



Co-funded by the European Union

Bringing innovative technologies for precision farming to the agri-food sector

November 2023



AgroHub.BG is the European Digital Innovation Hub for agriculture in the South Central Region of Bulgaria

Project: AgroDigiRise Number: 101083473 Program: DIGITAL-2021-EDIH-01 Duration: 36 months





Our **mission** is to unlock the innovative potential of the **South Central Region of Bulgaria** in the agricultural sector.

AgroHub.BG is a **European Digital Innovation Hub** (EDIH), approved under the "Digital Europe" program with the **AgroDigiRise** project. The main **goal** of the project is to develop the potential of the agricultural sector - farmers, SMEs and the public sector from the SCR of Bulgaria by providing access to technological solutions and a range of services, supporting their digital transformation.

The **focus** of the project is **precision farming** - automation of processes, optimization of resources, and intelligent agronomy, through which the future of agriculture can happen today. The project creates a network of cooperation between the agricultural sector, digital technology professionals, and scientists.



The project is implemented by a consortium with diverse profiles and experiences, which share a common vision of a more modern, resilient, and digital agri-food sector

IT and technologies ONDO Coordinator TehnoLogica IAI (Institute for Aarostrategies and Innovations) Bevine Farmers Supplier / Agromachinery NGPA **BATA AGRO** (National Grain (Bulgarian Association of Agro Hub Producers Association) Traders of Agromachinery) Science & Universities Investment consultancy AU (Agricultural University - Plovdiv) **TEZ Cluster** (Association Cluster Trakia Economic Zone) MVCRI (Maritsa Vegetable Crops Research Institute) ģ Cleantech CPSBB (Cleantech Bulaaria) (Center of Plant Systems Biology and Biotechnology) ARC Fund IPhS-BAS (Applied Research and (Institute of Philosophy and Sociology at the Communications Fund) Bulgarian Academy of Sciences) Public Sector **Municipality of Plovdiv** (Associated partner)

Agro Hub

Our consortium consists of 14 organisations



Developing a dynamic and sustainable ecosystem for innovation in the region





ECOSYSTEM Image: Comparison of the sector Image: Comparison of the sector Farmers SMEs Science Universities Public Sector General Public

Facilitating the interactions between the different stakeholders in it farmers, SMEs, research institutions, universities, technology companies, businesses involved in the agri-food sector and the industry of the SCR, public authorities

Achieving the synergies necessary for their common work to be able to realize the digital transformation goals

By connecting previously fragmented ecosystems of different digital solution providers and the end-users, to academia and public sector, the AgroDigiRise project will support the competitiveness and green transition of the SCR, attracting serious interest in innovations and incorporating them into practice. This will stimulate the economic potential not only in the region, but within the country and the EU, as digital solutions will be broadly multiplied.



Tech-enabled agricultural solutions in Bulgaria are trailing behind global trends due to:

- > Inefficient production
- > Low digital literacy
- > Slow modernization
- > Weak investment activity

- Difficult implementation of innovations
- Lack of information
- Lack of support and funding
- Limited access to experts

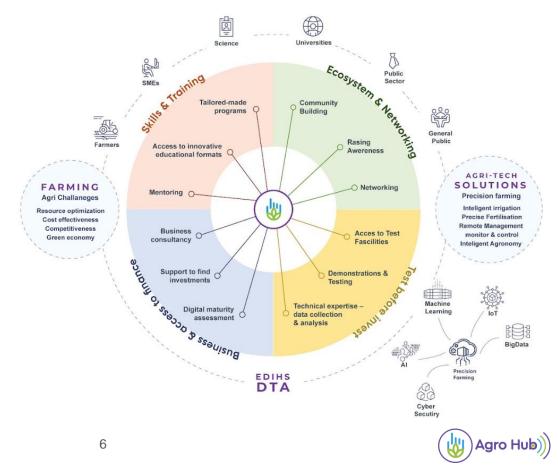


To solve Bulgaria's agri challenges, we've developed complex agri-tech solutions directed towards farmers, SMEs, and all participants in the agri-food chain, as well as in the public sector

Co-funded by the

European Union

Services offered by AgroHub.BG by category



Ecosystem & Networking

AgroHub.BG is creating an environment for mutual learning, knowledge and information exchange, as well as cooperation on local, national and international level by:

> Providing up-to-date information on the latest technological solutions in the agricultural sector

> Participation in various local and international events for networking and exchange of good practices such as workshops, webinars, exhibitions, demonstrations and seminars

Connection with other programs & initiatives, with EDIHs and DTA





AgroHub.BG is building a tech-enabled infrastructure across Bulgaria for the "Test before invest" services

Approved demo points in Bulgaria*

Co-funded by the *Proposal for 14 demo points have been approved. The rest are being 8 European Union reviewed. 16 demo points will become demo centers that showcase the usage of innovative complex technology solution for precision farming. The demo points include 3 science points, 3 vineyards, 3 greenhouses and 7 open fields.

Through the chain of DPs on farms with different geographical location, size, type of crops grown, soil and climate specifics, farmers will be able to see different applications and configurations of the technologies, compare them, and choose the solution that best fits their business

Through testing of innovative technological solutions, demonstrations and experimentation farmers will gain access to valuable technical expertise and data, aimed at increasing their digital maturity and encourage them to invest in technologies. Farmers receive expert advice and an implementation plan for technological modernization



The first demo point - The National Demo Center in Plovdiv is now open



The grand opening of the National Demonstration Center for digital solutions in agriculture in Plovdiv at Maritsa Vegetable Crops Research Institute on April 25 2023 Modernizing a 50+ year old greenhouse with our hardware and software solution for precision farming A day, during which we demonstrated our services through a number of workshops led by our experts. It included the latest agriculture tools, data analytics, and remote sensing technologies





In the Demo points we showcase a complex technological solution according to the Bulgarian specifics of the sector



Precision farming solution for greenhouses, vineyards and open fields automation system for precise irrigation, precise fertigation and climate control Disease prediction model and smart farm management with a focus on vineyards, but expanding the product range

Satellite imagery for precision agriculture and remote monitoring and control

A key factor for the technological construction of the AgroHub.BG are the infrastructure technological solutions themselves, which Bulgarian technology companies - partners in the project - develop and implement. Their solutions are not only competitive, but have also won various awards for innovation, green economy, and have attracted the interest of local and foreign investors

Our technology partners will work together to integrate their solutions into a single platform for precision agriculture. The integrated product can be tested under different conditions and needs of the individual farms, improved, complemented by research achievements (demo-science points), and offered in the EDIH network as an innovation in precision agriculture





Skills & Trainings

Tailor-made training programmes, based on interactive and practically applicable methodologies

Individual support and mentoring

Access to additional learning resources

The project partners, involved in the training services are professional training units, or vocational training centers with experience in working for SME teams, farmers and businesses



Agri Tech Glossary - an explanatory module for basic agri tech terms for media representatives



"Precision farming from the inside" - a workshop for intelligent irrigation, precise fertilization and climate control



Support for investment in innovative technologies - forum and discussion

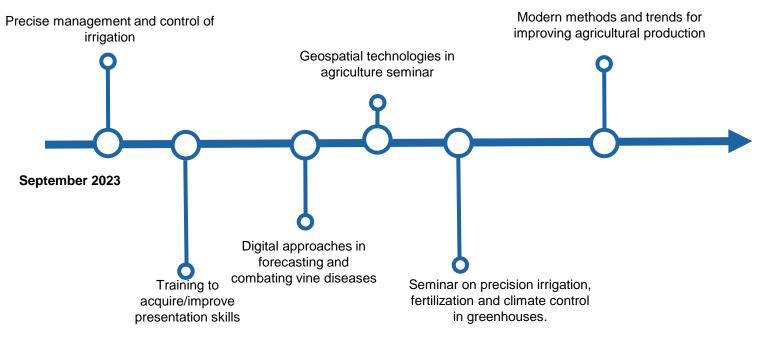


How to smarter fertilize tomato plants? - a workshop for precise fertilization of tomatoes





Our training calendar includes a series of seminars to build capacity of the local agritech ecosystem. Reach out to join us!



Dates are subject to change.







Business consultancy & access to finance

Business advisory and strategic planning for the development of sustainable and competitive business models

Supporting stakeholders in the region in finding and accessing funding opportunities for their digital transformation

Development of digital maturity in the agricultural sector

AgroHub.BG expertise includes:

- Technological audits
- Assessment of digital maturity
- Technology implementation plan
- Support for finding investments
- Project development and management
- Business consulting and mentoring
- Market research
- Preparation of a business plan and marketing analysis
- Finding business partners
- Mentoring and support when working with new technologies
- Business development and scaling
- Consulting on agro-sector-specific issues related to production





AgroHub.BG is constantly seeking synergies with innovators from the **EDIHs network by:**

- Transfering good experience in the field of precision farming, offering know-how and concrete solutions that can benefit EDIHs with a similar profile
- Exchanging expertise and services, share best practices and specialist knowledge
- Interconnecting knowledge, technologies and people in the context of service provision
 - Participating in matchmaking, training and capacity building events, joined projects, initiatives, seminars, and study visits

- Organising matchmaking events (including virtual formats) to facilitate cooperation on new digital technologies and their potential application in the agricultural sector
- Facilitating the exchange of offers/request of cooperation profiles to give clients (farmers, SMEs and public sector) more opportunities to find the right digital technology
- (Co)organising joint investor-related events and pitching preparation for SMEs
- Consulting the local companies and stakeholders to get support from other EDIHs in case the needed competences fall outside the competence of AgroHub.BG
- Collaborating to develop trainings in different formats, create innovative methodologies and exchange materials and resources





Reach out to us for collaboration

www.edih.agrohub.bg



<u>o@agrohub.bg</u> tworking@agrohub.bg

in agrodigirise

agrohub bg



