Project idea form - small projects

Version 2.1

Registration no. (filled in by MA/JS only) _____

Project Idea Form

Date of submission 02.06.2025

1. Project idea identification

Project idea name	Practical solution for enhancing the usage of AI-based tools in agriculture
Short name of the project	AI-AGRI
Previous calls	yes ◯ no ◉
Seed money support	yes ◯ no ◉

2. Programme priority

	1. Innovative societies

3. Programme objective

	1.1. Resilient economies and communities

4. Potential lead applicant

Name of the organisation (original)	Maaelu Teadmuskeskus
Name of the organisation (English)	Centre of Estonian Rural Research and Knowledge
Website	metk.agri.ee
Country	EE

Type of Partner	Higher education and research institution

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Which organisation(s) in the planned partnership take part in a project within the Interreg Baltic Sea Region Programme for the first time? Please list the respective partners.

Planning to involve following new partners:
- The Central Union of Agricultural Producers and Forest Owners (Finland)?
- AgriFood Lithuania?

5.1 Specific challenge to be adressed

During recent years several tools have been launched by IT-sector for using artificial intelligence (AI) in agriculture, for example for weather data analysis, crop growth and soil health monitoring, precision farming data analyses like yield and variable rate application data etc. This data is extremely valuable for farmers when making decisions related to the fertilization and nutrient management, pest control, planning optimal planting and harvesting times, optimizing machine use etc. The amount of data which can be gathered using GPS-systems in machinery, different sensors, satellites and drones is enormous and AI has proven itself as an effective tool for data analyses and for creating practical models which farmers can use daily in desicion-making.
At the same time the number of farms using these tools efficiently in project area is very small and the awareness of the possibilities offered by AI-based solutions in farmers community is low. There are innovative farmers, who are trying and testing new tools in their farms and cooperate with tech providers. But majority of farmers still rely more on experience than on data-driven recommendations. Also AI might be seen as complex, expensive or suitable only for large-scale farms. The absence of repeatable success stories makes it harder to trust the technology.
On the other hand in order to design effective AI-based tools for agriculture, tech companies need

access to specific, high-quality data from farmers. This data helps in training models, fine-tuning predictions, and making tools practical and relevant to real-world farming. They need to understand better the real expectations and capacity of mainstream farmers in order to offer user-friendly practical solutions which help them to reduce the input costs and labor needs, to improve productivity through smarter desicion-making and to mitigate the risks.
The farmers from Estonia, Finland, Latvia and Lithuania have higher digital skills than EUaverage, also in these countries the accessibility of internet connection is quite good. Farmers are already using modern machinery with GPS-systems, digital field maps and other applications, and several also use mobile soil sensors and weather stations. It means that wider group of farmers should be ready to use AI-based tools for analyzing the available data and for getting practical and useful recommendations. Just majority of farmers lack of awareness and information how AI-based tools can be useful for them

5.2 Focus of the call

Wider usage of AI-based tools can significantly strengthen the resilience of rural areas by making agriculture more adaptive, efficient, and economically viable. For example Studies and pilot projects in India, Africa, and the U.S. show that AI-assisted farming can increase farmers' incomes by 15–40%, depending on the crop and region.
Using AI-based tools farmers operating in rural areas are better equipped to manage changes that directly affect their operations making them more resilient—particularly to challenges caused by climate change (e.g. increased drought conditions, soil degradation, new pests, etc.), tightening environmental regulations in the EU, rising global input prices, and the growing shortage of skilled labor. AI-based tools support wider implementation of sustainable precision agriculture practices, so less water, fertilizers and pesticides are used. Recommendations based on high-quality soil data enables to prevent land degradation. Tailored AI-tools help small family farms to be economically more viable. Especially young people could find that farming is more attractive because of smart solutions and tools, so the image of agriculture for rural youth would be significantly improved.
AI tools can capture and share traditional knowledge digitally and help farmers to preserve and scale local best practices using tech.

6. Transnational relevance

Transnational cooperation is necessary for enhancing the wider usage of AI-based tools among farmers because agriculture and food systems are deeply interconnected across borders in EU. Pest outbreaks, climate change, soil degradation, and water scarcity affect farmers in similar way.
AI tools are only as good as the data they're trained on, therefore promoting and facilitating the cooperation among tech companies from project area would make strong impact to the quality of the solutions. By combining datasets from multiple countries enhances model accuracy and regional applicability (e.g., for weather, soil, or crop modeling).
Through transnational cooperation it is possible to introduce the real success stories of more innovative and digitally experienced agricultural producers -"Lighthouse Farms" - from different countries, which builds trust and provides inspiration to the bigger group of mainstream farmers.

7. Specific aims to be adressed

Building trust that could lead to further cooperation initiatives
When farmers and project partners cooperate across borders, then they share regional challenges of food chains, cultural insights and agricultural practices. Shared success stories of designing and implementing innovative AI-based tools become proof points that encourage future collaboration between farmers and tech communities. Trust built through initial cooperation lowers the barrier to future joint projects and efforts—in agriculture, education of rural youth and beyond.
Initiating and keeping networks that are important for the BSR
Such regional cooperation supports the creation of durable partnerships among farmers' associations/ communities, research institutions and tech companies/AI developers. These networks become platforms for future innovation, funding, knowledge exchange, and scaling AI solutions in agriculture across the BSR. AI-based tools for agriculture can be developed in one country and adapted in others. Exchange of information about standards, data platforms and user experiences helps to integrate the system regionally by tech companies.

Bringing the Programme closer to the citizens
N/A

Allowing a swift response to unpredictable and urgent challenges
By wider usage of AI-based tools in analyzing for example weather data farmers can predict better weather extremes like droughts and floods and can adjust planting and harvesting schedules based on accurate forecasts. It reduces climate-relates crop failures and supports food security.

8. Target groups

(max. 2.000 characters incl. spaces)

	Please use the drop-down list to define up to five target groups that you will involve through your project's activities.	Please define a field of responsibility or an economic sector of the selected target group	Specify the countries and regions that the representatives of this target group come from.

1. Small and medium enterprise	Mainstream farmers with good digital skills using contemporary technology, but low capacity and awareness about AI-based tools	Estonia, Finland, Latvia, Lithuania
2. Small and medium enterprise	Experienced "Lighthouse Farms", who have good experiences and skills in using AI-based tools, and are ready to share their successes and challenges within farmers community	Estonia, Finland, Latvia, Lithuania
3. Small and medium enterprise	Tech companies offering and designing AI-based tools for farmers	Estonia, Finland, Latvia, Lithuania
4. Sectoral agency	Rural advisory centers offering consultation and information for farmers	Estonia, Finland, Latvia, Lithuania

9. Contribution to the EU Strategy for the Baltic Sea Region

Please indicate if your project idea has the potential to contribute to the implementation of the Action Plan of the EU Strategy for the Baltic Sea Region (https://eusbsr.eu/implementation/).

yes ◉ no ◯

Please select which policy area(s) of the EUSBSR your project idea contributes to most.

PA Bio-economy

The MA/JS may share your project idea form with the respective policy area coordinator(s) of the EUSBSR. You can find contacts of PACs at the EUSBSR website (https://eusbsr.eu/contact-us/).

☐ If you disagree, please tick here.

10. Partnership

Lead partner: Centre of Estonian Rural Research and Knowledge
Partner 2: Estonian Chamber of Agriculture and Commerce
Partner 3: NGO Farmers Parliament (Latvia)?
Partner 4: The Central Union of Agricultural Producers and Forest Owners (Finland)?
Partner 5: AgriFood Lithuania?

11. Workplan

- Analysis of available AI-based tools in project area and more broadly in Baltic Sea region (functionality, value, scalability, transferability etc)
- Analyzing the current experiences, needs and expectations of farmers in project area regarding AI-based solutions
- Cross border workshops/networking sessions (online and face-to-face) involving the representatives of farmers, rural advisors and tech communities from project area
- Local field days and practical workshops (face-to-face, online) involving farmers, rural advisors and tech communities in each country, facilitating cooperation and co-designing process
- Producing informational materials for farmers about the opportunities and benefits of AI-based solutions, including practical examples and success stories

12. Planned budget

ERDF budget (planned expenditure of partners from the EU)	EUR 500,000.00
Norwegian budget (planned expenditure of partners from Norway)	*EUR XXX*
Total budget (including preparatory costs)	**EUR 500,000.00**

13. Project consultation

Please indicate if you wish to have a consultation (online meeting) with the MA/JS to discuss your project idea

yes ◉ no ◯

14. Questions to the MA/JS

Questions related to the content of the planned project	*(max.1.000 characters incl. spaces)*
Questions related to budgeting and expenditure	*(max.1.000 characters incl. spaces)*

Any other questions	*(max. 1.000 characters incl. spaces)*

15. Additional information

(max. 1.000 characters incl. spaces)

Your account in BAMOS+

Please remember that to officially submit your application you need to access our electronic data exchange system BAMOS+. More information about the process of applying for your account in BAMOS+ you will find here:
https://interreg-baltic.eu/gateway/bamos-account