

NEWSLETTER # 3

FARMWISE PROJECT

2026

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**

What this Newsletter covers

- Reflections from the FARMWISE General Assembly in Bologna: how project innovations can support real decisions
- Insights from field visits in Italy: from experimental plots to regional infrastructure
- Contributions from FARMWISE expertise to international discussions on water quality and food safety
- New evidence from a UK case study testing nature-based approaches to groundwater recharge
- Direct engagement with farmers, companies, and public authorities at HortiFruit in southeast Spain
- FARMWISE research shared with the wider scientific community at leading European events

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.

About 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

FARMWISE has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101135533.



FARMWISE in Bologna: From Project Review to Real-World Questions

Turning complex work into tools that support real decisions

FARMWISE partners, researchers, innovators, and external stakeholders came together in Bologna for the project's 5th General Assembly. More than a routine checkpoint, the meeting marked a moment of transition for FARMWISE. With core tools, models, and case studies now well-developed, the focus shifted from reporting progress to a more demanding question: how will these innovations actually be used by farmers, water managers, and policymakers?

Over two intensive days, partners tested how the pieces fit together, challenged underlying assumptions, and examined what is needed to move from technical readiness to real-world uptake. Stakeholder presentations on water management, governance, and digital tools grounded the discussions in operational reality, while hands-on sessions with the visual Decision Support System and open conversations on innovation and exploitation helped sharpen priorities.

The [full article](#) captures the exchanges and turning points shaping FARMWISE as it moves into its next phase.

 [Learn more on our website](#)



From Orchard Row to the River Po: FARMWISE Field Visits in Italy

Following the General Assembly in Bologna, FARMWISE partners stepped out of the meeting room and into the field to see how the project's ideas translate into practice.

Field visits in Italy offered a practical complement to the Bologna discussions, showing how FARMWISE thinking plays out across scales. From precision irrigation trials and biochar experiments at Acqua Campus to the large-scale water infrastructure managed by CER, partners followed the pathway from field decisions to river basin management. The visits highlighted how soils, crops, infrastructure, energy use, and governance interact — and why decision-support tools must reflect this complexity.

[Read the full story](#) to find out how the Italian case study brings FARMWISE's systems approach to life.



Acqua Campus is a cutting-edge center dedicated to the transfer of innovation to agricultural businesses. Its mission is twofold: research and demonstration. Acqua Campus consists of a modern irrigation research center and a demonstration center for leading-edge technologies for the distribution of irrigation water to farms and consortiums.

Research conducted at Acqua Campus focuses on identifying all the major innovations that may impact the most sensitive issues of modern and future irrigated agriculture. 15 hectares, 30 experimental fields, a cutting-edge analytical laboratory, and a multimedia classroom combine experimental field research, demonstration of results, and training.

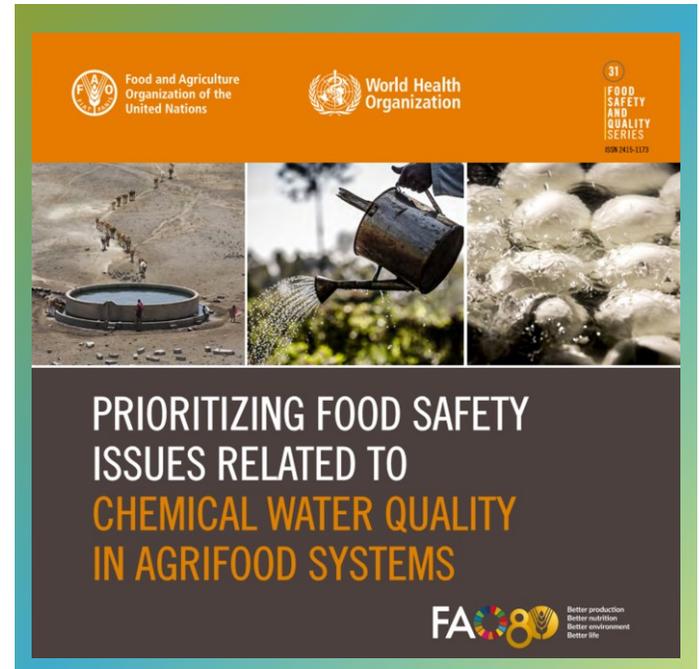
FARMWISE partner – UEA expert – contributes to global report on risks from water use in agrifood systems

Chemical risks in water used for food production are receiving growing attention, but guidance remains limited.

FARMWISE partner Prof Kevin Hiscock (University of East Anglia) has contributed expertise to a major FAO/WHO report assessing chemical hazards in agrifood water use, including both long-standing contaminants and emerging pollutants such as PFAS.

The report provides new tools to help authorities prioritise risks and strengthen food safety management. [The full article](#) explains how FARMWISE expertise is feeding into global discussions on safe and sustainable water use.

The publication is available to download on the [FAO website](#) and the [WHO website](#).



“The report shows that chemicals in water used to grow and prepare food can pose a risk to human health,” said Prof Hiscock.

“As part of the work of the expert review group, we identified high-priority contaminants including arsenic, cadmium, lead, thallium and fluoride, as well as emerging pollutants such as PFAS, often called ‘forever chemicals.’”

“These substances can enter food through irrigation, washing and processing, increasing long-term risks to human health. It is anticipated the report will provide governments with improved tools to assess and manage these risks, helping to protect consumers and ensure food safety worldwide.”



[Learn more on our website](#)

Nature-based solutions to enhance groundwater recharge: case study of a Runoff Attenuation Feature in the Wensum catchment, UK



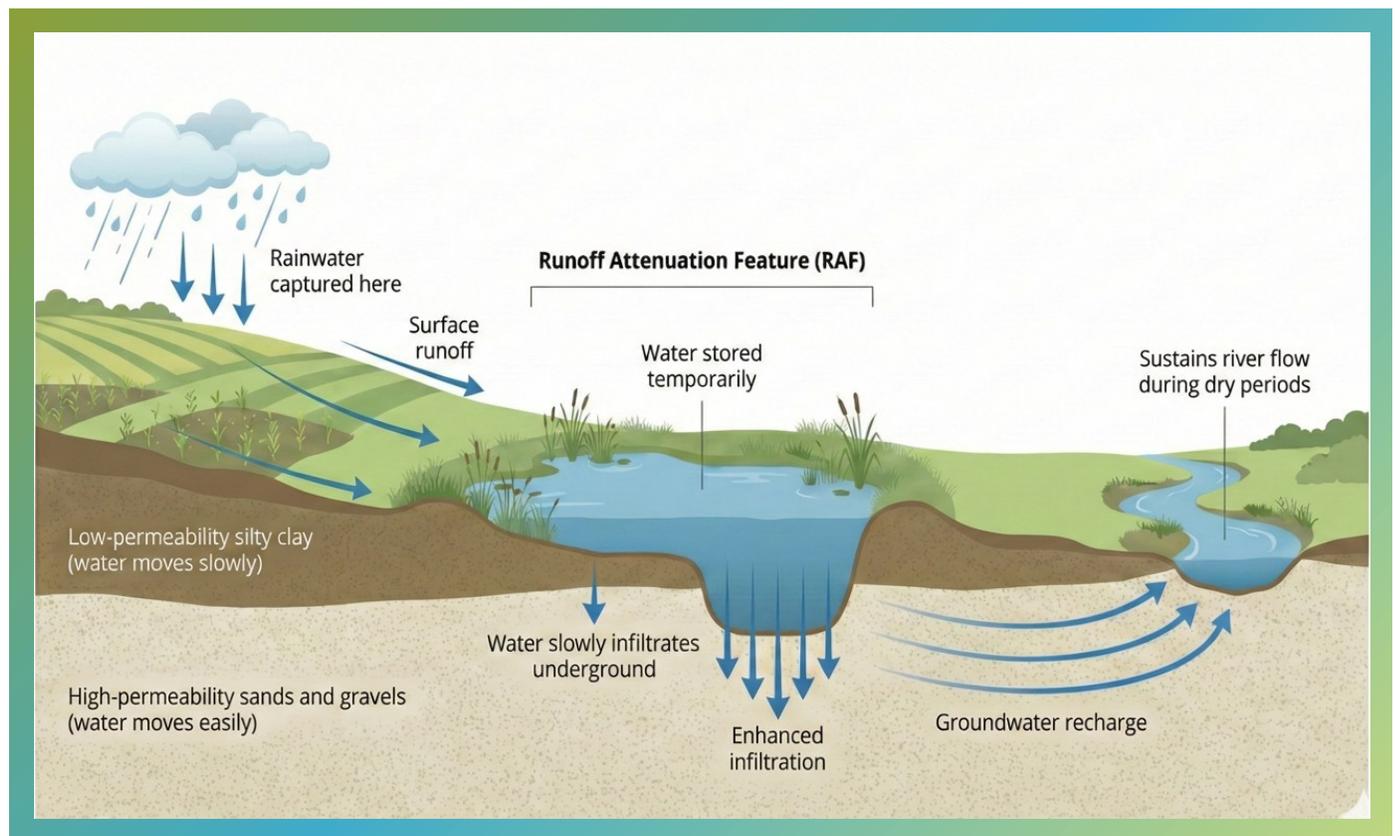
Early observations from a monitored intervention in a sensitive catchment

Can nature-based solutions make a measurable difference to water availability?

FARMWISE team members Richard Cooper and Kevin Hiscock at the University of East Anglia and colleagues at the British Geological Survey and the UK Centre for Ecology and Hydrology are monitoring a runoff attenuation feature in the Wensum catchment designed to capture surface runoff and enhance groundwater recharge in a vulnerable chalk stream system.

Early data suggest encouraging responses following rainfall events.

[Read the full article](#) to see how this case study is contributing real-world evidence to debates on nature-based water management.



[Read the article here](#)

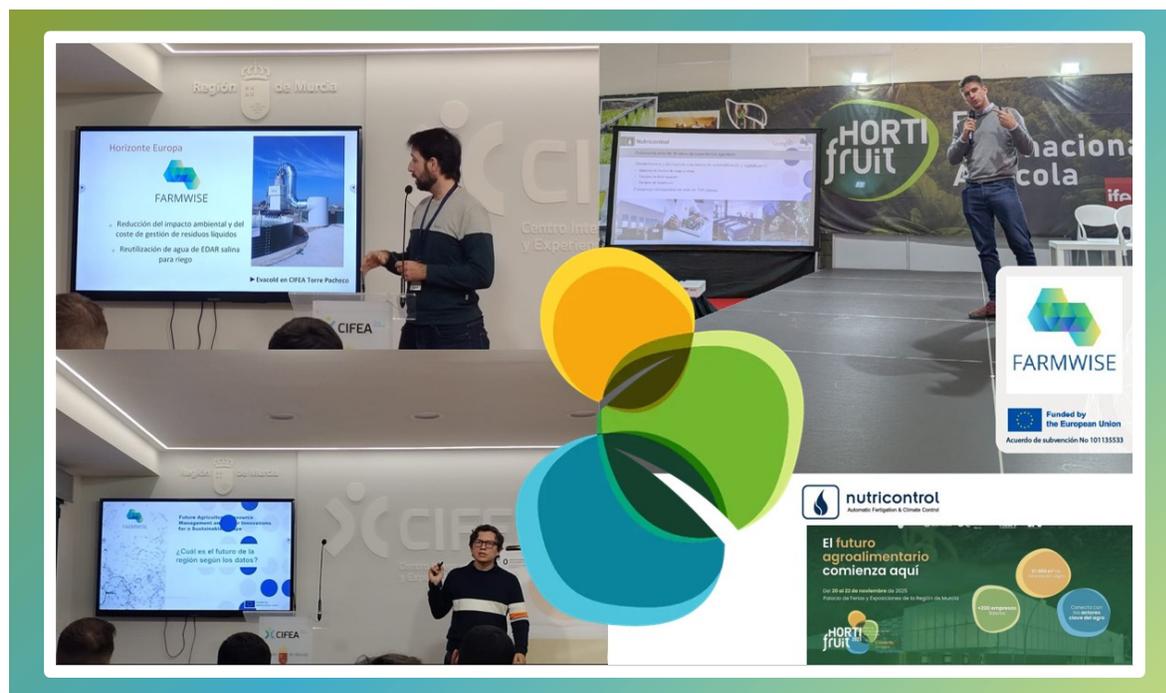
FARMWISE at HortiFruit: Turning Research into Dialogue with the Agri-Food Sector in Southeast Spain

How can digital tools, data, and scientific knowledge better support farmers, companies, and public authorities facing increasing water and climate pressures?

And what happens when European research projects step out of the lab and into direct conversation with the agri-food sector?

In November, FARMWISE brought these questions to HortiFruit, one of the leading trade fairs for fruit and vegetable production in southeast Spain. FARMWISE was represented at a dedicated booth by partners:

- **Centro de Edafología y Biología Aplicada del Segura (CEBAS-CSIC)**
- **COBET Tratamientos del Agua**
- **Nutricontrol**



Together, they engaged with companies, organisations, and professionals from across the southeast of Spain, explaining how the FARMWISE project applies artificial intelligence, precision agriculture, and decision-support systems to improve the management of water, nutrients, and soils.

Rather than focusing on theory alone, discussions centred on real-world applications, including digital crop monitoring, irrigation efficiency, water reuse, and data-driven decision-making tailored to Mediterranean farming systems.



[Read the full write-up here](#)

FARMWISE research showcased at leading European soil and geoscience events

Sharing early insights on soils, nutrients, and water management with the research community

FARMWISE research has recently been presented at major international soil and geoscience conferences, sharing early findings on soil compaction, nitrate leaching, and water-management strategies. Using modelling and field-based approaches, researchers explored trade-offs between productivity, environmental protection, and climate resilience.

Engagement with the wider scientific community helped refine methods and validate the relevance of FARMWISE approaches. [Read the full article](#) to learn more about the research behind these contributions.



[Read the full write-up here](#)