



From field to practice: nature-based and technical solutions for sustainable water and soil management on farms

Erasmus+ project: Water~Farmers, 1st webinar
30.06.2026



1st webinar, Water~Farmers



“Improving water management on the Pegarou farm in Ariège”, Chloé Malik, FCEN, **France**



“An area-based approach of using weirs for optimizing the water system in an agricultural area”, Maarten Raman, BNVL, **Belgium**



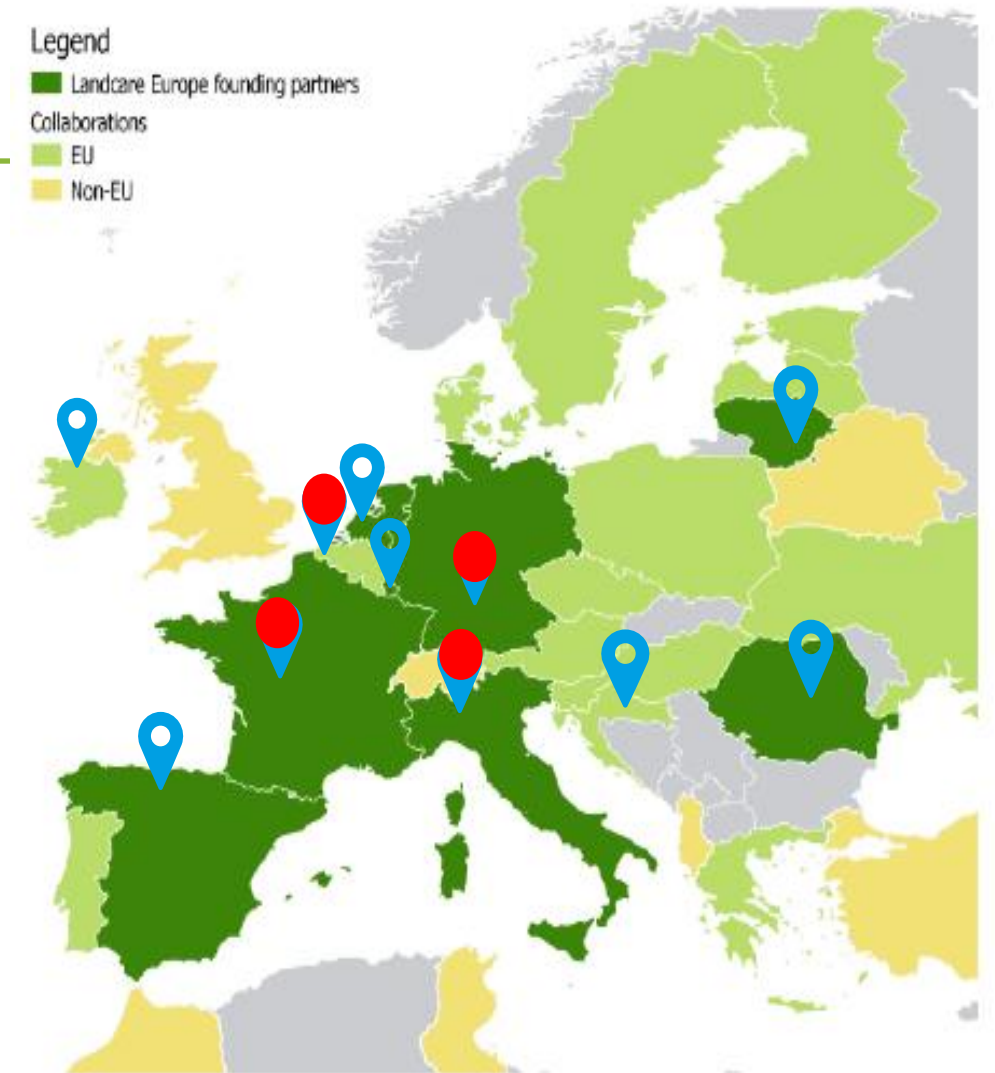
“Una Garlanda farm: agroforestry in rice farming”, Gemma Chiaffarelli, **Italy**

Water~Farmers

Erasmus+project: January 2026 – July 2028

Partners:

- Landcare Germany
- Boerennatuur Vlandern, Belgium
- Legambiente Italy
- FCEN, France
- Landcare Europe



Water~Farmers

Goals:

-  To develop, test and transfer a learner-centred, flexible and innovative **training program on sustainable water and soil management** for EU farmers, to become actors of the green transition.
-  To **enhance the knowledge and skills** and the quality of the work of agroecology consultants and their organisations on guiding and supporting farmers.
-  To strengthen a **European learning network** of organisations and farmers working for nature restoration and climate resilience in agricultural landscapes.



11 Partners

...and growing ☺

**Goal: Expand to
all 27 EU MS**



BOERENNATUUR

Sonairte
Valon Eco-Centre and Gardens



Deutscher Verband für
Landschaftspflege

**Conservatoires
d'espaces
naturels**



Landcare Europe in numbers (2021)

Structure

- > 2000 employees



Cooperation

- Cooperation with 29 European countries
- Outside Europe: Morocco, Tunisia, Lebanon, and Chile



Farming land

- Vast distribution: < 1 ha ... > 1000 ha



Consultation activities

- > 100,000 farmers, > 1000 citizens & > 600 political stakeholders addressed



LANDCARE EUROPE activities



Promoting Landcare as effective and necessary cooperative link between nature conservation, agriculture and politics.



Exchanging knowledge & best practices beyond borders to better implement EU environmental targets within an agricultural context.



Supporting the foundation of Landcare Associations and Landcare umbrella organisations as well as their activities.



Consulting policy makers and supporting the implementation of EU policies & strategies at national level.



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Best practice examples

- www.landcare-europe.org with European map

THE QUEICH MEADOWS - TRADITIONAL IRRIGATION AS A CLIMATE ADAPTATION MEASURE



Source: Contentivity

Name	Queichwiesen/Queich Meadows
Country	Germany
Biogeographical Region	Continental region
Region	Southern Palatinate
Landscape/ Eco system type / protected area	The Queich Meadows are situated between the Rhine and the Palatinate Forest, in Rhineland-Palatinate. They are part of an EU bird sanctuary and the Special Protected Areas „Offenbacher Wald“, „Bellheimer Wald“ and „Queichwiesen“
Size / Scope	450 hectares in 7 municipalities
Type of farm	Multiple and different kinds of farms are involved
Agricultural Use	Grassland used as fodder for horses and cattle
Best-practice / main idea	Reactivated traditional irrigation ditches are dammed successively, flooding the adjacent grassland to secure the profitability and biodiversity of the meadows.
Involved Stakeholders/ Partners	Farmers, people responsible for operating the weirs and sluice gates, local authorities, and seven municipalities are involved in the process. The Landcare Association „Landschaftspflegeverband Südpfalz e.V.“ and the Interest Group „Queichwiesen“ (IG) have mediated the process from the very start.

Duration	Water Meadows exist since the Middle Ages; reviving unused structures since the early 2000s until today
Goals	- Water retention - Preserving open landscapes - Increasing the amount and quality of the fodder - Preserving the practice of traditional irrigation in water meadows - Bird and species protection
Measures addressing water management	Weirs in the river Queich and sluice gates in ditches in grasslands and forests.
Measures addressing soil management	The regular flooding of the meadows with water from the rivers improves soil health and fertility.
Measures addressing other public goods	The wet „Queich“ meadows are a habitat for many protected bird species (Natura 2000 site).
Funding / Financing	Initial reactivation measures were funded by the private environmental sponsor „Deutsche Bundesstiftung Umwelt“ and co-financed by the program „Aktion Blau“ from the state Rhineland-Palatinate. River and ditch maintenance is financed by the respective communities. The irrigation itself is financially viable without external funding. It improves the quality of the grass.
Transferability	The general idea to dam ditches is transferable. It also does not work exclusively with irrigation ditches. There are plenty of examples that use sluice gates in drainage ditches for water retention. The key is a well-coordinated irrigation schedule and cooperation.
Tip / suggestion from the farmer / Landcare association	Including all stakeholders early in the process promotes acceptance of the project. Also, working out everyone's interests and boundaries and possible conflicts of interest as early as possible increases the chances of success in the long run.
Role of Landcare Associations (LCA)	Initiating and carrying out the project, recruiting and informing farmers, and mediation between different stakeholders.
Further information	German short film about the Queichwiesen https://queichwiesen.de/ Intangible Cultural Heritage of Humanity
Contact information	Deutscher Verband für Landschaftspflege (DVL) e.V./ Landcare Germany. info@dvl.org

Challenges and Solutions

No irrigation possible: On several occasions in the past, some municipalities have been unable to irrigate their sections because the river Queich did not carry enough water. Under current law, the Queich must maintain a certain minimum water level. The issue was quickly resolved within the Interest Group Queich Meadows: initially, it was decided to continue the irrigation plan from the point where irrigation had to be paused. However, this shifted the irrigation period to unfavourable times, where irrigation would have happened during harvest. Consequently, it was agreed that a water-level-related interruption to irrigation must be accepted by the affected municipalities.

Longitudinal connectivity: According to the European Water Framework Directive, water bodies like rivers, creeks, and, in some states, even ditches, must be passable for fish and other organisms. That means weirs and sluice gates are not allowed. However, the stakeholders of the Queich Meadows made an agreement with the local water authority: weirs in the Queich River do not constitute an obstacle to longitudinal connectivity when the water is only dammed up temporarily (2–3 days), and the weir is not completely closed (leaving a small but passable gap between the riverbank and weir). Still, one weir obstructs longitudinal passage even when the water is not dammed, as the drop in water level is too great. Fish and other animals are generally unable to overcome this difference in height. Therefore, a fish ladder has been installed.

Listed buildings: There are some very old structures, such as weirs, in the Queich River. Nowadays, they are classified as listed buildings under the Heritage Act and cannot simply be restored without consulting the local heritage protection authority.

Weirs and sluice gates



Photos: Various structures are used in the Queich River and in the ditches, such as simple sluice gates (top left), crank weirs (top right and bottom left), or a very large weir (bottom right) - a fish ladder was built around this weir to ensure longitudinal connectivity. Photos: Peter Keller, Pirmin Hilsendegen

The Queich River is usually dammed by large weirs. During the restoration of old weirs or construction of new ones, a planning office and a hydraulic engineering office were involved to draw up plans and obtain permits for extracting water from the river. The construction of the weirs was contracted to a civil engineering and a hydraulic engineering office. Simple sluice gates are used in the irrigation ditches. There, the sluice gates are lowered with a crank, or a wooden panel is inserted into a concrete frame.

Public relations promote acceptance

Experience in the Queich Meadows has shown that field trips and public outreach are essential for gaining acceptance of the traditional irrigation of water meadows. Acceptance is especially important in local councils, which have a major influence on the continuation of the water meadows. The value of the traditional water meadows is increasingly recognized. In 2023, traditional irrigation was inscribed on the Representative List of the UNESCO Intangible Cultural Heritage of Humanity.



Photo: Thomas Köhler, DVL

Authors: Thomas Köhler (DVL), Peter Keller (LPV Südpfalz), Pirmin Hilsendegen (IG), 26.03.26



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Invitation Landcare Conference



Save-the-Date
21-22 September 2026
Leuven, Belgium

Landcare Conference
Working with Farmers and Nature:
Water-Smart Agroecology and Landcare in Action

Registration open next week:

<https://www.landcare-europe.org/events>



Thank you very much!



Team Water~Farmers
February 2026

