

VETourismo

D2.1 INSIGHTS AND NEEDS ANALYSIS REPORT

VETourismo

ADVANCING DIGITAL AND SUSTAINABLE PRACTICES IN AGRO-TOURISM FOR VETS

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EXECUTIVE SUMMARY

This Transnational Synthesis Report presents the consolidated findings of the needs analysis conducted within the framework of the project aimed at strengthening vocational education and training (VET) for the agro-tourism sector. The report brings together evidence collected through questionnaires (229 responses) and focus groups (58 participants) implemented in the seven participating countries and provides a comparative analysis of the challenges, skills needs, and training gaps affecting agro-tourism stakeholders across Europe.

The findings reveal a strong consensus regarding the growing importance of agro-tourism as a driver of rural development, economic diversification, cultural heritage preservation, and sustainable tourism. At the same time, stakeholders consistently highlighted significant shortcomings in existing training provision, particularly in relation to digitalisation, entrepreneurship, sustainability implementation, and practical work-based learning opportunities.

Across the participating countries, agro-tourism operators face increasing pressure to adapt to digital transformation, changing visitor expectations, sustainability requirements, and competitive market conditions. However, current VET systems often remain fragmented, overly theoretical, and insufficiently aligned with the realities of agro-tourism businesses.

The analysis identified several recurring challenges, including low digital skills among agro-tourism operators, weak online visibility and digital marketing capacity, limited entrepreneurial and customer service competences, insufficient understanding of operational sustainability practices, weak cooperation between VET providers and businesses, and restricted access to training opportunities in rural and remote areas.

These findings provide the foundation for the development of a practice-oriented and future-focused agro-tourism curriculum that responds directly to the needs expressed by stakeholders and supports the long-term competitiveness and sustainability of the sector.

7	229	9	58	7	4
partner countries	questionnaire responses	focus group sessions	focus group participants	national research reports	months of fieldwork, 2026





1. INTRODUCTION

1.1 Purpose of the Report

This Transnational Synthesis Report presents the consolidated findings of the research activities conducted within the framework of the VETourismo project across the participating countries. Building upon the national reports developed through desk research, online questionnaires, and focus group discussions, the report provides a comparative and analytical overview of the current state of agro-tourism vocational education and training (VET), the challenges faced by the sector, and the competencies required for its future development.

Rather than reproducing the national findings individually, the report synthesises evidence collected from diverse stakeholder groups, including agro-tourism operators, vocational education providers, trainers, learners, entrepreneurs, policymakers, and rural development actors. Through this transnational perspective, the report identifies common challenges, emerging trends, training gaps, skills needs, and examples of good practice that characterise the agro-tourism sector across Europe.

The report constitutes a key foundation for the subsequent development of the VETourismo training curriculum and digital learning resources. By identifying the knowledge, skills, and competencies most relevant to contemporary agro-tourism, it ensures that future project outputs are evidence-based, responsive to labour market needs, and aligned with European priorities related to sustainability, digital transformation, innovation, and inclusion.

1.2 Project Overview

VETourismo is an Erasmus+ Cooperation Partnership in Vocational Education and Training (KA220-VET) that seeks to modernise vocational education and training within the agro-tourism sector by integrating sustainability, digital innovation, entrepreneurship, and inclusive learning approaches. The project responds to the growing importance of agro-tourism as a driver of rural development and economic diversification, while addressing the skills shortages and training gaps that continue to limit the sector's full potential.

Across Europe, agro-tourism is increasingly recognised as an effective mechanism for generating employment opportunities, supporting rural economies, preserving cultural and natural heritage, and promoting environmentally responsible tourism practices. At the same time, the sector is undergoing significant transformation as businesses adapt to changing consumer expectations, digital technologies, sustainability requirements, and new market opportunities. These developments require a workforce equipped with a broader and more integrated set of competencies than those traditionally associated with either agriculture or tourism alone.

The VETourismo project addresses these challenges through the development of an innovative training framework that combines sustainable agro-tourism practices, digital transformation, entrepreneurial skills, and inclusive educational methodologies. Particular emphasis is placed on strengthening the capacity of vocational education systems to provide relevant, accessible, and future-oriented learning opportunities for learners, professionals, entrepreneurs, and rural communities. The project also seeks to improve access to training for groups that may face barriers to participation, including rural youth, women, and individuals living in geographically remote areas.





The transnational research presented in this report represents the first step in this process. Its purpose is to ensure that the curriculum and educational resources developed during the project are firmly grounded in the realities, challenges, and aspirations of agro-tourism stakeholders across Europe.

1.3 Methodology

The findings presented in this Transnational Synthesis Report are based on a common mixed-method research methodology implemented across all seven partner countries. The research was designed to generate a comprehensive and evidence-based understanding of the current state of agro-tourism vocational education and training (VET), the skills required by the sector, existing competence gaps, and the challenges affecting the professional development of agro-tourism operators throughout Europe.

To ensure consistency and comparability, all project partners followed a common research framework and employed harmonised research instruments, procedures, and thematic priorities. The methodology combined desk research, quantitative data collection through an online questionnaire, and qualitative data gathered through focus group discussions. This triangulated approach enabled the partnership to collect robust evidence from multiple stakeholder perspectives while capturing both measurable trends and contextual insights into the realities of the agro-tourism sector.

Desk Research

The first phase of the research consisted of a desk-based analysis conducted by each project partner within their respective national context. The purpose of this phase was to establish a comprehensive understanding of the existing agro-tourism landscape and to provide the contextual foundation for the subsequent empirical research.

Partners reviewed relevant scientific literature, policy documents, strategic frameworks, legislation, statistical information, previous research, and existing vocational education and training provision related to agro-tourism. Particular attention was given to identifying the current state of agro-tourism development, national and regional policy priorities, existing educational opportunities, labour market trends, and examples of good practice. This initial mapping exercise enabled each partner to identify the key characteristics of the national agro-tourism ecosystem and informed the design and interpretation of the primary research activities.

Online Questionnaire

Building upon the findings of the desk research, the project consortium developed a common multilingual online questionnaire that was implemented across all participating countries. The survey was translated into the respective partnership languages to ensure accessibility and maximise stakeholder participation.

The questionnaire targeted a broad range of actors involved in agro-tourism and rural development, including agro-tourism operators, farmers, vocational education and training providers, trainers, learners, tourism professionals, entrepreneurs, local authorities, policymakers, rural development organisations, and other relevant stakeholders.

Rather than focusing exclusively on existing educational provision, the questionnaire explored the broader competence needs of the sector through a respondent profile section followed by five thematic sections:

- current state of training and skills in agro-tourism, including cooperation between VET providers and businesses and access to training for people with fewer opportunities;
- skills needs across the four VETourismo pillars: sustainability, digitalisation, entrepreneurship and cultural heritage;
- digitalisation and e-learning;
- barriers and support needs; and
- priorities for the future VETourismo curriculum.

The survey generated quantitative evidence regarding stakeholders' perceptions of current challenges, priority competence areas, barriers to skills development, and future educational needs. The common questionnaire made it possible to compare national results.

Focus Groups

To complement the survey findings with qualitative insights, each partner organised national focus group discussions involving representatives from the principal stakeholder groups identified during the research design phase. Participants included agro-tourism entrepreneurs, farmers, vocational education providers, trainers, learners, tourism professionals, local authorities, rural development organisations, business support organisations, and other actors actively involved in the agro-tourism ecosystem.

The focus groups followed common guidelines developed by the partnership, although their structure varied: most partners used three discussion areas (experience of agro-tourism, current practices, and required skills and measures), while Greece and Portugal used five thematic areas. The discussions enabled participants to elaborate on their experiences, identify practical challenges, validate the survey findings, and propose solutions based on their professional experience.

Particular emphasis was placed on understanding the realities of agro-tourism businesses, identifying existing competence gaps, exploring barriers to vocational education participation, examining opportunities arising from digitalisation and sustainability, and assessing the current level of cooperation between education providers and the labour market.

The qualitative evidence generated through the focus groups provided valuable contextual information that complemented the quantitative survey results and allowed the partnership to better understand the underlying factors shaping agro-tourism development in different national contexts.



Research Sample

In total, the online questionnaire collected 229 responses across the seven partner countries, exceeding the minimum of 175 responses (25 per country) set in the WP2 Data Collection Methodology, with the minimum of 25 responses reached in every country. In addition, 58 stakeholders took part in nine focus group sessions, with every country meeting the minimum of five participants.

Where partners reported the social profile of respondents, the share of people with fewer opportunities (e.g. residents of rural or remote areas, people from low-income households, people with a migrant or minority background or with a disability) clearly exceeded both the 20% target set in the WP2 Data Collection Methodology and the 35% participation target for underrepresented groups set in the project application, reaching 52% in Greece, 74% in Croatia and over 40% in Portugal.

The national data are not fully comparable, and the following limitations should be kept in mind. The Portuguese sample consists mainly of VET learners (76.2%), whereas the Bulgarian sample is dominated by representatives of chambers, business associations and NGOs (52.3%). The German and Romanian reports present their survey findings qualitatively, without mean scores. For this reason, the quantitative comparisons in this report draw mainly on the Croatian, Greek and Italian data, which report comparable mean scores on a five-point scale.

Table 1.1 on the following page summarises the research sample by partner country.

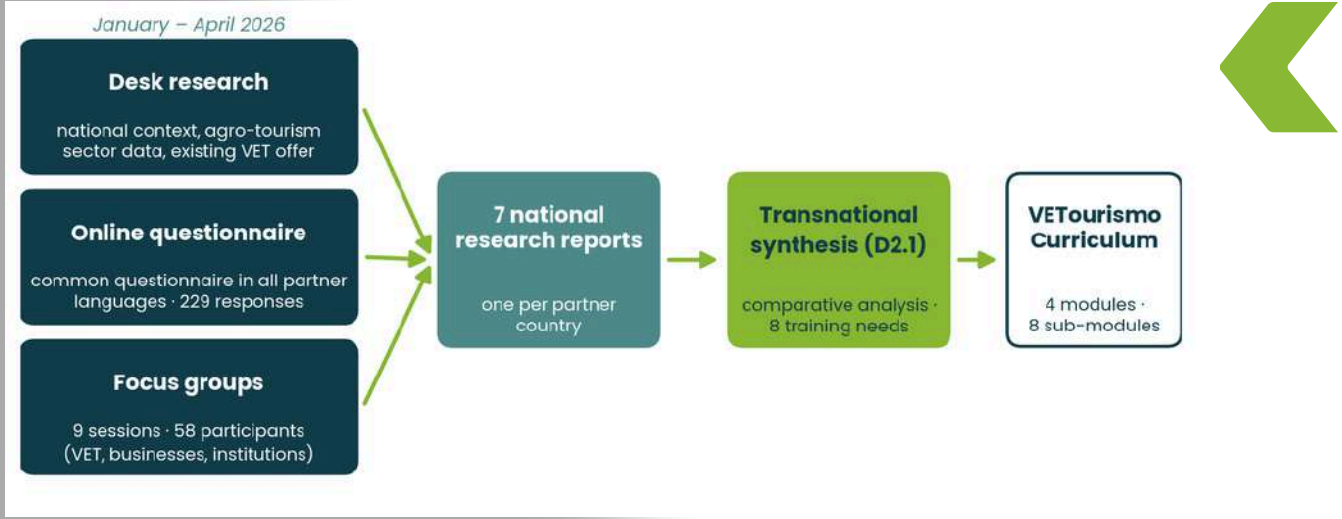


Table 1.1. Research sample by partner country

Country	Partner	Survey responses	Focus group participants	Focus group sessions
Bulgaria	BCCI	44	11	1
Croatia	PORC	27	12	1
Germany	DEULA / uDevelop	29	5	1
Greece	iAgroCert	25	6	1
Italy	Slow Tourism	25	10	2
Portugal	CEPROF	42	5	2
Romania	LTT Călimănești	37	9	1
Total		**229**	**58**	**9**

Source: VETourismo national research reports (2026).

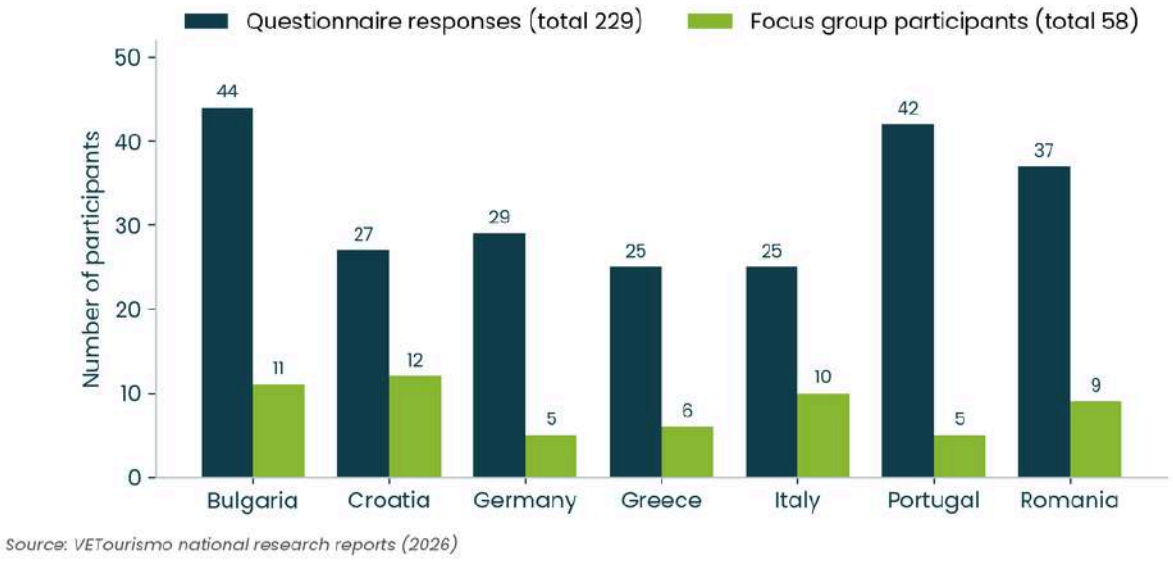


Figure 1.1. Questionnaire responses and focus group participants by partner country



Transnational Data Synthesis and Comparative Analysis

Upon completion of the national research activities, each partner prepared a National Research Report synthesising the findings from the desk research, questionnaire analysis, and focus group discussions. These reports constituted the primary evidence base for the present Transnational Synthesis Report.

The transnational analysis did not seek to reproduce the national reports individually. Instead, it applied a comparative analytical approach aimed at identifying common patterns, recurring challenges, country-specific characteristics, and broader European trends emerging across the seven participating countries. By comparing evidence collected through the three complementary research methods, the partnership was able to identify areas of convergence and divergence regarding skills needs, vocational education provision, labour market expectations, and the future development of agro-tourism.

The resulting synthesis provides a robust evidence base for the design of the VETourismo curriculum and subsequent educational resources. By grounding curriculum development in empirical research conducted across diverse European contexts, the project ensures that its educational outputs respond directly to the real needs of agro-tourism stakeholders while remaining sufficiently flexible to accommodate different national realities and regional characteristics.

2. COUNTRY FINDINGS

Greece

Greece presents a paradoxical situation in the field of agro-tourism. On the one hand, it possesses exceptional assets that position it favourably for the sector's development, including a strong tourism industry, rich agricultural traditions, internationally recognised gastronomy, and increasing demand for authentic and experience-based tourism. On the other hand, the educational ecosystem supporting agro-tourism remains fragmented and underdeveloped, creating a significant mismatch between labour market needs and available training opportunities.

The findings from both questionnaires and focus groups reveal a strong consensus among stakeholders regarding the strategic importance of agro-tourism for rural development and economic diversification. Participants consistently recognised the sector's potential to create employment opportunities, preserve local heritage, strengthen community resilience, and generate additional income streams for rural populations. Nevertheless, stakeholders simultaneously highlighted that current educational provision is insufficient to support these ambitions. The absence of a nationally accredited agro-tourism vocational pathway means that individuals entering the sector often rely on fragmented knowledge acquired through personal experience, informal learning, or self-directed online resources rather than structured education.

Digitalisation emerged as the most urgent challenge identified across all research activities. While stakeholders unanimously acknowledged the importance of digital tools for business competitiveness, many operators reported lacking the necessary competencies to effectively promote and manage their businesses online. Difficulties were particularly evident in social media management, digital marketing, website creation, online booking systems, customer relationship management, and digital storytelling. Focus group participants repeatedly described learning these skills independently or relying on younger family members, revealing a significant dependency on informal knowledge transfer rather than professional training structures. This situation not only limits business growth but also contributes to inequalities between enterprises with different levels of digital readiness.

Sustainability was identified as another major area requiring intervention. Although environmental awareness is increasing, many stakeholders demonstrated a limited operational understanding of sustainable practices. Sustainability is often perceived as an abstract concept rather than an integrated business strategy encompassing climate adaptation, resource efficiency, biodiversity protection, sustainable visitor management, and certification schemes. This gap is particularly concerning given the increasing impact of climate change on agricultural production and rural economies. Participants emphasised the need for practical and immediately applicable learning resources that can support businesses in implementing sustainability measures in their daily operations.

Entrepreneurship also emerged as a significant weakness. Many agro-tourism operators possess substantial agricultural expertise but lack competencies related to business planning, financial management, pricing strategies, funding opportunities, customer service, and long-term strategic development. The findings suggest that agro-tourism professionals are increasingly expected to fulfil multiple roles simultaneously, acting not only as farmers but also as entrepreneurs, marketers, hospitality providers, and cultural ambassadors. However, existing educational programmes rarely prepare learners for these multidimensional responsibilities.

The research further highlighted structural inequalities affecting access to education. Rural communities, women, older adults, and individuals living in geographically isolated areas face considerable barriers to participation in training activities. Distance, lack of transport, financial limitations, and competing family or professional responsibilities often prevent potential learners from engaging in traditional face-to-face programmes. These findings strongly support the need for flexible and inclusive learning environments capable of reaching diverse target groups.

Another recurring theme was the weak cooperation between vocational education institutions and agro-tourism businesses. Stakeholders described current collaboration as sporadic and insufficiently structured, resulting in limited opportunities for learners to acquire practical experience. The lack of mentoring mechanisms and work-based learning opportunities further contributes to the disconnect between education and labour market needs.

Nevertheless, focus groups also generated concrete opportunities for future collaboration, including the willingness of vocational institutions to pilot VETourismo modules and the participation of women's cooperatives as experiential learning environments.

Overall, the Greek findings clearly indicate that future educational interventions should move beyond traditional sector-specific approaches and adopt a multidisciplinary perspective that integrates agriculture, tourism, sustainability, entrepreneurship, digitalisation, and cultural heritage. Training should prioritise practical application, accessibility, and experiential learning while simultaneously responding to the realities of rural populations. The evidence strongly suggests that a flexible and digitally supported curriculum, such as the one envisioned by VETourismo, can contribute substantially to strengthening the professionalisation, competitiveness, and long-term sustainability of the Greek agro-tourism sector.

Germany

Germany presents a relatively mature rural tourism environment with strong agricultural traditions, well-developed regional tourism networks, and a growing interest in authentic farm-based experiences. Agro-tourism is increasingly recognised as an important mechanism for rural diversification, direct marketing, local value creation, and sustainable regional development. However, despite the sector's practical growth, the findings reveal a significant disconnect between the realities of agro-tourism practice and the structure of existing vocational education and training systems. Agro-tourism is developing successfully on the ground, yet it remains insufficiently recognised as a distinct educational field, creating gaps in the competencies required by operators and future professionals.

The questionnaires and focus groups demonstrated a strong consensus regarding the potential of agro-tourism to contribute to rural development, income diversification, and the preservation of local traditions. Stakeholders highlighted the increasing demand for farm-based experiences, regional gastronomy, educational tourism activities, and sustainable tourism products. At the same time, participants repeatedly noted that existing training opportunities tend to treat agriculture, tourism, and business management as separate domains, while agro-tourism requires their integration into a single professional competence profile. This fragmentation creates difficulties for operators who must simultaneously function as farmers, hosts, entrepreneurs, marketers, and sustainability managers.

Digitalisation emerged as one of the most significant challenges identified throughout the research. Respondents consistently emphasised the importance of online visibility, digital marketing, booking platforms, customer communication, and data-driven business management. Nevertheless, many participants indicated that these skills are either insufficiently addressed or entirely absent from existing training programmes. As a result, businesses often struggle to compete effectively within increasingly digital tourism markets. Importantly, stakeholders did not perceive digitalisation solely as a technical issue but as a fundamental business competence that influences competitiveness, customer engagement, and long-term sustainability.

Sustainability was also identified as a central priority. Participants recognised that environmental responsibility, resource efficiency, sustainable agriculture, and regional value creation are becoming increasingly important to visitors and policymakers alike. However, while awareness levels were generally high, stakeholders reported a need for more practical guidance regarding the implementation of sustainability measures in daily operations. The findings suggest that sustainability is often understood conceptually but requires stronger translation into operational decision-making and business development strategies.

Entrepreneurship emerged as another major competence gap. Respondents highlighted weaknesses in business planning, customer service, experience design, innovation, financial management, and strategic marketing. The research indicates that many agro-tourism operators possess substantial technical and agricultural expertise but require additional support in transforming these assets into competitive tourism products. As visitor expectations become increasingly experience-oriented, entrepreneurial competencies are becoming just as important as agricultural knowledge.

The focus groups further highlighted challenges related to access and relevance of training provision. Participants reported limited availability of specialised agro-tourism programmes, insufficient practical learning opportunities, and weak cooperation between educational institutions and businesses. Although stakeholders expressed strong interest in internships, mentoring, practical demonstrations, and collaborative learning formats, they noted that such opportunities remain relatively limited. Administrative complexity, time constraints, and labour shortages were also identified as barriers preventing participation in further education and skills development.

Overall, the German findings suggest that the future development of agro-tourism depends on the creation of interdisciplinary, practice-oriented, and flexible learning pathways that combine agriculture, tourism, entrepreneurship, sustainability, and digitalisation. Stakeholders clearly support the development of a curriculum that reflects the multidimensional nature of agro-tourism and bridges the existing gap between vocational education and labour market realities. The VETourismo approach responds directly to these needs by promoting integrated competence development and strengthening the professionalisation of the sector.

Romania

Romania demonstrates considerable potential for agro-tourism development due to its rich rural landscapes, strong agricultural traditions, diverse cultural heritage, and growing interest in authentic visitor experiences. Particularly in rural regions such as Vâlcea County, agro-tourism is increasingly viewed as an opportunity to support local economic development, preserve traditional practices, and create new employment opportunities. Nevertheless, the research findings reveal that the sector remains at a relatively early stage of professionalisation, with significant gaps in training provision, business development capacities, and practical skills acquisition. Existing educational opportunities are often fragmented and insufficiently aligned with the evolving needs of agro-tourism entrepreneurs and rural communities.

The questionnaires and focus groups revealed strong enthusiasm for the development of agro-tourism and widespread recognition of its contribution to rural revitalisation. Participants highlighted the importance of local traditions, regional gastronomy, cultural heritage, agricultural activities, and authentic visitor experiences as key assets that distinguish Romanian agro-tourism destinations. Stakeholders consistently viewed agro-tourism not only as a tourism activity but also as a mechanism for preserving local identity and strengthening community resilience. However, they also stressed that these opportunities cannot be fully realised without targeted investments in education and skills development.

One of the most prominent findings concerns the demand for practical and experience-based learning. Participants repeatedly expressed a preference for farm visits, demonstrations, workshops, local case studies, and direct engagement with successful agro-tourism initiatives. Existing training provision was frequently described as fragmented, theoretical, and disconnected from everyday business realities.

Stakeholders emphasised that future educational programmes should prioritise applied learning approaches that enable participants to immediately transfer knowledge into practice. Digitalisation emerged as a particularly important area for future development. Respondents consistently identified digital marketing, online promotion, communication tools, and digital customer engagement as essential competencies for attracting visitors and increasing business visibility. Many participants acknowledged that digital technologies are becoming indispensable for agro-tourism success, yet current levels of digital competence remain uneven. The findings suggest that many operators recognise the importance of digitalisation but lack the knowledge and confidence necessary to use digital tools strategically and effectively.

The research also revealed substantial training needs related to entrepreneurship and business development. Participants highlighted the need for stronger competencies in creating viable agro-tourism business models, developing attractive tourism products, promoting local products and traditions, and diversifying income streams. Stakeholders frequently emphasised that agro-tourism requires a combination of agricultural, tourism, and entrepreneurial knowledge, yet existing educational structures rarely address these dimensions in an integrated manner.

Sustainability was another important theme emerging from the research. Participants demonstrated strong appreciation for the role of agro-tourism in preserving landscapes, supporting local communities, and promoting environmentally responsible practices. However, the findings suggest that sustainability is often approached intuitively rather than strategically. Stakeholders expressed interest in learning more about sustainable resource management, circular economy principles, environmental protection, and sustainable tourism practices that could strengthen both competitiveness and long-term resilience. Two further challenges were specific to the Romanian context: the strong seasonality of demand in spa and rural areas such as Călimănești, which calls for training in service diversification and off-season offers, and a shortage of qualified staff in rural Vâlcea County.

Overall, the Romanian findings indicate that agro-tourism development is constrained less by a lack of potential than by insufficient access to structured, practical, and multidisciplinary training opportunities. The evidence strongly supports the need for a curriculum that combines entrepreneurship, sustainability, digitalisation, cultural heritage promotion, and experiential learning.

Croatia

Croatia presents a highly promising environment for agro-tourism development. The country possesses extensive rural territories, rich agricultural traditions, diverse natural landscapes, and a tourism sector that increasingly values authenticity, sustainability, and local experiences. Research findings indicate a growing interest in agro-tourism among both visitors and service providers, accompanied by rising recognition of its potential to support rural development, employment generation, and economic diversification. Nevertheless, the sector remains underdeveloped relative to its potential, and significant educational and structural barriers continue to limit its growth.

The questionnaires and focus groups revealed strong agreement among stakeholders that agro-tourism represents one of the most promising opportunities for the future development of rural Croatia. Participants highlighted increasing demand for sustainable tourism products, traditional gastronomy, cultural heritage experiences, and direct engagement with agricultural life. Family farms are increasingly diversifying their activities through tourism services, creating new income opportunities and contributing to the vitality of rural communities. At the same time, stakeholders recognised that sustained growth will require substantial investment in skills development and professionalisation.

A central finding concerns the need for modern vocational education capable of responding to rapidly changing sectoral demands. Stakeholders reported that existing educational provision often fails to adequately address the combination of competencies required within agro-tourism. While programmes addressing agriculture, tourism, or business may exist independently, integrated learning opportunities remain limited. As a result, many operators acquire essential knowledge through practical experience rather than structured training pathways.

Digitalisation emerged as one of the most significant priorities identified by respondents. Participants emphasised the importance of digital marketing, online promotion, social media management, digital booking systems, and online customer communication. However, many stakeholders reported lacking the competencies necessary to utilise these tools effectively. The findings suggest that digitalisation is increasingly viewed as a prerequisite for visibility and competitiveness, yet training opportunities capable of supporting digital transformation remain insufficiently available.

Sustainability was also strongly represented throughout the research. Stakeholders recognised that environmental responsibility, sustainable resource use, and community-based tourism are becoming increasingly important within both national and international tourism markets. Participants highlighted the need for training that connects sustainability principles with practical implementation, enabling operators to integrate environmental considerations into business management, visitor experiences, and product development.

Entrepreneurial competencies were identified as another important area requiring improvement. Respondents reported challenges related to business planning, market positioning, service development, innovation, and long-term strategic management. Many operators possess strong agricultural knowledge but require additional support in transforming agricultural activities into attractive tourism experiences capable of generating sustainable revenue streams. The findings indicate that entrepreneurship should be understood as a core competence for agro-tourism development rather than a supplementary skill.

The focus groups further highlighted challenges related to access to education, workforce development, and rural infrastructure. Stakeholders referred to financial constraints, limited specialised training opportunities, labour shortages, and administrative barriers as factors that constrain participation in education and business development initiatives. Participants consistently advocated for flexible, practice-oriented, and accessible learning opportunities capable of reaching rural populations and responding to the realities of small and family-run enterprises.

Overall, the Croatian findings demonstrate strong optimism regarding the future of agro-tourism while simultaneously highlighting the need for more structured and integrated educational pathways. Stakeholders clearly support the development of multidisciplinary training programmes that combine sustainability, digitalisation, entrepreneurship, and rural tourism management. The evidence suggests that the VETourismo curriculum can play a significant role in strengthening the competitiveness, resilience, and long-term sustainability of Croatia's agro-tourism sector.

Portugal

Portugal presents a relatively favourable environment for the development of agro-tourism, supported by strong national and European policy frameworks aimed at revitalising rural territories, promoting agricultural diversification, and strengthening tourism in low-density regions. The country's rich agricultural heritage, diverse landscapes, renowned gastronomy, and growing interest in rural and nature-based tourism create significant opportunities for agro-tourism enterprises. However, despite this supportive context, the findings reveal that vocational education and training provision has not evolved at the same pace as the sector itself, resulting in important skills gaps and a fragmented learning landscape.

The questionnaires and focus groups indicate that stakeholders view agro-tourism as a strategic tool for rural development, economic diversification, and community resilience. Participants recognised the increasing demand for authentic experiences that combine local culture, gastronomy, agricultural activities, and environmental sustainability. At the same time, respondents highlighted that agro-tourism remains insufficiently recognised as a distinct professional field, both within educational systems and labour market structures. Although Portugal possesses a well-established VET framework, existing programmes continue to separate agriculture, tourism, hospitality, and environmental management into different educational pathways, creating challenges for learners seeking integrated competence development.

Digitalisation emerged as one of the most important areas requiring further development. Stakeholders consistently emphasised the growing importance of digital marketing, online promotion, branding, customer communication, and digital business management. Focus group participants noted that digital tools are already widely used, including by small rural businesses, but that older owners in inland areas often lack these skills and rely on external services. The findings suggest that digital competencies are increasingly becoming a prerequisite for competitiveness, particularly in rural areas where businesses must reach visitors through online channels and digital platforms.

Sustainability also featured prominently throughout the research. Participants recognised environmental protection, biodiversity, sustainable agriculture and responsible tourism as growing market expectations. Unlike in most partner countries, Portuguese respondents considered sustainability to be relatively well integrated into existing training (59.5% rated it positively). The remaining needs concern practical implementation in rural businesses, particularly climate adaptation and risk prevention, such as wildfires, among older rural populations.

Entrepreneurship emerged as another critical training need. Respondents highlighted the importance of business planning, rural entrepreneurship, farm management, customer experience design, quality standards, certification processes, and product development. The findings indicate that agro-tourism operators increasingly require entrepreneurial mindsets capable of combining agricultural production with innovative tourism experiences. Yet existing training opportunities remain fragmented, often delivered through short-term initiatives rather than comprehensive educational pathways.

The research also highlighted the importance of practical and experiential learning. Stakeholders repeatedly stressed the need for real-life case studies, work-based learning, mentoring opportunities, and examples of successful agro-tourism initiatives from Portugal and abroad. Existing provision was frequently perceived as too theoretical and insufficiently connected to the realities of agro-tourism businesses. Participants expressed strong support for flexible learning formats capable of accommodating adult learners, entrepreneurs, and individuals living in rural regions.

Another important finding concerns the fragmented nature of agro-tourism training provision. Although organisations such as APEPA and APTERN provide valuable learning opportunities, agro-tourism is not formally recognised as a distinct professional profile within the national qualifications system. As a result, many learners must assemble competencies from multiple educational pathways, creating barriers to professionalisation and limiting the visibility of career opportunities within the sector.

Overall, the Portuguese findings suggest that agro-tourism possesses strong growth potential but requires a more integrated and multidisciplinary educational approach. Stakeholders clearly support the development of training that combines digitalisation, sustainability, entrepreneurship, hospitality, and rural development within a coherent competence framework. The VETourismo curriculum therefore has the potential to address a significant gap in the Portuguese training landscape while contributing to the long-term competitiveness and sustainability of rural tourism.

Bulgaria

Bulgaria presents a rapidly evolving agro-tourism sector characterised by significant growth potential, strong rural traditions, and increasing demand for authentic visitor experiences. Small family-run farms, guesthouses, local food initiatives, wine tourism activities, and community-based tourism experiences are becoming increasingly visible within rural areas, contributing to local economic development and cultural preservation. Nevertheless, the findings indicate that the sector remains at an early stage of professionalisation and continues to face substantial educational, structural, and organisational challenges that constrain its development.

The questionnaires and focus groups revealed widespread optimism regarding the future of agro-tourism in Bulgaria. Stakeholders consistently recognised the sector's ability to generate supplementary income, support rural communities, preserve traditions, and create attractive tourism products rooted in local identity. Participants highlighted the growing popularity of experience-based tourism, where visitors increasingly seek direct engagement with agricultural activities, local gastronomy, traditional crafts, and rural lifestyles. This shift creates important opportunities for agro-tourism businesses but simultaneously increases the demand for new competencies and professional skills.

One of the most significant findings concerns the mismatch between existing training provision and the skills required by the sector. Respondents repeatedly described current educational opportunities as overly theoretical and insufficiently adapted to the realities of small rural enterprises. Practical learning opportunities, internships, mentoring schemes, and work-based learning experiences were identified as particularly limited. Stakeholders consistently emphasised the need for training that combines theory with direct practical application and reflects the day-to-day realities of agro-tourism businesses.

Digitalisation emerged as one of the most urgent competence gaps. Participants highlighted deficiencies in digital marketing, online promotion, social media communication, branding, customer engagement, and the use of digital tools for business management. Many operators struggle to promote their services effectively and reach wider markets due to limited digital capabilities. The findings suggest that digital transformation is increasingly essential for competitiveness, yet current training systems have not adequately equipped operators with the necessary knowledge and confidence to utilise these tools strategically.

Sustainability was also identified as a priority area requiring further support. Respondents expressed strong interest in topics such as environmental protection, biodiversity conservation, sustainable agriculture, resource management, and sustainable tourism models. However, the research indicates that awareness frequently exceeds practical implementation. Stakeholders reported a need for training that demonstrates how sustainability principles can be translated into operational practices capable of enhancing both environmental performance and business resilience.

Entrepreneurship and business development emerged as equally important concerns. Participants highlighted the need for stronger competencies in business management, customer experience design, farm management, quality standards, certification procedures, and rural entrepreneurship. Many operators possess valuable local knowledge and agricultural expertise but require additional support in transforming these assets into sustainable tourism products capable of competing within contemporary tourism markets. The findings suggest that entrepreneurial skills are increasingly central to agro-tourism success.

The research further revealed several structural barriers affecting participation in training. Limited access to educational opportunities in rural and mountainous areas, financial constraints, time limitations, weak cooperation between training providers and businesses, and insufficient digital infrastructure all contribute to skills shortages and reduced learning opportunities. Focus group participants additionally highlighted the shortage of qualified trainers and the limited availability of specialised agro-tourism programmes tailored to regional needs.

Overall, the Bulgarian findings indicate that agro-tourism possesses considerable potential but requires stronger institutional support, more accessible learning opportunities, and greater alignment between education and labour market realities. Stakeholders consistently advocated for flexible, practical, and interdisciplinary training that integrates sustainability, entrepreneurship, digitalisation, and rural development. The evidence strongly supports the development of a curriculum capable of strengthening professionalisation, improving competitiveness, and supporting the long-term growth of agro-tourism in Bulgaria.

Italy

Italy presents one of Europe's most established agro-tourism landscapes, supported by a long tradition of agriturismo, strong links between agriculture and tourism, internationally recognised food and wine heritage, and a growing demand for authentic rural experiences. With more than 26,000 authorised agritourism farms and increasing visitor interest in nature-based, gastronomic, and experience-oriented tourism, the sector has become an important contributor to rural development and economic diversification. However, despite this strong market position, the findings reveal a significant disconnect between the evolving competence requirements of agro-tourism businesses and the educational pathways currently available to support them.

The questionnaires and focus groups demonstrate a broad consensus among stakeholders regarding the strategic importance of agro-tourism for sustainable rural development. Participants highlighted the sector's ability to preserve cultural heritage, promote local products, strengthen regional identities, and create employment opportunities in rural and mountainous areas. At the same time, respondents repeatedly emphasised that agro-tourism is becoming increasingly complex and now requires a much wider range of competencies than traditional agricultural activities alone. Operators are expected to combine agricultural production, hospitality services, food and wine experiences, marketing, customer care, sustainability management, and business administration within a single business model. Existing training provision, however, often struggles to reflect this multidisciplinary reality.

One of the most significant findings emerging from the Italian research concerns the persistent skills gap between labour market demands and current educational provision. Survey respondents consistently rated entrepreneurial skills, digital competencies, sustainability knowledge, and cultural heritage interpretation as highly important for agro-tourism success, while simultaneously expressing low levels of satisfaction with the training currently available in these areas. This mismatch suggests that existing VET programmes have not fully adapted to the evolving needs of agro-tourism operators and continue to deliver fragmented rather than integrated competence development.

Digitalisation emerged as a particularly important challenge. Stakeholders recognised digital tools as essential for business competitiveness, customer acquisition, and market visibility. Participants highlighted the importance of online booking systems, digital marketing, social media communication, online reputation management, digital storytelling, and virtual tourism experiences. At the same time, many operators reported lacking the practical competencies necessary to utilise these tools effectively.

The research further identified infrastructure-related challenges, including connectivity limitations in some rural areas, which continue to hinder digital transformation. Nevertheless, the strong interest in digital innovation suggests considerable readiness within the sector to adopt new technologies if appropriate training opportunities become available.Sustainability was another recurring theme throughout the research. Participants overwhelmingly recognised sustainability as a core component of modern agro-tourism and associated it with environmental responsibility, local value creation, authenticity, and long-term competitiveness. However, the findings reveal a substantial gap between awareness and implementation.

Stakeholders frequently described sustainability as an important concept but reported uncertainty regarding how to integrate it into everyday business practices. Similar observations were made regarding slow tourism, which was widely viewed positively but often lacked a clear operational definition. Respondents expressed a strong need for practical guidance on implementing sustainability measures, communicating sustainability commitments, and designing tourism experiences aligned with environmental and social responsibility principles.

Entrepreneurship emerged as another major area requiring intervention. Focus group participants highlighted difficulties related to business planning, financial management, product development, customer experience design, marketing strategies, and innovation. Many respondents noted that while agro-tourism operators often possess substantial agricultural expertise, they frequently lack the entrepreneurial competencies required to transform rural assets into successful tourism products. This challenge is becoming increasingly important as visitors seek personalised, high-quality, and experience-based tourism offers that require continuous innovation and strategic business management.

The research also identified accessibility as a significant concern. Stakeholders reported that rural and mountainous regions continue to face barriers to participation in training due to distance, cost, time constraints, and limited local availability of specialised programmes. Existing learning opportunities are often insufficiently flexible to accommodate adult learners, family business owners, and professionals already active in the sector. Participants therefore expressed strong support for modular, blended, and digitally supported learning approaches capable of reaching geographically dispersed target groups.

Another important finding concerns the fragmented nature of the agro-tourism skills ecosystem. Stakeholders repeatedly referred to weak cooperation between training providers, agritourism businesses, public authorities, universities, and sector organisations. The lack of structured collaboration limits opportunities for knowledge exchange, practical learning, innovation, and curriculum modernisation. Participants stressed the need for stronger partnerships capable of connecting education more directly with labour market realities and ensuring that training programmes remain responsive to emerging sectoral needs.

Overall, the Italian findings reveal a sector with substantial economic potential and a strong tradition of agro-tourism, yet one that faces significant challenges related to skills development, digital transformation, sustainability implementation, and stakeholder coordination. The evidence strongly suggests that future educational interventions should prioritise practical, flexible, and multidisciplinary learning approaches that integrate entrepreneurship, digitalisation, sustainability, cultural heritage, and customer experience management. The VETourismo curriculum is therefore well positioned to address the identified gaps by supporting a more coherent, accessible, and future-oriented training framework capable of strengthening both the competitiveness and sustainability of Italy's agro-tourism sector.

3. COMPARATIVE ANALYSIS

3.1 Common Findings Across Countries

Despite significant differences in tourism development, agricultural structures, educational systems, and rural contexts, the findings from Italy, Greece, Germany, Bulgaria, Croatia, Portugal and Romania reveal a remarkable degree of convergence regarding both the opportunities and challenges facing the agro-tourism sector. The analysis demonstrates that agro-tourism across Europe is undergoing a similar transformation, driven by digitalisation, sustainability imperatives, changing visitor expectations, and the increasing professionalisation of rural tourism businesses.

One of the strongest common findings concerns the growing mismatch between the competencies required by contemporary agro-tourism operators and those currently supported through vocational education and training systems. Across all countries, stakeholders recognised that agro-tourism has evolved beyond its traditional function as a supplementary source of agricultural income. Operators are increasingly expected to combine expertise in agriculture, hospitality, tourism management, entrepreneurship, sustainability, digital communication, customer service, and community engagement. However, existing educational pathways continue to address these domains separately, resulting in fragmented learning experiences that do not adequately reflect the realities of modern agro-tourism enterprises.

Digitalisation emerged as the most consistent priority across all national reports. Stakeholders repeatedly highlighted challenges related to digital marketing, online visibility, website management, social media communication, online booking systems, customer relationship management, and digital storytelling. Although the level of digital maturity varies among countries, the findings consistently indicate that digital competencies are among the most important skills required for business competitiveness while simultaneously representing one of the largest competence gaps. Many operators continue to rely on informal learning, self-experimentation, or family support to acquire digital skills, highlighting the limited availability of structured and sector-specific digital training opportunities.

A second common finding concerns the practical relevance of vocational education and training. Across all participating countries, respondents frequently described existing training programmes as overly theoretical and insufficiently connected to operational realities. Stakeholders consistently called for greater emphasis on experiential learning approaches, including internships, mentoring schemes, study visits, peer-learning activities, business simulations, case-based learning, and direct engagement with agro-tourism enterprises. This finding was particularly strong across focus groups, where participants repeatedly emphasised that practical experience often provides more valuable preparation than classroom-based instruction alone.

Entrepreneurship represents another major area of convergence. The research demonstrates that agro-tourism operators increasingly function as entrepreneurs rather than solely as agricultural producers or tourism providers. Respondents across all countries identified significant training needs related to business planning, financial management, diversification strategies, innovation, marketing, customer experience design, pricing strategies, and access to funding opportunities. The findings suggest that entrepreneurial competence is becoming a fundamental requirement for sectoral success, particularly as agro-tourism businesses seek to diversify income streams and adapt to changing market conditions.

The reports also reveal widespread recognition of sustainability as a strategic priority. Stakeholders consistently acknowledged the importance of environmental stewardship, resource efficiency, sustainable agricultural practices, biodiversity protection, and climate adaptation. However, a recurring finding across countries was the gap between awareness and implementation. While sustainability is widely perceived as important, many operators reported difficulties translating sustainability principles into concrete operational practices. This indicates that current training provision often succeeds in raising awareness but provides insufficient guidance regarding practical implementation and business integration.

Another notable area of convergence concerns the growing importance of authentic and experience-based tourism. Across all countries, stakeholders reported increasing visitor demand for local gastronomy, traditional agricultural practices, cultural heritage experiences, community interaction, and nature-based activities. This trend is gradually transforming agro-tourism from an accommodation-focused activity into an experience-oriented sector that creates value through authenticity, storytelling, participation, and cultural engagement.

Finally, all national reports identified systemic barriers affecting access to education and skills development. These barriers include limited availability of specialised training programmes, geographic isolation, financial constraints, time limitations, weak cooperation between VET providers and businesses, and restricted access to learning opportunities in rural and remote areas. Such challenges are particularly significant for small and family-run enterprises, which constitute the majority of agro-tourism businesses across the participating countries.

Taken together, these findings indicate that the future development of agro-tourism depends not only on market growth and visitor demand but also on the capacity of education and training systems to provide integrated, accessible, practice-oriented and future-focused learning opportunities capable of responding to rapidly evolving sectoral needs.

Figure 3.1 summarises the main challenges identified in each national report: six of them were reported in all seven partner countries, while others, such as population ageing, staff shortages or seasonality, reflect specific national contexts.

3.2 Differences Between Countries

While the research reveals strong similarities across countries, important differences also emerge regarding sector maturity, institutional support structures, training provision, digital readiness, and sustainability integration. These differences provide valuable insight into the diverse contexts within which agro-tourism operates and highlight the importance of developing a curriculum framework that combines a shared European competence base with sufficient flexibility to address local realities.

One of the most significant differences concerns the maturity and institutional development of agro-tourism ecosystems. Italy (26,360 authorised agritourism farms), Portugal and Germany have more established agro-tourism markets and a wider range of related training offers, although their reports also point to fragmented provision and weak coordination. In contrast, countries such as Bulgaria and Romania continue to exhibit substantial growth potential but face greater challenges related to sector fragmentation, limited visibility, and weaker institutional coordination.

Differences are also evident in the area of digital transformation. While digital skills gaps were reported in all countries, the nature of these gaps varies considerably. In some contexts, stakeholders emphasised advanced competencies such as digital branding, analytics, online customer engagement, and strategic marketing. In others, more fundamental barriers persist, including limited digital confidence, inadequate infrastructure, insufficient internet connectivity, and restricted access to digital learning opportunities. These findings suggest that digital training programmes must be sufficiently adaptable to accommodate learners starting from different levels of competence.

The reports also reveal variations in the implementation of sustainability practices. Although sustainability is universally recognised as important, countries differ in the extent to which environmental practices have been integrated into daily operations. In some cases, sustainability is already linked to established certification schemes, organic production systems, and sustainable tourism policies. In others, it remains primarily an aspirational objective supported by positive attitudes but limited operational knowledge. These differences reflect varying levels of policy development, market maturity, and access to technical support.

Entrepreneurial priorities also vary according to the developmental stage of agro-tourism enterprises. In more mature destinations, stakeholders emphasise innovation, diversification, international market access, product differentiation, and quality enhancement. In less mature contexts, training needs focus more strongly on fundamental business competencies such as financial literacy, business planning, administrative procedures, and access to funding. Despite these differences, both groups ultimately seek to strengthen business resilience and competitiveness.

Another important difference concerns the relationship between vocational education providers and industry stakeholders. While some countries reported examples of effective collaboration, work-based learning initiatives, and local partnerships, others highlighted limited interaction between educational institutions and agro-tourism enterprises. These variations influence the relevance of training provision, the availability of practical learning opportunities, and the extent to which curricula reflect labour market realities.

The comparative findings therefore suggest that agro-tourism development follows a common European trajectory but progresses at different speeds and through different pathways depending on local economic, institutional, and territorial conditions. Consequently, future educational interventions should balance common competence standards with the flexibility necessary to accommodate diverse national and regional contexts.

3.3 Emerging European Trends

Beyond the similarities and differences identified across the national reports, the comparative analysis reveals a number of broader trends that are shaping the future of agro-tourism across Europe and are likely to influence skills needs over the coming decade.The first emerging trend is the continuing professionalisation of the sector. Agro-tourism is increasingly evolving from a supplementary agricultural activity into a specialised business field requiring multidisciplinary expertise. Operators are expected to manage visitor experiences, digital communication, sustainability practices, marketing activities, hospitality services, financial planning, and community relationships alongside agricultural operations. This transformation is creating demand for more structured, comprehensive and professionally oriented learning pathways.

A second trend concerns the accelerating pace of digital transformation. Digital tools are becoming central to nearly every aspect of agro-tourism operations, from marketing and reservations to customer engagement and business management. The findings suggest that online visibility is increasingly a prerequisite for competitiveness rather than a supplementary advantage. Businesses unable to effectively utilise digital technologies risk exclusion from tourism markets that are increasingly shaped by online consumer behaviour.The analysis also highlights the growing importance of sustainability as a business strategy rather than solely an environmental concern. Stakeholders increasingly associate sustainability with destination attractiveness, visitor expectations, market differentiation, operational efficiency, and long-term resilience. This shift reflects broader European policy priorities while simultaneously responding to changing consumer preferences for environmentally responsible and authentic tourism experiences.

Another significant trend is the growing demand for experience-based tourism products. Visitors are increasingly seeking active participation, cultural immersion, local gastronomy, agricultural experiences, and meaningful engagement with rural communities. This development strengthens the strategic position of agro-tourism within rural development policies while simultaneously creating demand for new competencies related to storytelling, visitor engagement, interpretation of cultural heritage, and experience design.The findings further demonstrate the increasing importance of lifelong learning. Rapid technological developments, evolving sustainability requirements, changing consumer expectations, and market volatility mean that initial training alone is no longer sufficient. Continuous upskilling and reskilling are becoming essential components of professional development within agro-tourism, requiring flexible and accessible learning opportunities throughout an individual's career.

Finally, the research highlights a growing recognition that effective skills development depends upon stronger collaboration between vocational education providers, businesses, local authorities, rural development organisations, tourism associations, and community stakeholders. Across all countries, participants emphasised the need for partnership-based approaches capable of bridging the gap between educational provision and labour market realities. This trend suggests that future training systems will need to function as collaborative ecosystems rather than isolated educational structures.

Taken together, these emerging trends point towards a future agro-tourism sector characterised by digital innovation, sustainability integration, entrepreneurial dynamism, community engagement, and continuous learning. They also provide a strong foundation for the development of a curriculum that responds not only to current skills gaps but also to the long-term transformations shaping rural tourism across Europe.



	Bulgaria	Croatia	Germany	Greece	Italy	Portugal	Romania	Countries
Gaps in digital skills	●	●	●	●	●	●	●	7/7
Gaps in marketing and communication	●	●	●	●	●	●	●	7/7
Lack of practical, work-based experience	●	●	●	●	●	●	●	7/7
Gaps in applying sustainability in practice	●	●	●	●	●	●	●	7/7
Limited access to training in rural areas	●	●	●	●	●	●	●	7/7
Weak cooperation between local actors	●	●	●	●	●	●	●	7/7
Poor internet connectivity	●	●	●	●	●	●	○	6/7
Gaps in customer service and hospitality	●	●	●	○	●	●	●	6/7
Distance to training centres	●	○	○	●	●	●	○	4/7
Ageing rural population and operators	○	●	○	●	○	●	○	3/7
Difficulty attracting young people or qualified staff	○	●	○	○	○	●	●	3/7
Seasonality of demand	○	○	○	○	○	○	●	1/7

Source: VETourismo national research reports (2026), qualitative analysis of desk research, questionnaire and focus group findings (see Tables 4.4–4.7).

Figure 3.1. Main challenges identified in the national reports, by partner country

4. AGRO-TOURISM CHALLENGES

4.1 Introduction

The transnational research undertaken within the VETourismo project demonstrates that agro-tourism across Europe is undergoing a profound transformation. While traditionally perceived as a complementary activity supporting agricultural production, agro-tourism has evolved into a multidisciplinary economic sector that combines agriculture, hospitality, cultural heritage, environmental stewardship, entrepreneurship, and digital service provision. This evolution has expanded the opportunities available to rural communities but has simultaneously increased the complexity of the competences required by those operating within the sector.

Across all seven participating countries—Bulgaria, Croatia, Germany, Greece, Italy, Portugal and Romania—the evidence collected through desk research, online questionnaires and focus group discussions reveals a remarkably consistent picture. Although national contexts differ with regard to the maturity of agro-tourism, institutional support, rural demographics and tourism markets, stakeholders identified a common set of structural challenges that influence the sector's capacity to develop sustainably and competitively.

Rather than representing isolated national concerns, these challenges reflect wider transformations currently affecting rural Europe. The digitalisation of tourism markets, increasing environmental expectations, changing visitor behaviour, demographic decline in rural areas, labour shortages and the growing demand for authentic visitor experiences are reshaping the way agro-tourism businesses operate. Consequently, operators are expected to possess an increasingly diverse competence profile that extends well beyond traditional agricultural knowledge.

The comparative analysis demonstrates that existing vocational education and training systems have not evolved at the same pace as the sector itself. Although examples of good practice exist across the participating countries, stakeholders consistently reported that available educational provision remains fragmented, overly theoretical, insufficiently connected to labour market realities and rarely addresses the multidisciplinary nature of agro-tourism. As a result, many operators continue to develop essential competences through informal learning, practical experience or self-directed study rather than structured vocational pathways.

The research also highlights that these challenges are highly interconnected. Limited digital competences reduce business visibility and restrict access to wider tourism markets. Weak entrepreneurial capacities hinder innovation and long-term business resilience. Insufficient understanding of sustainability limits businesses' ability to respond to environmental challenges and changing consumer expectations.

At the same time, structural issues affecting rural territories—including ageing populations, limited infrastructure, restricted access to training opportunities and labour shortages—further constrain the capacity of agro-tourism enterprises to modernise and grow. Importantly, the findings demonstrate that these challenges should not be interpreted solely as barriers. They also represent significant opportunities for educational innovation. The high degree of convergence observed across the participating countries suggests that many of the identified competence gaps can be addressed through a common European curriculum while maintaining sufficient flexibility to accommodate national and regional contexts.

The following sections examine the principal challenges identified through the transnational research, combining quantitative evidence from the questionnaires with qualitative insights from the focus groups and desk research. Rather than presenting country findings individually, the analysis synthesises the evidence to identify common European patterns, highlight national variations and explain how these findings informed the development of the VETourismo curriculum.

Table 4.1. Main agro-tourism challenges identified across participating countries

Challenge	Countries where identified	Overall significance
Digital skills and digital marketing	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	Very High
Limited practical and work-based learning	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	Very High
Weak cooperation between VET providers and businesses	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	Very High
Entrepreneurship and business management	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	High
Sustainability implementation	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	High
Rural accessibility and participation in training	Bulgaria, Croatia, Greece, Italy, Portugal, Romania, Germany	High
Workforce and skills shortages	Bulgaria, Croatia, Germany, Greece, Italy, Portugal, Romania	High

The consistency of these findings provides strong evidence that agro-tourism is experiencing similar structural transitions throughout Europe. While the intensity of individual challenges varies according to national circumstances, the overall direction of sectoral development remains remarkably aligned, reinforcing the need for coordinated educational responses capable of supporting agro-tourism professionals across different European contexts.

4.2 Digitalisation and Technological Adaptation

Digitalisation emerged as the strongest and most consistent theme throughout the transnational research and represents one of the defining challenges shaping the future competitiveness of European agro-tourism. Across all participating countries, stakeholders recognised that digital technologies are no longer optional tools supporting business promotion but fundamental components of business management, customer engagement, destination visibility and long-term sustainability.

The comparative evidence demonstrates that digital transformation affects agro-tourism at multiple levels. Operators are increasingly expected to promote their services through digital channels, manage online reservations, communicate with visitors across multiple platforms, develop compelling digital narratives around local products and cultural heritage, monitor customer satisfaction and use digital tools to improve operational efficiency. However, the research consistently indicates that the development of these competences has not kept pace with technological change.

Although every country identified digitalisation as a priority, important differences emerged regarding the nature of the challenge. In Portugal, focus group participants reported that digital tools are already widely used, even by small rural businesses, although older owners often rely on external support. In Italy and Germany, interest in more advanced tools such as online reputation management and data analytics coexisted with basic skills gaps among smaller and older operators. By contrast, Bulgaria, Romania and parts of Greece highlighted more fundamental challenges related to digital confidence, limited access to structured digital training and difficulties adopting even basic digital business tools.

Croatia presented an intermediate picture, with operators demonstrating awareness of digital opportunities but reporting insufficient educational support for developing practical competences. Nevertheless, the overall conclusion remains consistent: existing training systems have not adequately prepared operators to compete within increasingly digital tourism markets.

Table 4.2. Comparative overview of digitalisation challenges

Country	Main digitalisation challenges identified
Bulgaria	Low digital confidence, digital marketing, online visibility, practical ICT training
Croatia	Social media management, online promotion, digital communication with visitors
Germany	Online marketing, booking systems, choice of suitable digital tools
Greece	Digital marketing, website management, booking systems, digital storytelling
Italy	Online branding, customer relationship management, digital transformation strategies
Portugal	Digital promotion, online marketing, destination visibility, integrated digital skills
Romania	Basic digital competences, online promotion, business digitalisation

One of the most striking findings concerns the relationship between digitalisation and competitiveness. Across the seven countries, respondents consistently recognised that visitors increasingly search, compare, book and evaluate tourism experiences through digital platforms. Consequently, businesses with limited online visibility risk becoming effectively excluded from highly competitive tourism markets, regardless of the quality of the experiences they provide.

Focus group discussions further revealed that many operators continue to acquire digital competences through informal learning rather than structured education. Participants frequently described learning through trial and error, online tutorials, younger family members or peer support networks. While these informal learning pathways demonstrate considerable entrepreneurial resilience, they also create significant disparities in competence levels between businesses and reduce the effectiveness of digital investment.

The findings additionally indicate that digitalisation extends beyond marketing activities. Stakeholders increasingly associated digital competence with broader business functions, including customer relationship management, financial administration, data analysis, visitor communication, online reputation management and strategic decision-making. This evolution reflects the growing integration of digital technologies into every aspect of agro-tourism business operations.

Another important observation concerns generational differences. Younger entrepreneurs generally demonstrated greater confidence in using digital technologies, whereas older operators often expressed uncertainty regarding both the technical aspects of digital tools and their strategic value for business development. This finding was particularly evident in rural areas characterised by ageing farming populations, reinforcing the importance of flexible lifelong learning opportunities capable of supporting professionals at different stages of their careers.

The research therefore suggests that digitalisation should not be understood simply as the acquisition of technical skills. Instead, it represents a transversal competence encompassing communication, entrepreneurship, marketing, customer experience management and business innovation. Future vocational education programmes must therefore integrate digital competences throughout the curriculum rather than treating them as isolated ICT modules.

From a curriculum development perspective, the findings clearly indicate the need for practical training covering digital marketing, social media management, website creation, booking platforms, customer relationship management, digital storytelling, data-informed business decisions and the strategic use of digital technologies to strengthen rural enterprises. Such training should prioritise experiential learning through practical exercises, case studies and business simulations rather than theoretical instruction alone.

4.3 Sustainability and the Green Transition

Alongside digital transformation, sustainability emerged as one of the central priorities shaping the future development of agro-tourism across Europe. The research demonstrates that sustainability is no longer perceived exclusively as an environmental responsibility but increasingly as a strategic dimension of business competitiveness, destination attractiveness and long-term rural resilience.

Across all participating countries, stakeholders expressed strong support for sustainable tourism and recognised the importance of protecting natural resources, preserving agricultural landscapes, maintaining biodiversity and safeguarding local cultural heritage. Nevertheless, the comparative analysis reveals a significant gap between conceptual awareness and practical implementation.

While respondents consistently acknowledged the importance of sustainability, many also admitted uncertainty regarding how sustainable principles can be incorporated into everyday business operations. Consequently, sustainability remains, in many cases, an aspirational objective rather than an operational management practice.

Table 4.3. Sustainability priorities emerging from the national research

Sustainability dimension	Comparative findings across participating countries
Environmental protection	Strong awareness in all countries
Resource efficiency	High priority but limited practical implementation
Sustainable agriculture	Frequently associated with agro-tourism identity
Biodiversity conservation	Strong emphasis in Italy, Portugal and Germany
Circular economy	Growing interest but limited operational knowledge
Climate adaptation	Increasing concern, particularly in Mediterranean countries
Sustainable visitor management	Rarely addressed within existing VET provision

Although the overall pattern is consistent, important national nuances can be observed. In Portugal, sustainability was considered relatively well integrated into existing training, whereas Italian stakeholders linked it to slow tourism and authentic experiences but reported a clear gap between its importance (4.00/5) and current training provision (2.52/5). Greece and Croatia focused more strongly on improving the operational understanding of sustainability among small and family-run businesses. Bulgarian stakeholders linked sustainability to experience-based tourism and practical, cost-saving tools, Romanian respondents stressed the natural resources on which local tourism depends, and German participants noted that sustainability is already embedded in many farming practices but is rarely communicated to visitors or integrated into tourism offers.

The findings also demonstrate that sustainability has become closely intertwined with changing visitor expectations. Across all countries, stakeholders reported growing demand for authentic tourism experiences based on local food systems, traditional agricultural practices, environmental responsibility and cultural heritage. Visitors increasingly associate sustainability with quality, authenticity and trust, making it a significant factor influencing destination choice and customer satisfaction.

However, focus group discussions repeatedly highlighted that many operators struggle to translate these expectations into practical business decisions. Respondents requested concrete guidance on sustainable resource management, energy efficiency, waste reduction, climate adaptation, biodiversity protection, sustainable procurement, certification schemes and effective communication of sustainability initiatives to visitors.

Another significant finding concerns the relationship between sustainability and entrepreneurship. The research indicates that sustainability is increasingly viewed not only as an ethical obligation but also as an opportunity for innovation and market differentiation. Operators capable of integrating environmental responsibility into their business models are perceived as better positioned to respond to evolving tourism markets and to create distinctive visitor experiences rooted in local identity and territorial heritage.

The comparative evidence therefore suggests that future vocational education should move beyond theoretical discussions of sustainability and instead develop operational competences enabling learners to implement sustainable practices within real agro-tourism businesses. This requires training that combines environmental management with entrepreneurship, visitor experience design, product development and strategic business planning. Ultimately, the findings indicate that the green transition represents one of the defining transformations facing European agro-tourism.

4.4 Entrepreneurship and Business Resilience

The transnational research clearly demonstrates that entrepreneurship represents one of the most significant competence gaps affecting the future development of agro-tourism across Europe. Although agro-tourism operators possess extensive agricultural knowledge, practical experience and strong connections to local communities, the findings consistently indicate that these strengths are not always accompanied by the entrepreneurial competences required to manage sustainable and competitive businesses in increasingly dynamic tourism markets.

Across all participating countries, respondents described agro-tourism as a business model that has evolved considerably over the last decade. Traditional activities centred primarily on accommodation and agricultural production are progressively being replaced by more diversified experiences combining gastronomy, cultural heritage, outdoor recreation, educational activities, wellness, local product promotion and community engagement. This evolution has transformed the role of the agro-tourism operator into that of a multidimensional entrepreneur who simultaneously manages agricultural production, tourism services, marketing activities, customer relations, financial planning and business innovation.

The research suggests that vocational education has not evolved at the same pace as these changing professional requirements. Existing educational provision continues to emphasise sector-specific knowledge, while relatively little attention is given to the integrated entrepreneurial competences required to operate modern agro-tourism enterprises successfully.

Questionnaire findings from all seven countries consistently ranked entrepreneurship among the highest priorities for future training. In Croatia, entrepreneurial competence received an average importance score of 4.37/5, while business planning, financial management and innovation appeared among the most frequently requested training areas. Similar priorities emerged in Greece, Italy, Romania and Portugal, where respondents repeatedly associated business sustainability with stronger managerial capacities rather than solely agricultural expertise.

The focus groups further reinforced these findings. Participants frequently reported uncertainty regarding pricing strategies, financial forecasting, diversification of income streams, product packaging, branding and customer retention. Many operators acknowledged that their businesses had grown organically over time without structured business planning, making it difficult to respond strategically to changing market conditions.

Rather than representing isolated weaknesses, these findings suggest that entrepreneurial competence functions as a transversal capability supporting nearly every aspect of agro-tourism development. Digital marketing, sustainability implementation, visitor experience design and innovation all depend upon operators possessing sufficient business knowledge to integrate these dimensions into coherent development strategies.

Table 4.4. Entrepreneurial competences most frequently identified across the national reports

Entrepreneurial competence	Countries where identified
Business planning and management	BG, HR, DE, EL, IT, PT, RO
Marketing and promotion	BG, HR, DE, EL, IT, PT, RO
Customer service and visitor experience	BG, HR, DE, IT, PT, RO
Product development and diversification	BG, HR, EL, IT, PT, RO
Pricing and financial management	HR, DE, EL, PT
Access to funding	HR, EL, RO

BG = Bulgaria, HR = Croatia, DE = Germany, EL = Greece, IT = Italy, PT = Portugal, RO = Romania. Source: VETourismo national research reports (2026).

Although the broad priorities were remarkably consistent, important national differences emerged regarding the specific entrepreneurial challenges faced by operators. Italian stakeholders focused more on experience design, product development and international marketing, while German participants stressed the shift from a production-oriented to a customer-oriented mindset, together with business planning, pricing strategies and hospitality skills.

Respondents from Romania, Bulgaria and Greece placed particular emphasis on foundational business competences, including business planning, financial literacy, marketing fundamentals and access to funding opportunities. These priorities reflect the earlier developmental stage of many agro-tourism enterprises operating within these countries and the need to strengthen managerial capacity before pursuing more advanced innovation strategies.

Portugal and Croatia occupied an intermediate position, where respondents recognised the need to improve both basic entrepreneurial competences and more advanced business development skills linked to digitalisation and sustainability.

Table 4.5. Comparative overview of entrepreneurship-related priorities

Country	Main entrepreneurial priorities
Bulgaria	Business management, digital marketing, visitor experiences
Croatia	Business planning, innovation, customer service, entrepreneurship (4.37/5 importance)
Germany	Business planning, pricing, customer management, hospitality
Greece	Business planning, pricing, EU funding, cooperative governance
Italy	Product innovation, destination branding, value-added services
Portugal	Digital marketing, pricing strategies, business planning
Romania	Business models, management and promotion, access to EU funds

Another important finding concerns business resilience. Stakeholders referred to recent crises—including the impact of the COVID-19 pandemic on tourism employment (Croatia), climate-related disruptions such as heat waves, wildfires and extreme weather (Greece and Portugal) and changing tourism demand—as evidence that agro-tourism enterprises require greater adaptive capacity. Successful businesses increasingly depend upon the ability to anticipate change, diversify income sources and continuously innovate in response to evolving market conditions.

The comparative analysis therefore suggests that entrepreneurship should no longer be considered a supplementary competence within agro-tourism education. Instead, it should function as one of the core pillars underpinning curriculum development, integrated with digitalisation, sustainability, customer experience management and rural innovation. Strengthening entrepreneurial capacity will not only improve business performance but also enhance the long-term resilience of rural communities by enabling agro-tourism enterprises to respond proactively to future economic, technological and environmental challenges.

4.5 Rural Development Constraints

The development of agro-tourism cannot be understood independently from the broader territorial realities of rural Europe. While rural landscapes, agricultural traditions and local heritage constitute the fundamental assets upon which agro-tourism is built, the research demonstrates that many of these territories simultaneously face structural challenges that directly influence the sector's development potential.

Across the participating countries, stakeholders consistently described rural areas as environments characterised by significant opportunities but also persistent demographic, economic and infrastructural constraints. Although the intensity of these challenges varies between national contexts, the overall pattern suggests that many agro-tourism enterprises continue to operate within territories experiencing population decline, ageing communities, limited public services and restricted access to educational opportunities.

Rather than representing isolated business-level problems, these constraints shape the wider ecosystem within which agro-tourism develops. Consequently, many of the skills gaps identified throughout the research are closely connected to broader rural development processes. Questionnaire responses and focus group discussions repeatedly highlighted accessibility as one of the principal barriers affecting participation in vocational education. Stakeholders from Greece, Italy, Bulgaria and Portugal particularly emphasised the difficulties associated with travelling long distances to attend training activities. Time constraints, transportation costs and seasonal workloads further limited participation among family-run businesses and self-employed operators.

The research also revealed important territorial disparities within countries. While agro-tourism enterprises located near established tourism destinations generally reported stronger access to professional networks, advisory services and educational opportunities, businesses operating in more remote rural regions often relied almost exclusively on local knowledge and informal support systems.

Table 4.6. Rural development constraints identified across participating countries

Rural challenge	Countries reporting
Limited access to training in rural areas	BG, HR, DE, EL, IT, PT, RO
Weak cooperation between local actors	BG, HR, DE, EL, IT, PT, RO
Poor internet connectivity	BG, HR, DE, EL, IT, PT
Distance to training centres	BG, EL, IT, PT
Ageing rural population and operators	HR, EL, PT
Attracting young people and qualified staff	HR, PT, RO
Seasonality of demand	RO

BG = Bulgaria, HR = Croatia, DE = Germany, EL = Greece, IT = Italy, PT = Portugal, RO = Romania. Source: VETourismo national research reports (2026).

An important finding emerging from the comparative analysis is that rural development constraints rarely occur independently. Instead, they reinforce one another through interconnected processes. For example, demographic decline contributes to labour shortages, while labour shortages reduce the capacity of businesses to diversify their activities. Limited business diversification weakens local economies, reducing investment opportunities and further discouraging younger generations from remaining in rural communities. Similarly, restricted access to education contributes directly to lower levels of innovation, limiting the adoption of digital technologies and sustainable business practices.

The focus groups repeatedly emphasised that strengthening agro-tourism should therefore be understood not simply as supporting individual enterprises but as investing in broader rural resilience. Participants frequently highlighted the importance of cooperation between municipalities, local action groups, educational institutions, producer organisations and tourism stakeholders in creating supportive local ecosystems capable of sustaining long-term development.

These findings reinforce one of the central conclusions emerging throughout the transnational research: agro-tourism education should extend beyond the development of individual competences and actively contribute to strengthening local networks, promoting community cooperation and enhancing the attractiveness of rural territories for future generations.

4.6 Workforce and Skills Shortages

Perhaps the most systemic challenge identified throughout the research concerns the growing shortage of appropriately skilled human resources within the agro-tourism sector. Although labour shortages have become increasingly visible across European tourism more broadly, the findings indicate that agro-tourism faces additional difficulties arising from its multidisciplinary nature and its location within predominantly rural areas.

In several countries, notably Croatia, Germany, Portugal and Romania, respondents reported difficulties finding individuals capable of combining agricultural knowledge with hospitality, entrepreneurship, customer service, sustainability and digital competences. This finding suggests that the principal challenge is not merely quantitative but qualitative. The sector increasingly requires professionals capable of integrating multiple areas of expertise within highly diversified business environments.

The comparative evidence further demonstrates that existing vocational education systems continue to prepare learners within relatively narrow disciplinary boundaries. Agriculture, tourism, hospitality, environmental management and business studies remain largely separated despite the fact that agro-tourism professionals routinely combine responsibilities across all these fields.

Questionnaire findings consistently identified practical experience as one of the greatest deficiencies affecting workforce preparation. Respondents across all countries emphasised that graduates often possess theoretical knowledge but limited exposure to real agro-tourism operations. Employers therefore invest considerable time in workplace training before new employees become fully productive.

Table 4.7. Most frequently reported workforce and skills shortages

Skills shortage	Countries identifying the issue
Digital competences	BG, HR, DE, EL, IT, PT, RO
Marketing and communication	BG, HR, DE, EL, IT, PT, RO
Business management	BG, HR, DE, EL, IT, PT, RO
Practical operational experience	BG, HR, DE, EL, IT, PT, RO
Sustainability implementation	BG, HR, DE, EL, IT, PT, RO
Customer service and hospitality	BG, HR, DE, IT, PT, RO
Combined agriculture–tourism profiles	HR, DE, PT, RO

BG = Bulgaria, HR = Croatia, DE = Germany, EL = Greece, IT = Italy, PT = Portugal, RO = Romania. Source: VETourismo national research reports (2026).

Several national reports also highlighted demographic pressures affecting workforce renewal. Croatia, in particular, documented an ageing agricultural workforce, with 36.18% of workers aged 50 or over, while the Greek report notes that only 13.6% of traditional agricultural holdings are run by owners under 40. Romania identified a shortage of qualified staff in rural areas, and Portugal linked rural depopulation to the need to encourage younger generations to remain in or return to rural areas. These trends underline the need for attractive and flexible learning pathways that engage younger learners.

The focus groups also revealed that workforce shortages cannot be separated from wider educational challenges. Weak cooperation between vocational institutions and businesses, limited opportunities for apprenticeships and internships, and the absence of structured work-based learning were repeatedly identified as factors contributing to persistent skills mismatches across the sector.

Table 4.8. Educational factors contributing to workforce shortages

Contributing factor	Evidence from national reports
Overly theoretical VET programmes	Identified in all participating countries
Limited work-based learning	Strongly emphasised across focus groups
Weak cooperation between VET providers and businesses	Universal finding
Limited lifelong learning opportunities	Common across rural regions
Restricted access to specialised agro-tourism curricula	Reported in every country

5. TRAINING GAPS AND SKILLS NEEDS

5.1 What is Missing from Education Today

The primary systemic failure in current Vocational Education and Training (VET) networks is the rigid preservation of disciplinary silos. Historically, public educational architecture has treated agriculture and tourism as entirely separate economic sectors, resulting in a deep, structural disconnect between institutional curricula and the operational reality of the modern rural entrepreneur. Active operators are forced to manage multidisciplinary businesses requiring synchronous mastery over agronomy, hospitality, digital marketing, environmental management, and complex financial planning—yet they are offered only highly fragmented, single-sector training tracks.

Quantifiably, this structural mismatch is evidenced by a massive gap between the perceived strategic value of interdisciplinary skills and their actual integration into educational systems. Across the national surveys, stakeholders consistently rated the integration of modern agro-tourism competencies within existing VET provision at low levels: current training coverage was rated between 2.32 and 2.56 out of 5.00 in Italy, between 2.6 and 3.3 in Greece and at 3.08 in Croatia. Furthermore, the delivery of these programs lacks agility and geographic accessibility. Traditional classroom environments fail to accommodate the seasonal rhythms and demanding work schedules of family-run farms, effectively isolating remote rural populations from professional development opportunities.

The institutional educational inventory reflects a highly fragmented landscape. In Croatia, for instance, national data indicate a major imbalance in available programmes, with 99 agricultural and 24 tourism programmes operating as completely separate disciplines. Croatia has recently introduced a four-year "agri-tourism technician" qualification, and Portugal and Romania offer rural and agro-tourism technician courses, but in countries such as Greece and Germany agro-tourism is not yet recognised as a distinct VET pathway. This division ensures that curricula remain overly theoretical, leaving graduates poorly prepared for real-world business environments and placing a heavy, practical retraining burden directly on employers.

5.2 Digital Skills

Digitalisation represents the most acute competence deficit and operational bottleneck identified across the European agro-tourism landscape. While stakeholders universally recognize the strategic importance of online visibility, actual implementation remains severely limited due to demographic realities and a lack of tailored training. In the national surveys, digital skills and smart technologies consistently ranked among the most important competence categories, with mean importance scores of 4.44 out of 5.00 in Croatia, 4.5 in Greece and 4.12 in Italy. Concurrently, the lack of digital skills among rural operators was identified as a severe barrier, scoring 4.08 in Croatia and 4.04 in Italy.

This deficit leaves small operators heavily reliant on informal, self-directed learning paths. A vast majority of operators acquire basic technological skills through trial-and-error, peer recommendations, or familial interventions. The common baseline across national reports highlights that current training is missing critical, practical business applications, including:

- Multi-Channel Channel Management: Most operators use a narrow, reactive approach to online promotion, lacking the skills to implement automated property management software (PMS) or direct booking engines to bypass high third-party commissions.
- Localized Search Engine Optimization (SEO): Micro-enterprises suffer from minimal digital visibility because they lack training in localized SEO, Google Business profile maximization, and active online reputation management.
- Data-Driven Customer Relationship Management (CRM): Operators rarely possess the skills to utilize basic CRM systems, leaving them unable to track guest preferences, manage digital feedback loops, or execute data-driven loyalty marketing.

The problem is further exacerbated by clear demographic imbalances. In Croatia, for example, 36.18% of the agricultural workforce is aged 50 or over, compared with a national cross-sector average of 29.08%, while farm holders under 41 represent just 14.35% of all holders nationally (18.72% in Osijek-Baranja County). Comparable concerns about ageing rural operators and lower digital readiness among older owners were raised in Greece and Portugal. The older demographic currently controlling the vast majority of rural assets requires highly specialized, simplified, and tailored digital VET interventions to prevent total exclusion from digitally driven tourism markets.

5.3 Green Skills

The green transition presents an operational paradox for agro-tourism: environmental stewardship is highly valued in theory, yet remains largely unimplemented in daily farm workflows. In the national surveys, stakeholders assigned high importance to environmental management and climate adaptation skills (for example 4.3 out of 5.00 in Greece, 4.15 in Croatia and 4.00 in Italy). However, current coverage of these topics was rated considerably lower, at 2.9 in Greece and 2.52 in Italy, while in Croatia average coverage across all pillars reached only 3.08.

Operators explicitly support the overarching principles of the European Green Deal and sustainable tourism, but they face massive confusion when trying to translate grand environmental concepts into daily business procedures. Sustainability is frequently discussed in broad terms—such as ecosystem preservation and biodiversity protection—but concrete training modules on how to establish, measure, and fund these processes are entirely absent from traditional VET offers. Future vocational curricula must address this deficit by delivering actionable, data-verified modules focused on:

- Circular Economy Operations: Designing zero-waste culinary workflows, executing water recycling protocols, and establishing localized short-supply procurement networks to reduce operational costs.
- Eco-Certification and Compliance: Navigating the dense administrative bureaucracy required to achieve official European eco-labels or organic production verifications, which operators currently view as an overwhelming hurdle.
- Climate Change Mitigation and Adaptation: Managing acute water scarcity, responding to erratic seasonal weather distributions, and altering agricultural yields to ensure the farm landscape remains resilient and attractive to tourists year-round.
- Slow Tourism Conception: Despite a natural leaning toward heritage preservation, empirical understanding of the "slow tourism" framework is limited, meaning operators miss out on designing high-yield, low-impact immersive products for conscious consumers.

5.4 Business and Entrepreneurial Skills

The underlying economic vulnerability of the agro-tourism sector stems from a pronounced lack of commercial and entrepreneurial acumen. While operators demonstrate exceptional technical competency in primary agricultural production, they are frequently unequipped for the aggressive, experience-driven realities of the modern hospitality market. Today's agro-tourist does not merely seek standard accommodation; they demand premium gastronomic tourism, structured educational workshops, wellness integration, and highly curated, participatory experiences. Managing this diverse mix requires an advanced level of business sophistication that traditional farming education does not provide.

Stakeholder survey diagnostics confirm that entrepreneurial and business development skills are highly valued, receiving mean scores of 4.6 out of 5.00 in Greece (the highest-rated pillar), 4.48 in Italy and 4.37 in Croatia. Yet, across partner territories, the lack of tailored vocational modules in business resilience is flagged as a major barrier to sector capitalization. Qualitative feedback from focus groups highlights several critical gaps in business management training:

- Financial Literacy and Dynamic Pricing: Operators struggle with cash-flow projection, yield management, and setting strategic prices that balance high inflation against seasonal shifts, which severely suppresses profit margins.
- Strategic Experience Design: Most operators lack the skills to transform raw agricultural assets into structured, premium, experience-based tourist products, limiting their ability to attract higher-spending demographics.
- Administrative and Funding Navigation: Navigating the complex processes required to access EU Structural Funds, national agricultural subsidies, or rural development incentives represents a massive bottleneck. In the Croatian focus group, around half of the participants explicitly pointed to these administrative and regulatory barriers as a primary obstacle to business survival.

This lack of business training directly undermines long-term resilience. When faced with systemic macro-shocks—such as high inflation, economic downturns, or sudden climate incidents—these family-run farms lack the strategic padding, diversified revenue lines, and marketing networks needed to absorb losses. Consequently, technical mastery of agriculture is wasted because operators lack the business skills to turn their seasonal yields into sustainable, profitable hospitality assets.

6. BEST PRACTICES

6.1 Detailed Examples Reported by Participating Countries

Drawing directly on the national reports, this section presents qualifications, training offers and enterprises that illustrate how agriculture, tourism and entrepreneurship can be combined in practice. Although no partner country yet offers a fully integrated agro-tourism VET pathway, these examples provide useful reference points for the VETourismo curriculum and its case studies.

- Technician-level qualifications combining agriculture and tourism (Croatia, Portugal, Romania): In 2021, Croatia entered the occupational standard of the "agri-tourist technician" in the Register of the Croatian Qualifications Framework, and a subsequent decision introduced a four-year vocational curriculum for the agri-tourism technician qualification (081605), linking agricultural, tourism and entrepreneurial competences in a single qualification for the first time. In Portugal, several professional schools offer the three-year "Environmental and Rural Tourism Technician" course (EQF 4, 3,425 hours), which covers agro-tourism activities, customer service, marketing, digital skills and sustainability. Romanian vocational high schools offer a "Technician in Agrotourism" pathway that includes practical modules, internships and farm visits.

- Targeted short courses and certified modules (Italy, Portugal, Germany): In Italy, regional authorised courses of 92 or 140 hours prepare operators to open and manage agritourism activities, while two-year ITS Academy programmes (EQF 5) combine classroom learning, laboratories, company cooperation and internships. In Portugal, APTERN delivers a 50-hour certified e-learning unit on tourism in rural areas (UFCD 3452), aligned with the National Qualifications Catalogue. In Germany, Chambers of Agriculture and regional associations offer short further-training courses on agritourism, farm holidays and direct marketing.

- Training in vocational schools with their own farms (Portugal): Schools in the APEPA network of agricultural vocational schools are closely connected to their regions and often operate their own agricultural facilities, giving learners practical, work-based learning opportunities. Many of these schools have extended their training offer to rural-economy activities such as tourism and crafts.

- Tourism enterprises named as reference cases (Greece, Croatia, Romania, Portugal): The national reports identify enterprises that could serve as case studies or virtual tour sites. In Greece, these include the Enagron eco-tourism village in Crete and the internationally recognised Eumelia Farm in Laconia, a biodynamic and organic estate that integrates renewable energy, greywater recycling and farm-to-table gastronomy, as well as the Wine Roads network in Northern Greece. Croatian respondents cited family farms in Baranja, such as "Stari Mlin", which combines accommodation, homemade gastronomy and guest participation in vegetable harvesting and traditional cooking. Romanian respondents pointed to agro-tourism guesthouses in Maramureș that combine traditional accommodation with local gastronomy, crafts and agricultural activities, while Portuguese respondents referred to harvest (vindima) experiences and wine tourism in the Douro Valley.

- Partnerships offered during the focus groups (Greece): The Greek focus group produced two concrete offers: a VET institute (IEK) in Veroia offered to pilot VETourismo modules within its tourism curriculum, and women's agro-tourism cooperatives in Imathia offered to act as practical placement sites for learners. The Hellenic Agrotourism Federation (SEAGE) also expressed its willingness to act as a national connector between VET institutions and agro-tourism businesses.

- Complementary EU-funded projects (Bulgaria, Greece): Erasmus+ and other EU-funded initiatives, such as Tourural in Bulgaria and AgroTourNet and DigAccessAgrotourism in Greece, offer e-learning tools and support for the digital transition of rural tourism operators. As the Greek report notes, however, such initiatives do not yet constitute an accredited agro-tourism VET pathway.

6.2 Promising Approaches and Tools

A review of the national reports shows that stakeholders in all partner countries favour flexible, practical and action-oriented learning formats over traditional classroom instruction. The approaches below were recommended by stakeholders in the national reports. Most of them are not yet widely implemented, but they respond directly to the barriers identified in the research, such as time constraints, distance, limited digital skills and weak links between schools and businesses:

- Hybrid, blended and decentralised delivery (Italy, Bulgaria, Greece, Portugal): Because operators cannot easily leave their farms to attend training in distant centres, Italian and Bulgarian stakeholders recommended short online units, evening webinars, local workshops, downloadable toolkits and mobile training units for rural and mountain areas. Greek participants asked for mobile-first design, audio narration for lower-literacy users and offline-capable content, while Portuguese participants stressed that face-to-face sessions remain essential for people less familiar with online tools.

- Actionable practical toolkits (Italy, Greece, Bulgaria): Stakeholders asked for tools that can be applied immediately, such as business-planning templates, digital communication calendars and sustainability checklists (Italy), a step-by-step guide to organic certification (Greece) and toolkits for waste management, local sourcing and energy efficiency (Bulgaria).

- Micro-credentials and modular pathways (Croatia, Italy, Bulgaria, Portugal): Several reports recommended micro-qualifications or micro-credentials and modular courses, complemented in Italy and Bulgaria by training vouchers, so that operators can upskill step by step without interrupting their business activities.

- Integrated school–business partnerships (Croatia, Bulgaria, Italy, Portugal): Partners proposed formal cooperation structures linking VET providers, businesses, tourist boards and local authorities, such as partner networks, field classes and mentoring (Croatia), Regional Agro-Tourism Clusters (Bulgaria), regional networks for internships, trainer pools and shared materials (Italy) and digital platforms connecting students with agro-tourism businesses (Portugal).

- Immersive virtual and 360° farm tours (Croatia, Italy, Portugal, Greece): Virtual or 360° farm tours were rated highly as a tool for both training and promotion (4.35/5 in Croatia and 4.20/5 in Italy; 64.3% positive ratings in Portugal), and 40% of Greek respondents selected virtual farm visits and case studies as a preferred training format. Bulgarian respondents also expressed strong interest in this format.

- On-farm peer learning and mentoring (Croatia, Bulgaria): Croatian focus group participants strongly supported peer learning, farm-to-region exchanges, on-farm demonstrations and mentoring, particularly for newcomers to the sector, while the Bulgarian report recommended mentoring programmes and "learning-by-doing" workshops hosted at successful agro-tourism businesses.

7. RECOMMENDATIONS FOR CURRICULUM DEVELOPMENT

7.1 Translational Logic: Transforming Research Findings Into Actionable Training Architecture

The comprehensive data gathered through cross-national surveys, focus groups, and desk research highlights a clear and urgent message: the future viability of European agro-tourism depends on a complete overhaul of its Vocational Education and Training (VET) architecture. The empirical findings are no longer just diagnostic data points; they serve as the direct foundational framework for building a new, unified, and highly responsive curriculum blueprint.

The data shows a major disconnect where current educational offerings remain deeply isolated within narrow academic tracks—either teaching traditional primary agriculture or general urban hotel hospitality—completely ignoring the complex, multi-disciplinary reality of the rural host. Operators are no longer acting merely as primary agricultural producers or rural hosts. They are forced to manage multidisciplinary businesses that require synchronous mastery over agricultural output, hospitality management, multi-channel digital communication, circular economy principles, and entrepreneurial experience design.

To close this gap, the curriculum framework must directly convert the identified challenges into targeted, practical learning pillars. This ensures that every component of instruction directly resolves a real-world business bottleneck, helping operators transition from vulnerable primary producers to highly competitive, resilient rural entrepreneurs. The core systemic crisis is that the formal VET networks, public advisory frameworks, and institutional support mechanisms have failed to evolve at the same pace as these market expectations. This has created a critical friction point between theoretical policy objectives and the operational realities of rural entrepreneurs, which requires a structurally transformed training architecture.

7.2 Foundations of the Curriculum Framework

The following structural matrix establishes the direct relationship between the specific diagnostic findings collected across participating countries and the corresponding curricular responses required to move the sector forward:

Identified Research Finding / Core Deficiency	Required Curricular Core Foundation	Operational Focus & Target Competencies
Low digital skills among agro-tourism operators	Applied Business Digitalisation	Shifting from basic IT literacy to practical business management software, automated booking engines, and digital channel managers to reduce third-party agency commissions.
Weak online visibility and digital marketing capacity	Hyper-Local Digital Branding & Visibility	Practical execution of localized Search Engine Optimization (SEO), Google Business profile maximization, and customer relationship management (CRM) systems to track guest preferences and feedback.
Overly theoretical VET programmes	Action-Oriented & Applied Learning Design	Eliminating long academic lectures in favor of step-by-step business simulations, operational toolkits, and interactive case studies directly applicable to family farm realities.
Limited practical learning and work-based exposure	Immersive Field Experience & Mentorship	Mandatory integration of practical on-farm training, peer-to-peer job shadowing, and active participation within successful operational environments to bridge theoretical gaps.
Weak entrepreneurial and customer service competences	Commercial Literacy & Experience Engineering	Comprehensive training in cash-flow projection, inflationary cost accounting, dynamic seasonal pricing, and transforming raw agricultural assets into premium participatory guest experiences.
Limited operational understanding of sustainability	Applied Circular Economy Workflows	Translating broad policy goals into day-to-day farm practices: zero-waste culinary production, integrated composting, greywater recycling, and clear guidance for securing European eco-labels.
Weak cooperation between VET providers and businesses	Multi-Stakeholder Educational Ecosystems	Building formal, continuous feedback loops and joint advisory boards that bring together vocational schools, local tourism clusters, and regional development bodies.
Limited access to training in rural and remote areas	Decentralized & Flexible Delivery Systems	Overcoming travel and time barriers through mobile training units ("VET on wheels") and asynchronous, mobile-first micro-learning assets optimized for older workforces.

7.3 Pedagogical Delivery and Strategic Accessibility Frameworks

Developing a modern curriculum foundation is pointless if the target demographic cannot access it due to structural, demographic, and operational constraints. Small, remote operators face severe time and cost barriers when attempting to access professional training. Traveling long distances to urban centers for standard classroom training is unfeasible for family farms with daily agricultural commitments. This lack of flexible, localized, and digitally accessible VET formats locks the most vulnerable rural populations out of the skills upgrade loop, reinforcing spatial and economic inequalities across European regions. To ensure long-term sector growth and overcome these challenges, future VET delivery must be built upon the following three strategic pillars:

- Work-Based Learning and Practical Exposure: Educational programs must pivot away from standard classroom spaces and move directly into the field. The curriculum foundations must integrate mandatory work-based learning, practical simulation toolkits, and hands-on operational exposure. This includes peer learning, on-farm demonstrations and mentoring hosted by experienced operators, as recommended by Croatian and Bulgarian stakeholders, together with structured internships in which host businesses receive clear guidance on what learners should practise and how their learning is assessed. Curricula must move away from single-sector training and focus instead on creating flexible micro-credentials and combined skills profiles that integrate farming, hospitality, digital communication, and social interaction skills directly into a unified professional identity.

- Decentralized and Digitally Accessible Infrastructure: To support older workforces and isolated remote populations, VET delivery must be highly flexible and mobile. In Croatia, for example, 36.18% of the agricultural workforce is aged 50 or over, well above the national cross-sector average of 29.08%, and farm holders under 41 represent a small minority (14.35% nationally, 18.72% in Osijek-Baranja County). The elderly demographic that currently controls the vast majority of rural assets requires specialized delivery systems. This requires deploying mobile training units directly to remote village centers, combined with mobile-first asynchronous micro-learning hubs that provide short, video-based, offline-accessible content that older operators can easily complete around their daily farm routines without requiring long-distance travel.

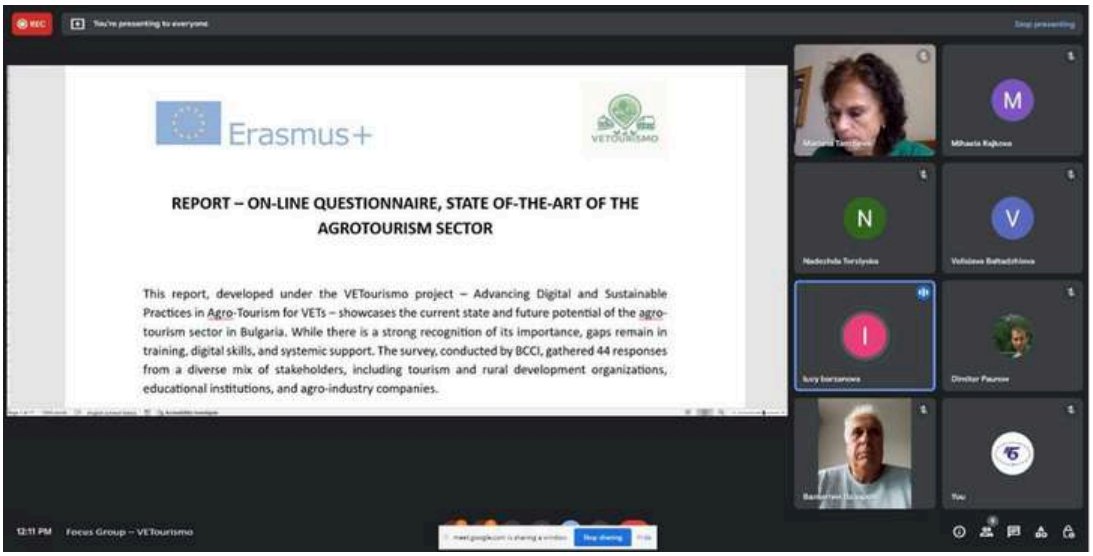
- Formal Multi-Stakeholder Cooperations: To eliminate weak collaboration between VET providers and local businesses, regions must establish formal joint advisory boards and structural feedback channels. General cooperation between vocational schools and active agro-tourism businesses is extremely weak, which ensures that curricula remain overly theoretical, leaving graduates poorly prepared for real-world business environments. By pairing vocational schools directly with local tourism clusters, regional development agencies, and agricultural associations, the curriculum can be continuously updated based on shifting tourist profiles, economic realities, and regulatory mandates. This deep cooperation creates a highly agile learning ecosystem, securing joint funding opportunities and ensuring a steady pipeline of job-ready graduates who can drive long-term rural development and economic diversification.

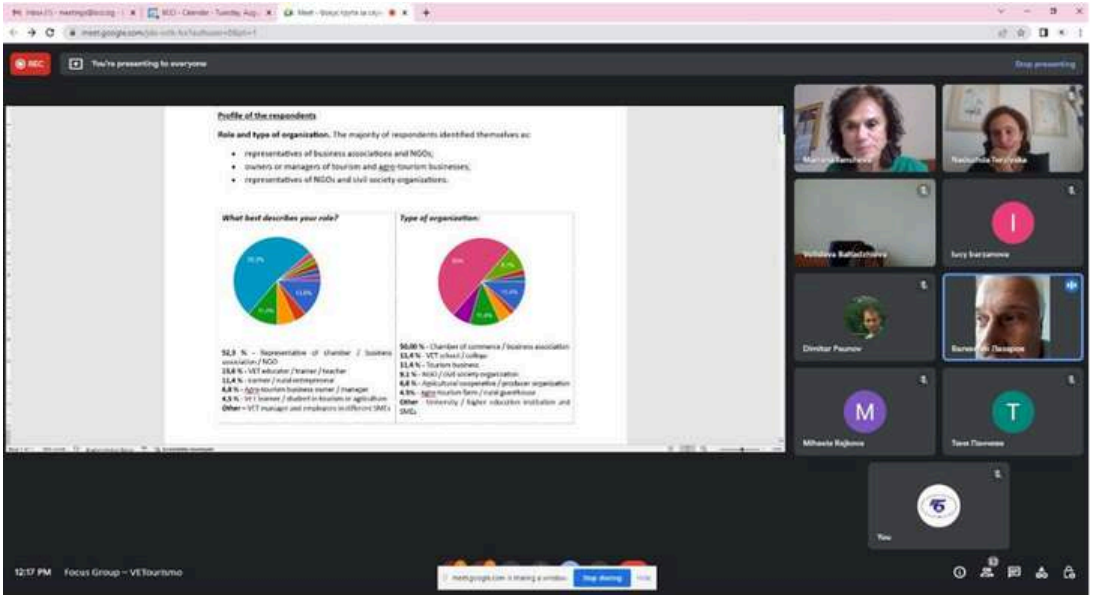
ANNEX 1: THE ONLINE QUESTIONNAIRE IN ENGLISH (TRANSLATED IN ALL PARTNERS' LANGUAGES)

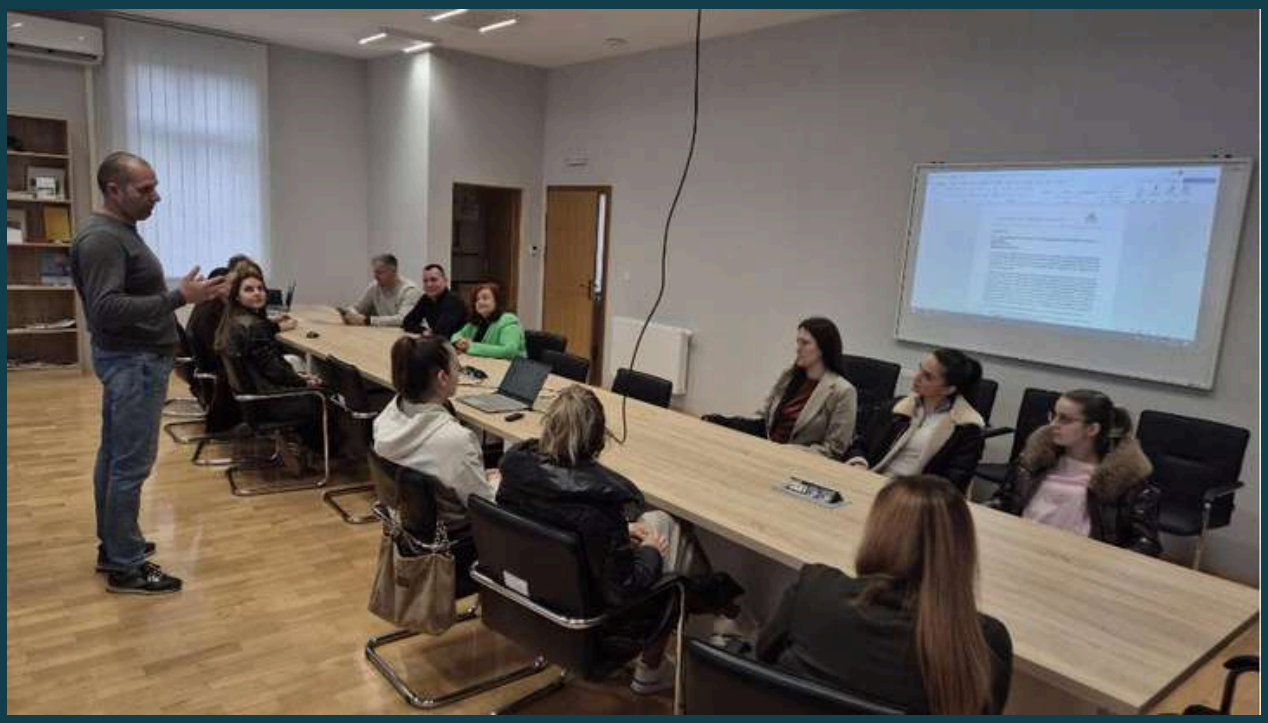
https://forms.gle/82SRyubtY2eUuinp9

ANNEX 2: MOMENTS FROM VETOURISMO FOCUS GROUPS

2.1 Bulgaria



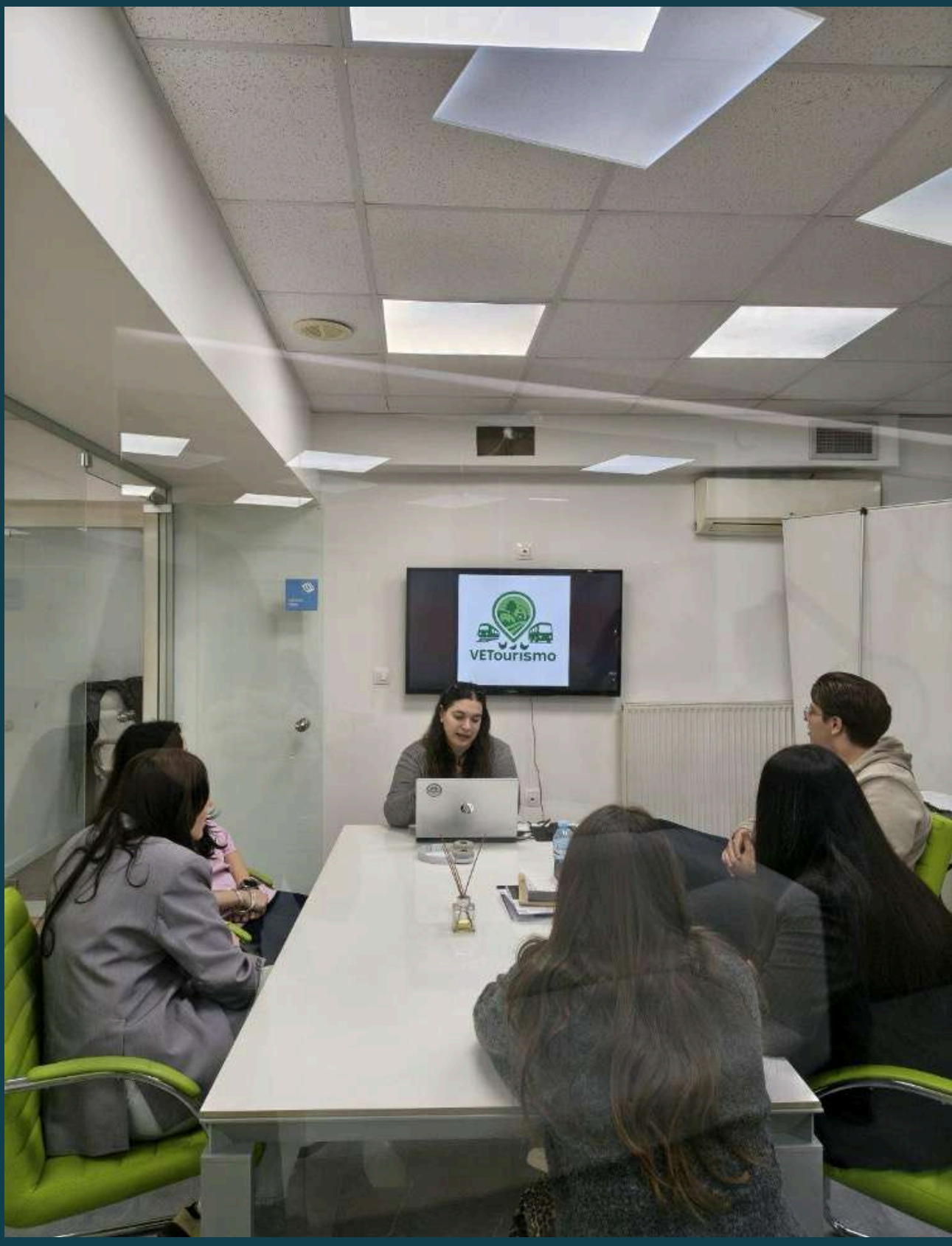






2.3 Germany




VETourismo

2.4 Portugal





2.5 Italy


Slow Tourism Alto Adige
Paola Majocchi
Maria Imoli
katia duregon
Federica Ferrari
Federica Ferrari


Slow Tourism Alto Adige
Ali Ulusoy
sandra caddeo
Elisa Guerzoni
Alberto Cannone

2.6 Greece





2.7 Romania



VETourismo

D2.1 INSIGHTS AND NEEDS ANALYSIS REPORT

VETourismo

ADVANCING DIGITAL AND SUSTAINABLE PRACTICES IN AGRO-TOURISM FOR VETS

Project Number: 2025-1-DE02-KA220-VET-000361332

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