courses on organic farming in Belgium, but webinars and educational videos created by farmers and gardeners are more common.

Target group suitability:

Accessible to all audiences as they cover a wide range of topics.

Evidence/Case Study:

Biowallonie hosts free webinars on its YouTube channel to discuss technical points with farmers. Several farms such as Arbuste Fruitier and Le Potager du Gailleroux have Youtube channels on various topics. In France, La Forêt Nourricière offers a comprehensive 15-hour online program consisting of 19 videos and 6 PDF modules, with modules that can be purchased separately or as a whole.

Strengths and Weaknesses:

Strengths	Weaknesses
• Videos on YouTube are accessible for free, with no ICT skills required. • Hundreds of videos accessible on numerous topics. • Possibility for farmers to share their experience.	• No full online course found in Belgium • The one online course mentioned here is costly if taken whole.

Practical Recommendations:

Videos can be used as additional resources and help us avoid creating material that is already available.

Method 4: Personalised support

Support provided by experienced farmers. It can include advice, help to start a project, or support over several years

Target group suitability:

Farmers wishing to start a project that requires expertise and time.

Evidence/Case Study:

Perma-Projects Academy provides long-term (3-5 years), customised support for professional agroecological market gardening projects. Their mission is to guide new initiatives from their initial setup until they reach full autonomy.

Arbuste Fruitier offers tailored assistance for the creation of forest gardens.

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Strengths and Weaknesses:

Strengths	Weaknesses
• Tailored support from a professional • Available at different phases of a project	• Not time efficient as it cannot address many farmers at once

Practical Recommendations:

Hard to apply as such. Request for personalised support could be integrated in the forum.

Conclusion

Training methods outside the official circuit in Wallonia come mostly from the initiative of experienced farmers and gardeners willing to share their expertise and passion, with multiple farms providing group training and peer-to-peer training, personalised support, and publishing videos on specific topics. There is a notable lack of digital resources beyond videos.

3.2 Innovative Methods in Italy

Introduction

The Italian agricultural training context is characterised by a high diversity of farm sizes, strong regional differences, and a significant presence of small, family-run farms. Many farmers—particularly older ones—have limited formal education and uneven digital skills, which strongly influences how training can be effectively designed and delivered.

Over recent years, innovative training methods have emerged in Italy in response to multiple pressures, including the implementation of the Common Agricultural Policy (CAP) 2023–2027, increasing sustainability requirements, and the need to translate research and innovation into practical, economically viable farming solutions. Traditional classroom-based training alone has proven insufficient, especially for farmers with limited time availability and low digital confidence.

As a result, Italy has progressively adopted practice-oriented, advisory-supported and blended training approaches that combine field-based learning, peer exchange, digital micro-learning and individual tutoring. These methods are particularly effective because they are embedded in real farming contexts, build trust among participants, and respect farmers' operational constraints.

Within WP2-A4, ASTERES identified and analysed four innovative training methods that are already implemented through national and regional agricultural policies, advisory systems and farmer networks. These methods have been selected because they are inclusive, evidence-based, and directly aligned with the objectives of the AgriGreenSkills project and EU sustainability policies.

Catalogue of Innovative Methods in Italy

Method 1: Field-Based Training on Demonstration Farms (Learning by Doing)

This method is based on hands-on training activities carried out directly in agricultural fields or farms. Learning takes place through live demonstrations of sustainable farming practices, supported by technical experts or advisors. Farmers observe, discuss, test and immediately apply new techniques under real conditions. Theoretical input is limited and strictly linked to practical activities.

Target Group Suitability

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- Small-scale and family farmers
- Older farmers
- Farmers with low formal education
- Farmers with limited digital skills

Evidence / Case Study:

- **AMAP – Agenzia Marche Agricoltura Pesca**: field demonstrations, pilot plots and on-farm training days on sustainable agriculture and biodiversity https://www.amap.marche.it
- **CREA – Council for Agricultural Research and Economics**: experimental farms and innovation transfer through open days and pilot initiatives https://www.crea.gov.it

Strengths and Weaknesses

Strengths	Weaknesses
• Very high learning effectiveness for low-skilled learners • Immediate practical application • Strong trust-building between farmers and trainers • Suitable for complex practices requiring observation	• Limited scalability • Higher organisational and logistical costs • Dependent on seasonality and local conditions

Practical Recommendations:

Demonstration-based activities should be used as core learning moments and transformed into short digital learning resources (videos, photo-based explanations, checklists) to be hosted on the AgriGreen Hub, extending their impact beyond physical participation.

Method 2: Structured Peer Learning (Farmer-to-Farmer Learning)

Peer learning involves farmers sharing experiences, techniques and solutions with other farmers in facilitated settings. Knowledge transfer occurs through farm visits, group discussions and demonstrations led by experienced farmers, supported by farmer organisations that ensure relevance and credibility.

Target Group Suitability

- Farmers sceptical of institutional training
- Small family farms
- Rural communities and local networks

Evidence / Case Study:

- **Coldiretti – Campagna Amica**: farmer networks, hosting farms and peer exchange on sustainable practices and short supply chains https://www.campagnamica.it
- **CIA – Agricoltori Italiani**: local and regional farmer groups exchanging practices and solutions https://www.cia-agricoltori.it

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Strengths and Weaknesses

Strengths	Weaknesses
• High credibility and trust among participants • Use of accessible language and real-life examples • Strong motivational and community effect • Low formal training barriers	• Variable quality of content • Risk of non-evidence-based practices • Limited standardisation of learning outcomes

Practical Recommendations:

Peer learning activities should be complemented with validated digital content on the AgriGreen Hub, ensuring alignment with EU sustainability objectives while preserving the value of experiential farmer knowledge.

Method 3: Smartphone-Based Micro-Learning (Short Videos and Audio Content)

This method delivers learning content through very short videos, audio messages or visual micro-units accessible via smartphones. Content is designed for quick consumption and repetition, often using channels already familiar to farmers, reducing digital entry barriers.

Target Group Suitability

- Farmers with smartphone access but low digital literacy
- Farmers with limited time availability
- Rural learners needing flexible learning formats

Evidence / Case Study:

- **ISMEA – Istituto di Servizi per il Mercato Agricolo Alimentare**: short informational videos explaining agricultural practices, funding opportunities and sustainability measures https://www.ismea.it
- Regional advisory services funded under Rural Development Programmes (PSR)

Strengths and Weaknesses

Strengths	Weaknesses
• High accessibility and scalability • Cost-effective • Flexible and time-efficient • Reinforces learning through repetition	• Risk of fragmented learning • Limited interaction and feedback • Requires careful instructional design

Practical Recommendations:

Micro-learning should be used as a complementary method, supporting experiential and advisory-based learning and guiding farmers towards structured learning pathways within the AgriGreen Hub.

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Method 4: Individual Tutoring and Advisory-Based Learning

This method provides personalised, continuous support through agricultural advisors or tutors who accompany farmers over time. Learning is embedded in real decision-making processes and focuses on practical problem-solving, compliance with sustainability requirements and long-term improvement.

Target Group Suitability:

- Small farms with specific sustainability challenges
- Farmers requiring personalised guidance
- Farmers implementing CAP eco-schemes

Evidence / Case Study:

- **Advisory services of Coldiretti and CIA – Agricoltori Italiani**
  https://www.coldiretti.it
  https://www.cia-agricoltori.it
- **SRH03 Intervention – Marche Region (CAP 2023–2027)**: training, coaching and tutoring activities supporting professional skills development
  https://www.regione.marche.it

Strengths and Weaknesses

Strengths	Weaknesses
• Highly personalised and context-specific • Strong impact on behavioural change • Direct link between learning and farm performance	• High cost per learner • Low scalability • Strong dependence on human resources

Practical Recommendations:

Key elements of advisory-based learning should be translated into guided digital learning pathways, self-assessment tools and decision-support materials within the AgriGreen Hub to increase scalability while preserving effectiveness.

Conclusion

The Italian analysis demonstrates that innovative agricultural training methods are most effective when they are practice-oriented, embedded in real farming contexts and supported by trusted advisory structures. Experiential learning and peer exchange provide the highest levels of engagement and inclusiveness, particularly for farmers with lower educational backgrounds and limited digital skills.

At the same time, micro-learning and digital tools significantly enhance scalability and accessibility, while advisory-based learning ensures that sustainability competences are translated into concrete, economically viable practices. The findings strongly support the AgriGreenSkills approach, which integrates these complementary methods into a coherent, inclusive and transferable training framework.

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3.3 Innovative Methods in Poland

Introduction

Poland's agricultural training and advisory ecosystem is characterized by a strong tradition of advisory-led learning, combined with a growing need for innovation driven by environmental, economic, and policy pressures. The country has a highly diversified farm structure, dominated by small and medium-sized family farms, many of which are operated by farmers with limited formal vocational education and uneven digital skills. This structural profile strongly influences how training must be designed and delivered in practice.

Historically, farmer education in Poland has been organized through a network of public and private advisory institutions, agricultural universities, producer organizations, and specialized training centres. A central role has been played by institutions such as *Centrum Doradztwa Rolniczego*, regional advisory centers, and sectoral experts, whose mandate is not only to disseminate knowledge but also to support decision-making at farm level. Learning has traditionally taken the form of in-person courses, field visits, printed guidelines, and individual advisory consultations.

However, over the last decade – and particularly in the context of the European Green Deal, CAP reform, and increasing climate instability – this traditional model has proven insufficient on its own. Farmers are expected to adopt new practices related to biodiversity protection, soil health, water management, reduced chemical inputs, and climate adaptation, while simultaneously maintaining economic viability. For many Polish farmers, these requirements are perceived as complex, abstract, and risky, especially when communicated primarily through regulatory language or formal training formats.

As a response, Poland has witnessed the gradual emergence of innovative, practice-oriented training methods that aim to lower entry barriers and improve acceptance of sustainability-oriented change. These methods have not replaced traditional advisory services but rather transformed them, shifting the focus from theory-heavy instruction toward learning by doing, learning from peers, and learning in context.

Several key drivers explain why these innovative methods have developed in the Polish context:

- Farmers rarely have the possibility to attend long, formal courses. Training must fit into daily farm routines and seasonal workloads.
- Polish farmers place high value on solutions demonstrated by other farmers or trusted advisors rather than abstract recommendations.
- While smartphone use is increasingly common, many farmers remain hesitant toward complex e-learning systems, requiring intuitive and supported digital solutions.
- Sustainability measures linked to subsidies and eco-schemes require not only awareness but also practical understanding of "how to comply without losing income."

Consequently, the most effective innovative training approaches in Poland share several defining characteristics:

- They are experiential, using demonstration farms, field days, and real-life case studies.
- They are advisory-led, combining digital tools with human guidance and interpretation.
- They rely on short, modular learning formats rather than long curricula.
- They promote peer learning and community-based exchange, reducing resistance and increasing motivation.

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From a green skills perspective, these methods are particularly relevant because sustainability cannot be learned effectively through theory alone. Topics such as soil regeneration, biodiversity enhancement, or water efficiency require context-specific adaptation, observation of outcomes over time, and an understanding of trade-offs between environmental and economic objectives. Innovative training in Poland therefore emphasises practical feasibility, showing farmers not only what to change, but why, how, and with what expected results.

This national context aligns very strongly with the core philosophy of the AgriGreenSkills project. The project's emphasis on accessible digital learning, practical case-based content, trainer and advisor involvement, and support for farmers with lower educational backgrounds directly reflects the realities of the Polish agricultural sector. The innovative methods identified in Poland provide concrete, tested pathways for translating EU-level sustainability objectives into locally meaningful and economically viable farming practices.

In this sense, Poland offers a mature example of how green skills training can be embedded into existing advisory structures while progressively integrating digital and innovative elements. The methods presented in this Guide illustrate approaches that are not only effective nationally but also highly transferable to other European regions facing similar structural and educational challenges among their farming communities.

Catalogue of Innovative Methods in Poland

Method 1: Demonstration Farms and On-Farm Experiential Learning

Demonstration farms function as real-life learning environments where farmers observe and discuss sustainable practices implemented under local conditions. Training activities include guided farm visits, thematic field days (soil health, biodiversity, water management, reduced chemical inputs), and facilitated discussions led by agricultural advisors. Learning is based on observation, comparison, and direct exchange between farmers and experts.

Target group suitability:

- Small and medium-scale farmers
- Farmers with low formal education
- Older farmers with limited digital skills
- Farmers skeptical toward regulatory-driven sustainability measures

Evidence/Case Study:

National Demonstration Farm Network coordinated by Centrum Doradztwa Rolniczego

Official portal: https://gospodarstwademonstracyjne.cdr.gov.pl/

The network is used nationwide as a core instrument for knowledge transfer in sustainable agriculture and CAP eco-schemes.

Strengths and Weaknesses:

Strengths	Weaknesses
• Very high credibility and trust • Strong practical relevance and	• Limited scalability • Dependent on season and logistics

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immediate applicability • Effective for green skills requiring contextual adaptation	• Requires facilitation to ensure structured learning outcomes

Practical Recommendations:

Within the AgriGreenSkills project, demonstration farms should be used as pilot learning environments where sustainable practices can be observed and documented under real farming conditions. Learning activities conducted on these farms can be transformed into structured digital resources by recording short practice-based videos, capturing before-and-after effects, and summarizing key decision points made by farmers. These materials can then be adapted into micro-learning units hosted on the AgriGreen Hub, ensuring that the knowledge gained on-site is accessible to a wider audience.

Method 2: Digital Advisory and Decision-Support Learning (eDWIN Platform)

The eDWIN platform supports farmers through digital advisory tools that integrate monitoring, alerts, and recommendations aligned with integrated pest management and sustainable input use. Learning occurs through real-time decision-making, supported by advisors during onboarding and follow-up consultations.

Target group suitability:

- Farmers with basic digital access (smartphone/computer)
- Crop-oriented farms
- Farmers supported by advisors or cooperatives

Evidence/Case Study:

eDWIN – Internet Platform for Advisory and Decision Support

Official site: https://www.edwin.gov.pl

National project implemented by public agricultural institutions to support sustainable crop protection.

Strengths and Weaknesses:

Strengths	Weaknesses
• Promotes evidence-based and environmentally responsible decisions • High scalability once onboarding is completed • Strong link between learning and daily practice	• Requires initial digital guidance • Lower adoption without advisory support • Less suitable for farmers with very low digital literacy

Practical Recommendations:

In AgriGreenSkills, decision-support platforms such as eDWIN should be presented as learning tools embedded in everyday farm management rather than as standalone digital solutions. The AgriGreen Hub can include introductory modules explaining the environmental and economic value of data-driven decision-making, followed by simple onboarding guidance that helps farmers understand how to use such tools step by step. Advisory and training staff should be actively involved in supporting farmers during the initial phase of use, reinforcing learning through interpretation and discussion. This

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approach ensures that digital decision-support systems contribute directly to green skills development while remaining accessible to farmers with varying levels of digital confidence.

Method 3: Short Webinars and Low-Barrier Online Training by Advisory Institutions

Short online training sessions (60–90 minutes) delivered by advisory institutions focus on concrete sustainability topics such as organic farming, climate adaptation, water management, or eco-schemes. Sessions are often live, interactive, and recorded for later access.

Target group suitability:

- Farmers with limited time availability
- Farmers with basic digital skills
- Trainers and advisors

Evidence/Case Study:

Online training programs organized by **Centrum Doradztwa Rolniczego**

Example: https://www.cdr.gov.pl/doskonalenie-zawodowe/szkolenia

This method was widely used during and after COVID-19 as a permanent training format.

Strengths and Weaknesses:

Strengths	Weaknesses
• Cost-effective and scalable • Rapid response to policy or environmental changes • Easily reusable learning materials	• Risk of passive participation • Limited hands-on experience • Requires follow-up for behavioural change

Practical Recommendations:

For AgriGreenSkills, short webinars delivered by advisory institutions can be used as flexible entry points into green skills learning. Training content should be designed in modular units that can be delivered live and subsequently reused as recorded learning resources within the AgriGreen Hub. Each session should focus on a clearly defined practical topic and be complemented by concise follow-up materials, such as summaries or reflection prompts, to support knowledge retention and application. By integrating webinars into the digital platform, AgriGreenSkills can offer farmers time-efficient learning opportunities while maintaining consistency and coherence across training materials.

Method 4: Peer Learning and Multi-Actor Innovation (EPI Operational Groups)

EPI Operational Groups bring together farmers, advisors, researchers, and enterprises to jointly develop and test innovative solutions to real agricultural challenges. Learning is embedded in problem-solving, experimentation, and dissemination of results.

Target group suitability:

- Innovative and motivated farmers
- Farmer groups and cooperatives
- Advisors and trainers seeking real-life case studies

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Evidence/Case Study:

EPI Operational Groups database (KSOW+):
https://www.ksowplus.pl/baza-danych/baza-grup-operacyjnych-epi

Numerous Polish projects addressing soil health, biodiversity, and resource efficiency.

Strengths and Weaknesses:

Strengths	Weaknesses
• Very high relevance and ownership • Strong peer-to-peer learning effect • Generates credible, local case studies	• More complex coordination • Benefits concentrated among active participants • Requires translation into simple learning materials

Practical Recommendations:

AgriGreenSkills can build on the experience of EPI Operational Groups by using their innovation projects as a source of credible, practice-based case studies. The results of these projects should be translated into accessible learning content that highlights the problem addressed, the solution tested, and the practical outcomes achieved under Polish farming conditions. By presenting these innovation stories in a simplified and visual format on the AgriGreen Hub, the project can encourage peer learning and reduce resistance to change. In addition, creating space for moderated exchange among farmers within the platform can further strengthen knowledge sharing and reinforce community-based learning dynamics.

Conclusion

The analysis of innovative training methods in Poland demonstrates that effective green skills development for farmers requires a pluralistic and adaptive learning ecosystem rather than reliance on a single training model. The Polish experience confirms that sustainability-related competences are acquired most successfully when learning is closely connected to real farming practice, supported by trusted advisory structures, and delivered through formats that respect farmers' time constraints, educational backgrounds, and digital readiness.

Experiential approaches based on demonstration farms remain the most inclusive and engaging method, particularly for small-scale, older and low-educated farmers, as they provide concrete evidence of sustainable practices under local conditions and foster trust through peer learning. At the same time, digital decision-support tools and short online training formats significantly enhance scalability and cost-efficiency, enabling continuous learning and rapid dissemination of updated knowledge related to environmental regulations, climate risks, and innovative practices. Peer learning and multi-actor innovation further strengthen engagement and long-term behavioural change by embedding learning within collaborative problem-solving and locally relevant experimentation.

The comparative framework highlights that the strengths and limitations of individual methods are complementary rather than competitive. High engagement and inclusiveness achieved through experiential and peer-based learning can be effectively combined with the flexibility and scalability offered by digital and blended formats. This balanced combination is particularly important in the Polish context, where farm structures, digital capacities and learning preferences vary widely across regions and age groups.

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Overall, the Polish contribution confirms the strategic relevance of the AgriGreenSkills approach, which integrates accessible digital learning, advisory support, and practice-based methodologies into a coherent training model. By combining demonstration, advisory guidance, micro-learning and peer exchange, the project is well positioned to support an inclusive green transition, strengthen farmers' capacity to implement sustainable practices, and ensure that environmental objectives are translated into economically viable solutions at farm level. The methods identified in Poland therefore provide both a robust national foundation and a transferable reference framework for other European regions pursuing effective green skills development in agriculture.

3.4 Innovative Methods in Bulgaria

Introduction

In Bulgaria, socialist state agriculture until 1990, structured in state farms without private ownership, was drastically changed with the return of land to the owners from before 1945. Many people who now manage small farms and especially in remote areas do not have the necessary qualifications, skills and knowledge. Training and advice on agriculture in Bulgaria are relatively recent. The first services that provided training and advice were in 1995, and since 1999 the National Agricultural Advisory Service has been established, which operates as a unit of the Ministry of Agriculture and Food. Over the years, various organizations have been created with a license to provide services in agriculture, but they are not strictly profiled as training centers for farmers, but in a very wide range of activities that hire external specialists for agricultural training. Training in the field related to agro-ecology is mainly for organic farming and in a very narrow sense, more theoretical than working practices. These trainings, intended primarily for farmers who want to receive subsidies and become certified as organic producers under the Rural Development Programs, are mostly limited to explanations of the permitted plant protection and fertilisation products. In recent years, non-governmental organisations and private farms have begun to provide training and advice, also using modern digital tools.

In Bulgaria, training courses on small-scale and family farmers who may lack access to structured VET programme; older farmers with limited digital confidence; farmers in remote or rural regions; low-skilled or low-qualified agricultural workers, are carried out mainly by private companies and non-governmental organizations.

Some of them offer on-site training at the farm or a combination of on-site and online training. There are also online courses organised by the National Agricultural Advisory Service, which are short – 1-2 hours long. However, they are not recorded and are only available to course participants. In this report, we decided to look at four different training methods that are relevant to the project's topic:

- to reduce environmental pressures, improve soil and water management, enhance biodiversity, implement climate-smart practices, and comply with increasingly complex regulatory frameworks.

There are no sources indicating trainings for trainers on the AgriGreenSkills project topics outside of formal academic institutions. Agricultural trainers and advisors who require adaptable methodologies to support sustainability transitions are part mainly conducted by non-governmental organisations and even private farms. The research is outside the official education system, focussing mostly on private and peer-to-peer resources.

There are no sources indicating specifically for training for trainers outside of formal academic institutions. This study shows that trainers who want to build on their knowledge beyond their

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academic education participate in trainings together with farmers. The practical skills they acquire, they could adapt into pedagogical methods. For the needs of this report, we did not find specific trainings only for trainers on the project topics and outside academic institutions.

All trainings in this research are paid by trainees.

Catalogue of Innovative Methods in Bulgaria

Method 1: On-site and blended Trainings (online and on site)

Training courses provided by private non-governmental organization with own farm. Demonstration center with practical trainings, short and long lasting cources.

Target group suitability:

The courses are for all adult audiences – small and big holders farmers, young and old trainees, agricultural advisors. No specific group but only on agri-environmental practicies. Not conventional and not general agricultural skills such as obtaining a tractor driver's license or using mineral fertilizers and chemical plant protection.

Evidence/Case Study:

https://www.balkep.org/

A demonstration and education site for polyculture and for visitors from all over the world, while hosting courses and events throughout the year and managing a forest garden/permaculture plant nursery. Visitors are welcome by prior arrangement or by dropping in to one of the bi-annual Open Day events. The organization run online courses as well. All courses and event are mostly practical and focus on the area of permaculture, organic practices, sustainable and water and soil management, silver horticulture.

Strengths and Weaknesses:

Strengths	Weaknesses
• Open to multiple audiences • Specific range of topics related to agri-environmental practices • Mix of online courses and on-field practice	• The cources are paid which a burden for small farm holder

Practical Recommendations:

This type of training is very professional and with specific topics in agri-environmental issues and AgriGreenSkills project can provide, and used as a complement to those courses with specific software or apps.

Method 2: Demonstration farm and practical courses

A small organic garden with mixed crops cultivated by the methods of sustainable agriculture, whose produce will support the social enterprise. A training center and Green Academy for young people up

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to 29 years of age. Includes professional training, practical activities, support for finding employment or setting up their own agricultural enterprise.

Target group suitability:

Preferable young people but not limited to all others. People who are interesting in sustainable agriculture but no skills and knowledge.

Evidence/Case Study:

Botanical life Foundation: https://botanicalife.wixsite.com/botanica-eng

A non-profit foundation which supports entrepreneurship, creativity and innovations among young people. The foundation implements activities in the fields of ecology, agriculture, gardening and permaculture. Funded by projects and paid by course participants or volunteering. Short courses – 2-5 days.

Strengths and Weaknesses:

Strengths	Weaknesses
• Sustainable agriculture demonstration farm • Practical training on site	• No online courses

Practical Recommendations:

BotanicaLife Results from trainings on sustainable agriculture can be used, as well as the specific requirements of young people. Knowledge of permaculture and other agro-ecological practices can be built on the skills of a large part of young people with electronic devices.

Method 3: On site trainings and online tools

Market garden with trainings for gardeners and farmers using different way of trainings: on farm – 1 day, viber, vlog, blog, videos on YouTube, reels in Facebook, Instagram, participations in events organized by other organizations.

Very specific and practical advice on sustainable/regenerative agriculture.

Target group suitability:

Accessible to all audiences – from children to old and only topics related to sustainable agriculture.

Evidence/Case Study:

Nearby farm https://blizkataferma.com/

Strengths and Weaknesses:

Strengths	Weaknesses
• Videos on YouTube are accessible for free, with no ICT skills required • Calendar of upcoming events • Possibility for farmers to share their experience	• No full online course found in Bulgaria • The course onsite is costly

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Practical Recommendations:

Videos can be used as additional resources and help us avoid creating material that is already available. The use of various channels with video tools as Facebook, Viber, Youtube as a multiplier tool to promote the trainings and the project.

Method 4: Personalised support in urban gardening

People can rent their own piece of land to grow vegetables and herbs. Support provided by professional trainers via advices on site.

Target group suitability:

Urban people with small plots and heritage home in a village who can wishing to start a project that requires expertise and time.

Evidence/Case Study:

Omaya garden https://omayagarden.bg/

Using an accessible location in the city to engage people in hands-on training from organic farming professionals. What is learned can be used to apply the knowledge to their heritage properties and gardens on a larger scale.

Strengths and Weaknesses:

Strengths	Weaknesses
• Tailored support from a professional • Attracting new supporters to sustainable gardening	• No online tools

Practical Recommendations:

Opportunity to engage new gardeners in sustainable agricultural practices in urban settings. Implementation of online tools that can more easily and quickly contribute to the acquisition of new techniques.

Conclusion

In Bulgaria, there have been no systematic online trainings available for small farmers, as well as for trainers in the field of sustainable agriculture. Online trainings are conducted mainly by non-governmental organisations or private companies/farms and are not supported by the state. There are no accessible online resources outside of YouTube and sporadically on Facebook. All of them are paid for by the trainees.

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3.5 Innovative Methods in Greece

Introduction

In Greece, innovative training methods have emerged to bridge the gap between traditional agricultural practices and modern sustainability requirements. These methods align with local needs by focusing on bio-economy, regenerative agriculture, and experiential learning. Their effectiveness lies in their ability to combine digital accessibility (multilingual platforms) with practical, on-farm training and urban-rural networking.

Catalogue of Innovative Methods in Greece

Method 1: Regenerative Farming Greece

Title: E-learning / online knowledge platform

Website: https://regenerativefarminggreece.org/el/

A Greek initiative focused on educating the community about soil health, agroforestry, and ecosystem resilience through regenerative techniques.

Target Group Suitability:

Farmers in transition to sustainable practices and local producer networks.

Evidence/Case Study:

Active local networks in Athens, Argolida, and Chania that offer practical on-farm training sessions.

Strengths and Weaknesses:

Strengths	Weaknesses
• Highly practical "hands-on" orientation and excellent use of instructional videos.	

Practical Recommendations:

Adopt their "on-farm" training model and utilize their video resources for visual learners.

Method 2: Wikifarmer

Title: Structured Peer Learning (Farmer-to-Farmer Learning)

Website: https://wikifarmer.com/en

A vast digital library of agricultural knowledge covering a massive range of farming techniques, accessible in multiple languages.

Target Group Suitability:

- Professional farmers
- Agronomists
- General public

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A globally recognized platform with a strong Greek presence, used as a primary reference for crop management.

Strengths and Weaknesses:

Strengths	Weaknesses
• Extreme variety of subjects and user-friendly interface.	• Some advanced content or services are paid.

Practical Recommendations:

Recommend it as a supplementary reference hub for technical farming questions during the project.

Method 3: Open Farm

Title: Field-Based Training on Demonstration Farms (Learning by Doing)

Website: https://openfarm.gr/

A network based in Athens that promotes experiential learning by connecting urban consumers and trainees with local producers through farm visits and workshops.

Target Group Suitability:

- new farmers
- urban trainees
- students looking for a connection to the food system

Evidence/Case Study:

The organization of "Open Farm Days" in Athens and across Greece, facilitating direct knowledge exchange between producers and the public.

Strengths and Weaknesses:

Strengths	Weaknesses
• Exceptional for networking and direct experiential learning; promotes transparency in the food chain.	• Less focused on academic or technical certification compared to e-learning platforms.

Practical Recommendations:

Use this model to organize experiential site visits for trainees to see green skills in practice.

Method 4: RELIEF – Bio-economy

Title: Blended advisory training

Website: https://relief.uop.gr/

A specialized e-learning platform providing free, multilingual courses (including Greek) on applying bio-economy practices within the farming sector.

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Target Group Suitability:

- Farmers
- Agronomists
- Agricultural professionals

Evidence/Case Study:

An Erasmus+ project that concluded in May 2025, offering high-quality digital content specifically for the Greek agricultural context.

Strengths and Weaknesses:

Strengths	Weaknesses
• Completely free, provides deep information, and is highly accessible due to the Greek language option.	• As a finished project, long-term updates may be limited.

Practical Recommendations:

Use this platform's modules as a foundation for training in sustainability and eco-systems.

Conclusion

The evaluation of innovative training practices in Greece shows that building strong green skills among farmers depends on a flexible and interconnected learning system, rather than on a single educational approach. The Greek case demonstrates that sustainability-related competences are most effectively developed when digital learning tools are combined with hands-on farm experience and strong links between urban and rural communities.

Practical, experience-based initiatives such as Open Farm and the local networks of Regenerative Farming Greece have proven to be especially inclusive and motivating, particularly for young farmers and people entering agriculture from urban areas. These initiatives promote "learning by doing" and encourage trust through direct interaction and knowledge exchange. At the same time, online platforms such as Wikifarmer and RELIEF support large-scale learning and provide in-depth technical content, offering free and reliable guidance on issues such as bio-economy practices and crop management.

The Greek experience underlines that the advantages and shortcomings of individual training methods complement one another. For example, the openness and collaboration fostered through field visits and farm demonstrations help counterbalance the more theoretical orientation of digital learning environments. This integrated approach is particularly relevant in Greece, where it helps connect traditional farming practices with contemporary sustainability standards.

In summary, the Greek case confirms the strategic importance of the AgriGreenSkills approach, which brings together online education, advisory services, and practical training into a unified system. By combining demonstrations, video-based instruction, and peer-to-peer learning, the project is well equipped to promote an inclusive green transition. It supports farmers in turning environmental goals such as soil protection and ecosystem resilience into economically sustainable farming practices. The methods developed in Greece therefore offer a solid basis and a transferable model for other European regions seeking to strengthen green skills in agriculture

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4. Comparative Framework on Innovative Methods

4.1 Evaluation Criteria in Belgium

Method	Accessibility (1-5)	User-friendliness (1-5)	Cost-efficiency (1-5)	Engagement (1-5)	Inclusiveness (1-5)	Best suited for...
On-site and Face-to-Face Training	3	5	3	4	5	All audiences depending on the topic, from unemployed people to active farmers wishing to adopt new methods
Peer-to-Peer Learning and Technical Exchanges	3	5	3	5	5	Active farmers
Online Training and Digital Resources	4	4	3	2	4	All audiences depending on the topic
Personalised support	3	5	3	5	5	Active farmers

Table 1. Comparative Framework in Belgium

The diversity of face-to-face offers means a wide array of people of different experience may be reached. However, there is an inverse relationship between how easy a training method is to access and how much it engages the participant. Online training is the most accessible but the least engaging, whereas peer-to-peer learning and personalised support offer maximum engagement at the cost of lower accessibility.

On-site training and online resources are versatile enough for "all audiences," ranging from the unemployed to active farmers. However, the most highly-rated methods for engagement – peer-to-peer learning and personalised support – are specifically optimised for active farmers.

In conclusion, the matrix suggests that while digital tools are better for broad reach, interpersonal and tailored approaches are superior for driving deep engagement, particularly within the farming community.

4.2 Evaluation Criteria in Italy

Training Method	Accessibility (1–5)	User-friendliness (1–5)	Cost-efficiency (1–5)	Engagement (1–5)	Inclusiveness (1–5)	Best suited for...
Method 1 – Field-based training on demonstration farms	3	4	2	5	5	Older farmers, low-skilled farmers, farmers learning complex practices through observation

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Method 2 – Structured peer learning (farmer-to-farmer)	4	4	3	4	4	Small family farmers, farmers sceptical of formal training, local rural communities
Method 3 – Smartphone-based micro-learning	5	4	5	3	4	Farmers with limited time availability and basic smartphone skills
Method 4 – Advisory-based learning	3	3	2	4	5	Agricultural advisors and farmers implementing CAP eco-schemes

Table 2. Comparative Framework in Italy

The comparative analysis confirms that no single training method is sufficient on its own. An integrated combination of field-based learning, peer exchange, digital micro-learning and advisory support is required to address the diverse profiles and needs of Italian farmers.

The comparative matrix (Excel) illustrates how different methods respond to varying levels of digital literacy, time availability and learning preferences, and supports the design of an inclusive and flexible training model within AgriGreenSkills, where simple digital materials (videos, infographics and audio content) are used to complement and enhance existing practices.

4.3 Evaluation Criteria in Poland

Method	Accessibility (1-5)	User-friendliness (1-5)	Cost-efficiency (1-5)	Engagement (1-5)	Inclusiveness (1-5)	Best suited for...
Demonstration Farms and On-Farm Experiential Learning	3	5	3	5	4	Small and medium-scale farmers with low formal education, Older farmers with limited digital skills
Short Webinars and Low-Barrier Online Training by Advisory Institutions	4	4	4	3	3	Farmers with mid-to-high digital skills, Trainers and advisors
Digital Advisory and Decision-Support Learning (eDWIN Platform)	4	4	5	4	3	Younger/mid-age, smartphone users, crop-oriented farms
Peer Learning and Multi-Actor Innovation	3	4	4	4	3	Innovative farmers, farmer

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(EPI Operational Groups)						groups and cooperatives, advisors and trainers

Table 3. Comparative Framework in Poland

The comparative analysis demonstrates that each educational method presents distinct strengths and responds to different learner profiles, levels of digital competence, and resource capacities. No single approach fully addresses all dimensions of accessibility, engagement, inclusiveness, and cost-efficiency. Therefore, the effectiveness of advisory and training interventions depends largely on how well the chosen method aligns with the characteristics and needs of the target group.

Demonstration farms and experiential on-farm learning emerge as the most engaging and user-friendly approaches, particularly suitable for small and medium-scale farmers, older practitioners, and those with limited digital skills or formal education. Their hands-on and practice-oriented nature enhances understanding and trust; however, they require greater logistical effort and financial resources.

Short webinars and low-barrier online training offer a balanced and flexible solution. They ensure relatively high accessibility and cost-efficiency while enabling advisory institutions to reach wider audiences. This format is particularly effective for farmers and trainers with moderate to advanced digital competences.

Digital advisory and decision-support platforms stand out in terms of cost-efficiency and scalability. They are well suited for younger and mid-age farmers, especially those operating crop-oriented farms and using smartphones or digital tools regularly. However, their inclusiveness may be limited if digital divides persist.

Peer learning and multi-actor innovation models foster collaboration, knowledge exchange, and innovation ecosystems. They are particularly valuable for innovative farmers, cooperatives, and advisory networks, strengthening collective problem-solving capacities.

Overall, the findings suggest that a blended and complementary approach – combining experiential, digital, online, and peer-based methods – would maximize outreach, inclusiveness, and long-term impact. Integrating multiple formats within advisory systems can ensure that diverse farmer profiles are effectively supported while maintaining both engagement and cost-efficiency.

4.4 Evaluation Criteria in Bulgaria

Method	Accessibility (1-5)	User-friendliness (1-5)	Cost-efficiency (1-5)	Engagement (1-5)	Inclusiveness (1-5)	Best suited for…
On-site blended Trainings	5	5	2	5	5	Older farmers, practical learners
Demonstration farm and practical cources	4	4	3	5	5	Younger Farmers with mid-to-high digital skills
On site trainings and online	5	5	3	4	5	All ages

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Personalised support in urban gardening	3	3	3	4	3	Mixed groups, transition support

Table 4. Comparative Framework in Bulgaria

Comparative analysis shows that combining different methods is the best means of training. Even if some of the means of communication are intended to attract a larger community. In Bulgaria, interest in agro-ecological activities is greater among young and educated people, for whom the use of modern tools is not a limitation. However, the group of farmers and gardeners in remote rural areas requires an easier training method. Access to a demonstration field with practical on-site activities shows broad support, but the high price barrier is an obstacle. Most training venues with demonstration farms are located in larger, central locations, so digital tools would be suitable for small and remote areas far from large central population centers. Good mobile operator coverage in the country allows access to digital applications, as long as they are separate modules, short and easy to understand, with a strong practical focus and without theoretical background material.

4.5 Evaluation Criteria in Greece

Training Method	Name	Accessibility (1–5)	User-friendliness (1–5)	Cost-efficiency (1–5)	Engagement (1–5)	Inclusiveness (1–5)	Best suited for...
Method 1 – E-learning / online knowledge platform	**Regenerative**	4	5	4	5	4	Small farmers, innovative and open to new cutting-edge methods
Method 2 – Structured peer learning (farmer-to-farmer)	**Wikifarmer**	5	5	3	3	5	Professional farmers, digitally active and with limited time
Method 3 – Field-Based Training on Demonstration Farms (Learning by Doing)	**Open Farm**	3	4	3	5	5	Small-scale farmers with minimal familiarity with technology
Method 4 – Blended advisory training	**RELIEF**	5	4	5	3	4	Suitable for young farmers, agronomists and professionals who are fully familiar with technology

Table 5. Comparative Framework in Greece

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The analysis for Greece reveals that a diversified and complementary approach is essential, as no single training method addresses the varying needs of all farmer profiles effectively.

Field-based training on demonstration farms, such as Open Farm, achieves the highest possible scores in engagement and inclusiveness.

This makes it the most effective method for small-scale farmers with minimal familiarity with technology, as it prioritizes experiential "learning by doing" over digital interaction. In contrast, structured peer learning through platforms like Wikifarmer offers maximum accessibility and inclusiveness for professional, digitally active farmers who need to manage limited time, although its cost-efficiency is moderate due to some paid advanced services.

E-learning and online knowledge platforms, specifically Regenerative Farming Greece, stand out for their high user-friendliness and engagement. These platforms are best suited for innovative small farmers who are open to adopting cutting-edge methods through instructional videos and digital resources. Meanwhile, blended advisory training programs like RELIEF demonstrate excellent cost-efficiency and accessibility. By providing high-quality, free content in Greek, they offer a scalable foundation for young farmers and agricultural professionals who are already fully familiar with technology.

Overall, the matrix confirms that an integrated mix of experiential, digital, and peer-based methodologies best supports inclusive and effective green skills development within the Greek agricultural sector."

7. Conclusion

The research conducted within WP2-A4 confirms that the future of agricultural training in Europe must move beyond conventional instructional formats and adopt models that are deeply embedded in the lived realities of farmers. The innovative methods analyzed across partner countries demonstrate that effective green skills development is not achieved through information delivery alone, but through learning processes that are experiential, context-sensitive, trust-based, and progressively supported by accessible digital tools.

Across Belgium, Italy, Poland, Bulgaria and Greece, a consistent pattern emerges: farmers engage most effectively when training reflects their daily practice and when new knowledge is demonstrated in real production environments. Demonstration farms, field-based learning, advisory support and structured peer exchange consistently show higher levels of credibility and behavioral impact than purely classroom-based or fully online training. This finding is particularly significant for small-scale and older farmers, who often rely on experiential knowledge and intergenerational learning traditions. When sustainability practices are observed under real conditions, discussed with trusted advisors, and compared with neighboring farms, they become tangible and economically understandable rather than abstract policy requirements.

At the same time, the analysis highlights that scalability remains a structural challenge. Field demonstrations, personalized advisory support and long-term tutoring produce strong learning outcomes, yet they are resource-intensive and geographically limited. Conversely, digital platforms, webinars and micro-learning formats offer broad outreach and cost-efficiency, but risk excluding those with lower digital literacy or limited confidence in navigating online systems. The tension between depth of impact and breadth of access is therefore a central consideration in designing inclusive agricultural education.

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The findings of this Guide suggest that the most sustainable approach lies in combining these models rather than prioritizing one over another. Blended learning architectures, where experiential training is complemented by short, modular, and user-friendly digital content, provide a balanced solution. In such models, digital tools do not replace advisors or peer networks; instead, they reinforce and extend them. Short videos recorded on demonstration farms, simplified decision-support explanations, visual step-by-step guides and self-assessment tools can translate on-site learning into scalable resources hosted within the AgriGreen Hub. In this way, digitalization becomes an enabler of inclusion rather than a barrier.

Another important conclusion concerns the psychological and cultural dimensions of the green transition. For many farmers, sustainability measures linked to EU policy frameworks are perceived as complex, bureaucratic or economically risky. Innovative training methods that emphasize peer exchange and advisory mediation play a crucial role in reframing sustainability as an opportunity rather than an obligation. When farmers witness concrete economic and agronomic benefits implemented by trusted peers, resistance decreases and motivation increases. This demonstrates that innovation in training is as much about social trust and communication as it is about pedagogy or technology.

The research further indicates that accessibility must remain a central design principle. Simplified language, modular structure, practical case studies, and intuitive digital navigation are not secondary features; they are preconditions for inclusion. If green skills training is overly technical, text-heavy, or digitally complex, it risks widening the gap between advanced farms and those already operating with limited resources. The AgriGreenSkills framework therefore prioritises clarity, usability, and contextual relevance in all future training materials.

Ultimately, this Guide confirms that inclusive green transition in agriculture is not primarily a technological challenge but a pedagogical one. Effective change requires learning models that respect farmers' realities, build on trust networks, and translate sustainability objectives into economically viable and context-specific solutions.

The innovative methods identified here provide a strong foundation for achieving that goal and ensuring long-term impact beyond the lifetime of the project.

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