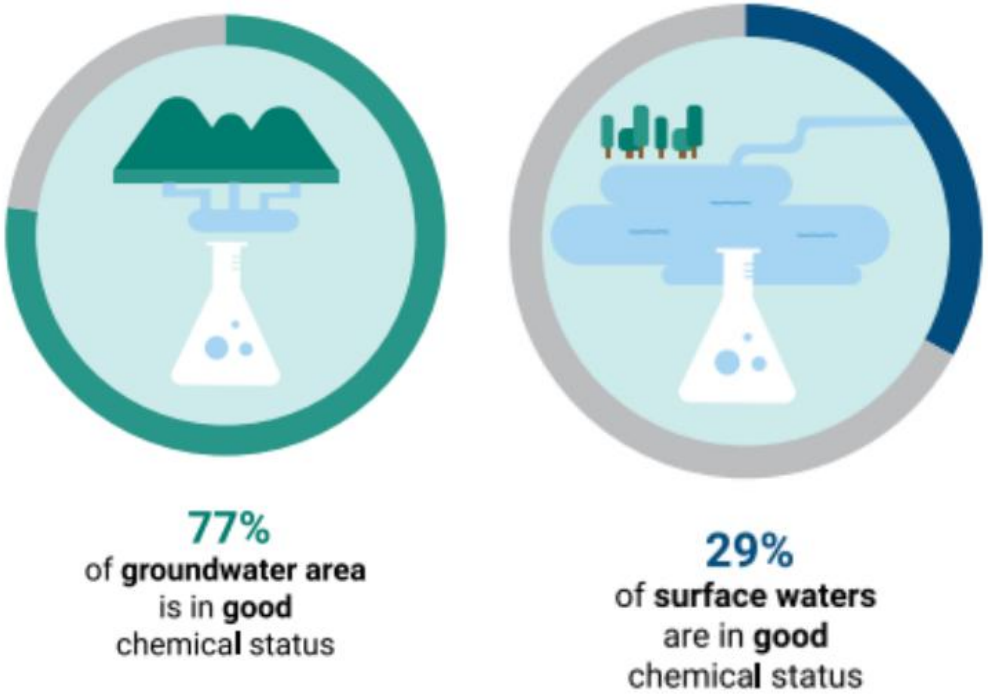
Addressing Knowledge Gaps in Water Management

EU FarmBook WorkShop:
Farmers Guardians of Water Resources

14 April 2025
Webinar

Gregorio Dávila Díaz – DG AGRI B2 – European Commission

Water – an essential resource for agriculture



Source: EEA Europe's State of Waters (2024)

- Agriculture: 28% of water abstraction – 59% of water consumption in the EU
  (significant variations across regions and seasons - up to 80% in some southern areas)
- Agriculture as a source of pressures at places: over-abstraction, diffuse pollution (nitrates, pesticides)

Water – an essential resource for agriculture

- European Climate Risk Assessment (EUCRA, March 2024): Climate Change poses critical risk to crop production (increased yield losses due to enduring drought and increased water scarcity)

- Importance of irrigation/ stable water supply for profitability of agriculture and socio-economic vitality of rural areas

- Water - increasingly a constraining factor for the sector: Science predicts reduced availability of water (and increased variability of supply) & increase in irrigation water demand

Vision For Agriculture and Food

Zoom in water management

Adverse weather events - a **key risk to crop production** (esp. Southern Europe (EUCRA))

Transformational changes where current productions not sustainable for longer term: new local strategies, research / innovation, more climate resilient crops…

Water Resilience Strategy

- more efficient water use, reducing water pollution, addressing over-abstraction
- special attention to improving nutrients management / circularity (priority to nutrient pollution hotspots, limit negative externalities of livestock, extensification in regions with high livestock concentrations)

European Commission

Vision For Agriculture and Food

Zoom in water management

Farming with Nature: better implementation, streamlining & enforcement of existing legislation, incentives & new market-based tools

Importance of healthy soil: incentivise / support farming practices that recover, maintain or improve soil health, support for organic farming

Further advancing through **digitalization**

Using **knowledge, research and innovation** as catalysts for change

Strengthening Agricultural Knowledge and Innovation Systems (**AKIS**) under the CAP (**EIP-AGRI**, strengthening role of **independent advisors)**

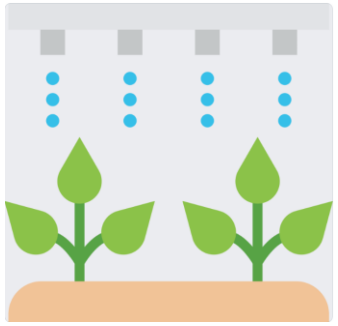
European Commission

The Role of Farmers

Sustainable use of pesticides

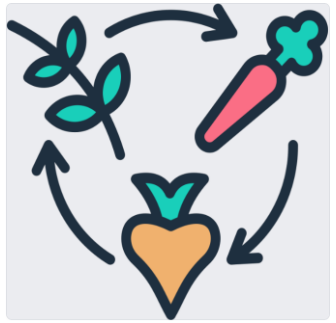
Efficient nutrient management

Water efficient irrigation



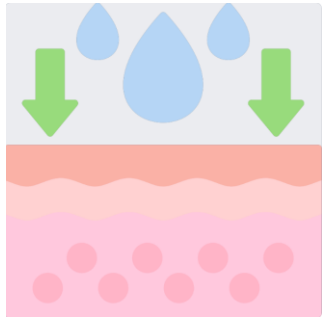
Sustainable drainage

Water reuse



Crop Change

Increased water retention



Drinking water protection

Enhancing the water performance of their business

Enhancing Water resilience

European Commission

The Role of Farmers

- Water-smart agriculture: modernization of the sector, digital (precision farming), Earth Observation early warning systems

- Research on new varieties and knowledge exchange on new crops changes in crops/varieties need to be closely evaluated to ensure the viability of farmers' income (yields, market demand), while safeguarding social sustainability and generation renewal keeping farmers in their fields

- This however will take time, funding and effort. Not only farming needs to adapt to climate change, but also farmers need to adapt to new techniques and methods. 12% of farmers are below the age of 40

Addressing Knowledge Gaps and CAP

AKIS-related interventions (innovation, training, knowledge exchange) including Farm Advisory Services: tools at Member States' disposal within CAP Strategic Plans that work in synergy to foster a resilient agricultural sector.

https://eu-cap-network.ec.europa.eu/index_en

CAP Network: supporting awareness, innovation, technology dissemination, e.g. brokerage event April 2025 (Prague) including digitalization and circular water management

European Innovation Partnerships (EIP)-AGRI: promoting sustainable, resource-efficient, and competitive agriculture and forestry in rural areas.

By January 2025, ~4000 EIP-AGRI Operational Group projects (EIP-AGRI OGs), supporting bottom-up innovation projects at local level – 10% of OGs on water management

European Commission

Support for water resilience under the CAP (investments in irrigation)

EAFRD supports investments in:

- improving existing irrigation installations and infrastructure to increase efficiency and reduce losses
- use of recycled water for irrigation (in line with Water Reuse Regulation)
- rainwater collection
- new irrigation/ expanding irrigation installations
- advanced/ digital technologies, decision support syst./ irrigation planning
- use of renewable energy for irrigation installations
- creation or expansion of reservoirs (must not lead to significant negative environmental impact and be “climate proof”)

- *Provisions to ensure consistency with WFD objective of reaching/ maintaining good status of water bodies*

Investments in irrigation: support also under **sectoral interventions** (F&V, wine) – same provisions apply

Support for water resilience under the CAP (eco-schemes, agri-environment, green investments…)

- Improvement of **soil health** (on 47% of the agricultural area): positive effects on water storage capacity, infiltration, limitation of erosion
- Shift to **more resilient crops/ varieties**
- Support for agro-forestry, establishment or maintenance of **landscape features**, agro-ecological approaches
- **Landscape approaches** to increase « sponge » function (restoration/ management of wetlands, peatlands, flood plains, grassland etc.)
- Support for **advisory services**, knowledge sharing and information actions
- **Cooperation, research and innovation** (including EIP-AGRI operational groups bridging research results and practice on the ground)

Thank you

European Commission