Experience of Austria on water-efficient agriculture at basin level

Ernst Überreiter

Directorate-General I - Water Management

Parma, May 21st 2025

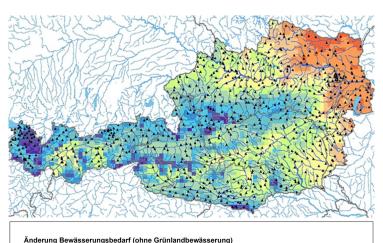
Federal Ministry Agriculture and Forestry, Climate and Environmental Protection. Regions and Water Management Republic of Austria

Challenge for water management

Water quantity / water availability

- Study "Austria's Water Treasure " (2021): assessment of available groundwater resource and groundwater use today and in 2050
- Agricultural water demand will double until 2050, available groundwater resources probably decrease
- Risk of regional/local shortages in 2050
- Solutions on the supply side as well as on the

Die Ergebnisse sind regiona water demand side required
Experience of Austria on water-efficient agriculture at basin level, 21 May 2025 Wasserschatz Österreichs, BMLRT 2021

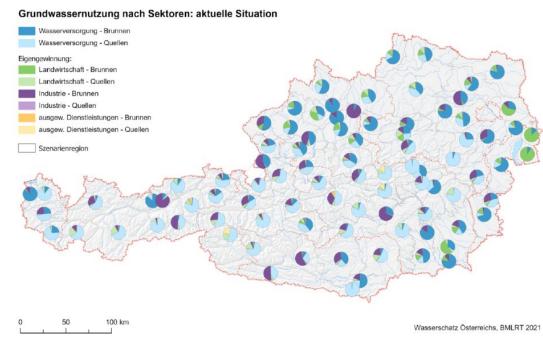


Wasserschatzszenario 2050 - ungünstic

Federal Ministry Agriculture and Forestry, Climate and Environmental Protection, Regions and Water Management Republic of Austria

Water demand for agriculture in Austria

- Only 4% of available water resources used by agriculture
- Irrigation demand almost double until 2050
- Irrigation concentrated in specific areas with water use for irrigation up to 90%
- Mainly groundwater abstraction



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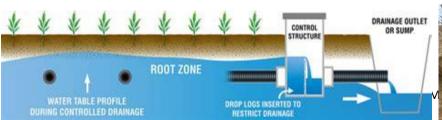
Landscape Water Management

Background

- Historically, we tried to get rid of water as fast as possible
- Climate change triggers new ideas of landscape management (drought management, pluvial floods...)

Objectives

- Development of methods to keep water in our landscapes
- Pilote sites with different measures to efficiently retain water
- Adaption of simulation models for landscape water management to optimize practical implementation









Common Agricultural Policy 2023-2027

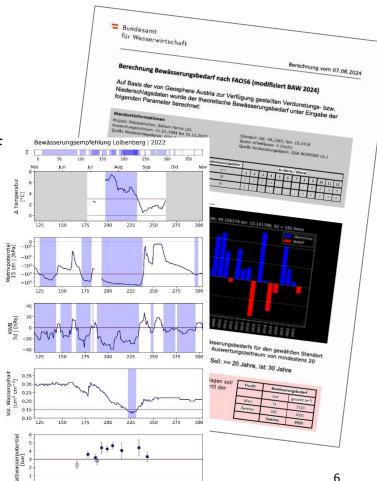
- Support for investments in irrigation
 - different options for individual farms, associations of farms and producer
 organisations and its members (fruit and winegrowing) differences in support rates
 - Key funding requirements include
 - Water permits
 - Water meters, water savings (if existing installations are renewed), net-increase of irrigated areas only for GW-bodies in good quantitative status, ...
 - Pumps: change from fossil fuel to electric energy power supply

Irrigation demand management

Background: Improved irrigation management for wine production is an important tool for steering of wine quality

Objectives

- Development of basic data for optimal irrigation management at local and regional scale
- Testing of innovative methods to estimate irrigation demand using a combination of different sensoring devices



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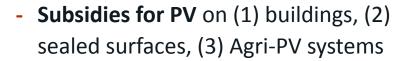
Agriculture Austria - Vision 2028+

 Goal 2: Soil protection, an efficient water strategy, and the promotion of renewable energies are designed to secure the basis of production and strengthen climate and biodiversity protection.

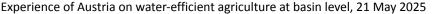




Measures:



- Agroforestry systems and hedgerows
- Efficient and sustainable use of biomass and bioenergy
- Build humus, improve soil fertility, carbon farming, promote efficient water use and retention
- Multifunctional, sustainable, and efficient irrigation measures







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SaveWater

AT-CZ Interreg project SaveWater

- Project duration: 09/2024 08/2027
- Catalogue of different water retention measures
- Quantifiying effects of water retention measures
- 38 agricultural reference sites in Austria
- Digital Twin; use of satellite data



Petzenkirchen





Thank you for your attention!

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