



# DEEPPDEMO Water-Food Nexus

**Location:**  
**Püspökszilágy, Hungary**

**Leader:**  
**Hungarian University  
of Agriculture and  
Life Sciences**



This demonstration site focuses on assessing the impact of nature-based water retention solutions such as log dams and lateral reservoirs on the surrounding environment and agriculture. These structures help retain rainwater and mud, trap debris, thus prevent flash floods while potentially recharging soil moisture. The site is critical for the community, offering both protective and productive benefits for local landscapes and farming.

**Project partner that will support:**

- Municipality of Püspökszilágy

**Non-project partners that will support:**

- Association of Climate Friendly Settlements
- State Study-Farm Estate of Mezőhegyes

**Stakeholders involved:**

- Local authorities
- Farmers
- Water management authorities
- NGOs
- Academia

**Key objectives:**

- Installation of log dams
- Enhance water retention
- Monitor soil moisture
- Evaluate social benefits
- Strengthen knowledge sharing

**What is being tested on-site?**

Installed sensor network will monitor the impact of small-scale water retention measures on their surrounding environment by:

- aiming to detect and monitor the long-term effect of the nature-based solutions on local water availability
- monitoring atmospheric parameters for microclimatic features
- providing information about the activity of log dams and the hydrology of the catchment

**Timeframe:** Throughout the duration of the project and beyond for in-depth analysis (from 2025 to 2029)

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