AI4Agri

Developing green and digital skills towards AI use in agriculture

Project Number: 2023-1-PL01-KA220-VET-000160825

Erasmus+

KA220-VET - Cooperation partnerships in vocational education and training

Work package n°4 - Exploiting AI use in agriculture & Policy recommendations

Guidelines for A.4.1: National Policy Report Template

Developed by

YET

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National Policy Report: YET, Greece

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Executive Summary

The AI4Agri Policy Roundtable, conducted in Northern Greece in July 2025, engaged eight key stakeholders to gather insights on the adoption of AI. Participants included farmers (37.5%), representatives from cooperatives (25%), the tech sector (25%), and VET trainers (12.5%).

The discussion revealed a high level of digital adoption, with 100% of respondents already using AI or digital tools. However, familiarity with specific AI applications was varied, with 50% describing it as moderate, 25% as very familiar, and 25% as slightly familiar.

Key barriers to AI accessibility were unanimously identified by all participants as cost, lack of digital infrastructure, lack of training/skills, and lack of awareness. A majority (62.5%) also cited unclear regulations as an obstacle. Internet connectivity was widely seen as a challenge, with 87.5% rating it as "Fair" and 12.5% as "Poor". Furthermore, a majority (62.5%) were unsure about available public funding or CAP schemes for AI adoption.

To address these challenges, participants unanimously endorsed public-private partnerships to develop smart infrastructure. There was also strong support for cooperative models, such as shared AI services and digital platforms (87.5% support), and a high willingness to lease equipment (87.5%). Direct grants were overwhelmingly identified as the most helpful form of financial support (87.5%).

On capacity-building, participants prioritized practical training, with 87.5% favoring field demonstrations. Agricultural extension services were seen as the most appropriate leaders for training initiatives (75%). The primary concern regarding AI use, cited by 100% of participants, was a future dependence on technology. Despite this, most would support open data initiatives if privacy is protected.

For measuring success, reduction in input use (100%), farmer income growth (100%), and environmental benefits (87.5%) were cited as the most important indicators. There was a unanimous willingness to participate in AI pilot programs. Participants saw AI as a valuable tool for achieving Green Deal objectives, including resource optimization, soil health management, and biodiversity monitoring. They emphasized that achieving these benefits requires targeted investments, subsidies, practical training, and clear policies.

Policy Context

Agriculture is central to the European Green Deal’s climate and biodiversity objectives. AI technologies can enhance productivity, reduce environmental impact, and enable precision farming. Yet, significant barriers to adoption remain, including challenges in digital readiness, equitable access to technology, and the need for effective policies, particularly for the small and medium-sized farms common in Southern Europe.

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1. Introduction and General Perceptions

The AI4Agri Policy Roundtable in Greece, conducted in July 2025, was held under WP4: Exploiting AI Use in Agriculture & Policy Recommendations of the Erasmus+ project "AI4Agri: Developing green and digital skills towards AI use in agriculture" (Project Number: 2023-1-PL01-KA220-VET-000160825). The event gathered eight key stakeholders to provide crucial feedback on the opportunities, obstacles, and support mechanisms needed for successful AI adoption in the Greek agricultural sector. The participants represented a diverse cross-section of the industry, including farmers (37.5%), cooperatives (25%), the tech sector (25%), and VET trainers (12.5%).

In terms of digital readiness, all participants (100%) confirmed they are currently using AI or digital tools in their agricultural activities, indicating a strong baseline of digital engagement. Regarding familiarity with specific AI applications in agriculture, 50% of participants described themselves as moderately familiar, while the other half was evenly split between being very familiar (25%) and slightly familiar (25%). The roundtable revealed valuable insights from these key stakeholders on the challenges and recommendations for increasing the accessibility and impact of AI technologies, in alignment with the European Green Deal and Common Agricultural Policy (CAP) objectives

2. Key Barriers to AI Accessibility

During the roundtable, participants unanimously agreed on several key barriers hindering their access to AI applications. All respondents (100%) identified the following as significant challenges:

- **Cost:** High investment costs for AI-enabled equipment and software.
- **Lack of digital infrastructure:** This was a major concern, particularly regarding internet access in farming regions.
- **Lack of training/skills:** A need for more technical skills and qualified personnel was reported.
- **Lack of awareness:** Insufficient information about the potential benefits and applications of AI tools.

In addition, a majority of participants (62.5%) pointed to **unclear regulations** as another barrier to adoption.

The concerns about infrastructure were further detailed by participant ratings of internet connectivity in their regions, with 87.5% describing it as "Fair" and 12.5% as "Poor". No participant rated the connectivity as "Good" or "Excellent". Consequently, 37.5% confirmed that limited connectivity affects their ability to use smart technologies, while a significant portion (62.5%) were unsure of its full impact.

The discussion also revealed a knowledge gap regarding financial support. A majority (62.5%) were unsure if any public funding or CAP schemes exist to support AI adoption, while only 37.5% were aware of such programs. This highlights that a lack of accessible information is a systemic challenge rooted in both infrastructure and awareness issues.

3. Infrastructure and Financial Needs

To support the adoption of AI technologies, participants unanimously agreed that **public-private partnerships for developing smart infrastructure** are the most critical improvement needed in their areas. This reflects the widespread view that foundational infrastructure is a prerequisite for any meaningful progress.

Beyond infrastructure, participants showed strong interest in alternative, collaborative models to overcome the high cost of entry.

- A strong majority (87.5%) support the creation of **shared AI services or cooperative digital platforms** for farmers.
- An equal number (87.5%) expressed a willingness to **lease AI-enabled equipment or subscribe to shared digital services** as a cost-effective alternative to direct purchase.

Regarding direct financial aid, **direct grants** were overwhelmingly identified as the most helpful form of support by 87.5% of respondents. A smaller group (12.5%) also saw value in funding for **cooperative digital tools**.

4. Education

The discussion on education and training revealed a strong preference for practical, hands-on learning approaches.

- **Field demonstrations** were chosen by 87.5% of participants as the most helpful type of training to adopt AI tools.
- **Peer learning sessions** were also seen as valuable by 12.5% of respondents.

When asked who should lead these capacity-building efforts, a large majority (75%) believe that **agricultural extension services** are the most appropriate institutions. Private tech companies were also identified as potential leaders by 25% of participants.

The primary ethical concern raised by all participants (100%) was the potential for an over-**dependence on technology**. Despite this, there is strong support for data-driven innovation, as 87.5% of respondents would support **open data initiatives**, provided that data privacy is protected.

Participants identified numerous ways AI could contribute to environmental sustainability and Green Deal objectives, including:

- **Agriculture:** Optimizing the use of natural resources, improving soil health, monitoring biodiversity, and reducing greenhouse gas emissions.
- **Energy and Climate Action:** Forecasting energy consumption and designing lightweight AI models that use renewable energy.
- **Circular Economy:** Using machine vision for smart sorting and recycling and optimizing waste collection logistics.
- **Biodiversity Monitoring:** Identifying species, monitoring invasive species, and analyzing soil health through remote sensing.

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5. Monitoring and Evaluation

To measure the success of AI implementation in agriculture, participants agreed that a set of clear indicators is necessary. The indicators selected were:

- **Reduction in input use** (e.g., water, fertilizer) (100% of respondents).
- **Farmer income growth** (100% of respondents).
- **Environmental benefits** (87.5% of respondents).
- **Increase in yields** (50% of respondents).
- **Training and adoption rates** (37.5% of respondents)

Other important metrics included an increase in yields (50%) and tracking training and adoption rates (37.5%).

There is a remarkable and unanimous willingness (100%) among participants to engage in **pilot programs or case studies** on AI use. This signals a strong desire for practical experimentation and learning. Additionally, a large majority (87.5%) would support **citizen monitoring platforms** that use AI for environmental data collection.

6. Multi-Stakeholder Engagement

The roundtable successfully gathered a diverse group of professionals whose combined expertise enriched the discussion. Participants came from a range of sectors, including Agriculture (62.5%), AI and technology (25%), and VET and general education (12.5%). The roles represented included farmers, members of cooperatives, technology companies, and VET trainers. This wide range of professional backgrounds ensured that challenges and opportunities were examined from multiple perspectives, leading to a multi-faceted and comprehensive dialogue. The event evaluation confirmed that all participants felt their input was valued and heard, and that diverse perspectives were adequately represented.

7. Policy Recommendations

7.1 Infrastructure Investment

- Foster **public-private partnerships** to fund and develop shared smart infrastructure, a need unanimously supported by stakeholders.

- Support the creation of **cooperative digital platforms** that allow farmers to share data and access AI tools collectively, which received 87.5% support

7.2 Financial Support Mechanisms

- Establish a government-funded **direct grant program**, the preferred support mechanism for 87.5% of stakeholders, to co-finance the adoption of AI-enabled machinery, software, and training.

- Create financial incentives and support for **equipment leasing programs and subscription-based services**, which 87.5% of participants were willing to use.

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7.3 Capacity Building and Training

- Develop and fund practical, hands-on training programs, with a focus on **field demonstrations**, which 87.5% of participants found most helpful.
- Empower **agricultural extension services** to lead AI training and advisory efforts, as recommended by 75% of stakeholders.
- Promote peer-to-peer learning networks to facilitate knowledge sharing among agricultural professionals.

7.4 Open Data and Interoperability

- Develop a national data governance framework that ensures farmer data ownership and privacy, which would encourage the 87.5% of stakeholders who support **open data initiatives** under these conditions.
- Promote the use of interoperable systems and standardized data formats to facilitate seamless data sharing.

7.5 Ethical and Regulatory Clarity

- Establish **clear regulations** governing the use of AI in agriculture to address the uncertainty cited as a barrier by 62.5% of participants.
- Develop ethical guidelines that address key concerns, particularly the **dependence on technology**, which was a unanimous concern.

8. Conclusion

The AI4Agri Roundtable in Greece highlights a sector that is digitally engaged but facing significant, uniform barriers to advanced AI adoption. Participants acknowledged AI's transformative potential for resource optimization, productivity, and sustainability, while clearly articulating the obstacles: prohibitive costs, inadequate digital infrastructure, and a need for practical skills and awareness.

The findings point to a clear path forward. A successful strategy must be built on a foundation of **public-private partnerships** to improve infrastructure, **direct financial support** like grants to lower entry costs, and **practical, field-based training** led by trusted bodies like agricultural extension services. The strong interest in cooperative models, leasing, and pilot programs demonstrates an eagerness to embrace innovation if the right support structures are in place.

By implementing targeted policies that address these specific needs for infrastructure, finance, and education, while also providing regulatory clarity, Greek agriculture can unlock the full potential of AI. This will foster modernization, strengthen resilience, and ensure sustainable growth in alignment with national and European Green Deal objectives.

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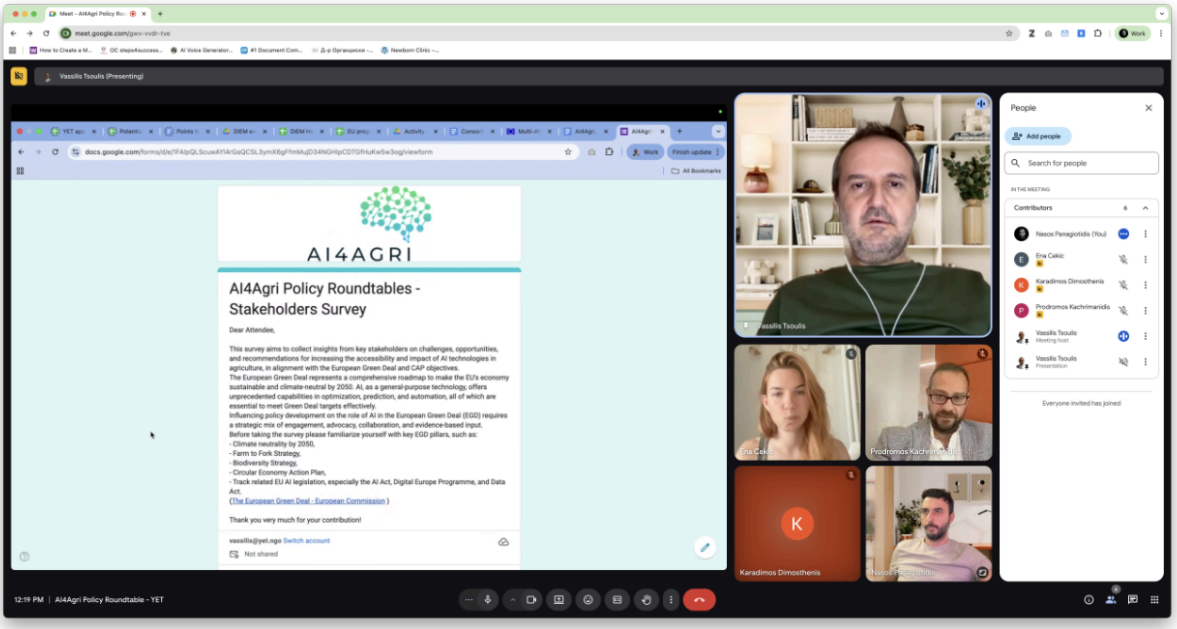
9. Attachments

Photos



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PARTICIPANTS LIST

STAKEHOLDERS SURVEY REPORT

EVALUATION REPORT

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AI4Agri Project website: https://www.ai-4-agri.eu/

AI4Agri Project e-Learning Platform: https://ai4agri-elearning.eu/

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