

NEWSLETTER #1

FARMWISE PROJECT

2025

The project involves 17 beneficiaries and 3 associated partners from 13 countries. This multi-disciplinary project, funded by the EU research and innovation program **Horizon Europe (GAP-101135533)**, brings together experts in water management, agriculture, climate, sensors, earth observation, data and AI, aiming to develop sustainable solutions to address sustainable water management, and climate change challenges.



Revolutionising Water Management & Agriculture in Europe

**COLLABORATIVE
SOLUTIONS FOR
SUSTAINABLE
FARMING**

Introduction to the FARMWISE Project

- **Project** 101135533 – FARMWISE
- **Type of Action:** HORIZON-RIA
- **Cluster 6:** “Food, Bioeconomy, Natural Resources, Agriculture and Environment”
- **Topic:** HORIZON-CL6-2023-ZEROPOLLUTION-01-1 - Knowledge and innovative solutions in agriculture for water availability and quality
- **Duration:** 36 months
- **Start date:** 01.01.2024

We're pleased to share the latest developments from our Horizon Europe-funded project, which focuses on advancing sustainable farming through innovative technologies and artificial intelligence (AI).

Spanning eight case studies, our work is already making a meaningful impact on water management and agricultural productivity across Europe.

In this newsletter, we highlight key updates on our progress and a closer look at how we're driving innovation to shape the future of sustainable agriculture.



What this newsletter covers:

- Highlights from the 3rd General Assembly in Murcia
- COBET Recognized for Water Reuse Innovation in La Verdad
- New Study Shows Significant Water Savings with Automated Subirrigation Systems
- Latest Research on Nutrient Impact of Subirrigation Systems

[Learn more on our website](https://www.farmwise-project.eu)

FARMWISE ADVANCES SUSTAINABLE AGRICULTURE AT 3RD GENERAL ASSEMBLY IN MURCIA

Murcia, Spain – January 22-23, 2025

The FARMWISE project, part of the EU's Horizon Europe Zero Pollution programme, held its 3rd General Assembly on January 22–23, 2025, at CEBAS-CSIC in Murcia, Spain. The two-day event brought together partners and experts to review progress and discuss future strategies for sustainable agriculture and water management. Highlights included deep dives into innovations such as AI-powered Decision Support Systems, precision farming, and climate-resilient practices. Attendees also visited local pilot sites, observing firsthand how FARMWISE technologies are improving productivity while reducing waste and pollution. Project leaders emphasized the value of collaboration in achieving the EU's sustainability goals. Building on previous successes, the Murcia meeting sets the stage for the project's continued impact across Europe.



MEMBERS OF THE PROJECT CONSORTIUM ATTEND THE 3RD GENERAL ASSEMBLY IN MURCIA

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COBET RECOGNIZED FOR BREAKTHROUGH IN WATER REUSE AT FARMWISE GENERAL ASSEMBLY:

Murcia, Spain – **Cobet Tratamientos del Agua S.L.** earned national spotlight in **La Verdad** for its innovative Evacold system, showcased during the FARMWISE 3rd General Assembly. Designed for sustainable brackish water reuse, Evacold operates at low temperatures using 100% renewable energy, producing no discharge and yielding reusable salts—aligning with EU Zero Pollution goals. Presented as a game-changer for agriculture, the system enables wastewater reuse for irrigation amid rising water scarcity. In collaboration with FARMWISE and Wageningen University, Cobet is helping to drive AI-powered, precision water management. With expanding commercial deployments and support from Spain's latest water reuse legislation, Cobet is paving the way for a circular, climate-resilient water future.



PARTNERS

The FARMWISE consortium includes 17 beneficiaries and 3 associated partners from 13 countries.

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ATGARD



NEW STUDY HIGHLIGHTS WATER SAVINGS WITH AUTOMATED SUBIRRIGATION SYSTEMS

Murcia, Spain – April 2025

A new study titled “**Controlled Drainage with Subirrigation Systems: Reduce Water Supply by Automatic Control**”—led by KWR, Wageningen University & Research, KnowH2O, and Vrije Universiteit Amsterdam—unveiling how Controlled Drainage with Subirrigation (CDSI) systems can drastically reduce irrigation water use. Published in collaboration with KWR, KnowH2O, and Vrije Universiteit Amsterdam, the study shows that dynamic, automated CDSI can lower water requirements by up to 348 mm—and even more when minor water stress is tolerated—without impacting crop yields. Field data and modeling (using SWAP) confirmed that factors like root depth, soil properties, and ditch levels influence efficiency. The findings highlight CDSI as a powerful tool for climate-resilient farming, supporting the FarmWise mission to develop smart, sustainable water solutions.



NEW RESEARCH REVEALS NUTRIENT IMPACTS OF SUBIRRIGATION SYSTEMS



A new publication, “**Effects of Controlled Drainage with Subirrigation on Nutrient Concentrations in an Agricultural Field in the Netherlands**,” features contributions from FarmWise partner Wageningen University & Research and KWR. The study examines how **Controlled Drainage with Subirrigation (CD-SI)** impacts nutrient levels in groundwater and surface water. Field monitoring over eight months in the Netherlands found increased nutrient concentrations in groundwater following manure application, while surface water quality remained stable. The study also observed nutrient levels mirroring input water during subirrigation and identified spatial patterns linked to drainage pipe placement. These findings provide essential guidance for balancing water efficiency with environmental stewardship—further supporting FarmWise’s mission to advance sustainable, science-based agriculture.

Next Steps:

Engage with us on Social Media and stay connected

Stay informed with our latest updates and take part in upcoming surveys. Your voice matters!



PROJECT OVERVIEW

The project aims to develop **AI-based tools to enhance European water policy and decision-making** through precise data analytics and interactive visualisation & research-driven technologies for water resource management in agricultural landscapes, **ensuring resilience against climate change and promoting environmental sustainability.**

Our project harnesses **the power of 11 cutting-edge technologies to revolutionise agriculture and water management** in various European regions. These technologies are designed to empower farmers with choices to maximise their productivity, optimise resource usage, and promote sustainability.

[Read More on our website](#)



PRACTICAL APPLICATIONS OF FARMWISE



● THE FARMWISE PROJECT, SPANNING THREE YEARS FROM JANUARY 2024 UNTIL DECEMBER 2026, AIMS TO: FUTURE PROJECT

- Develop improved tools based on AI for efficient European water policy and decision-making.
- Utilise an integrated systems thinking approach to enhance sustainable water management.
- Establish comprehensive European-scale databases on water quantity, quality, and availability.
- Assess the efficacy and scalability of innovative solutions through advanced field tests.
- Develop and implement integrated strategies for agricultural risk assessment and mitigation.
- Create an interactive decision support system for improved agriculture management using AI and Machine Learning (ML)



CASE STUDIES AND DEMONSTRATORS:

Location & Operator

Eight case studies across Europe will test and evaluate the impact of the innovations in diverse agricultural and climatic contexts. The project will serve as a testing ground for sustainable value chains. *Locations of the case studies are the Netherlands, Poland, the UK, Spain, Italy, Ukraine, Finland and Sweden.*

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