

EU CAP Network Workshop 'Circular water management'

Seville, Spain
12 - 13 March 2024



Funded by
the European Union

Water and EIP-AGRI: Operational Group projects, networking activities, publications

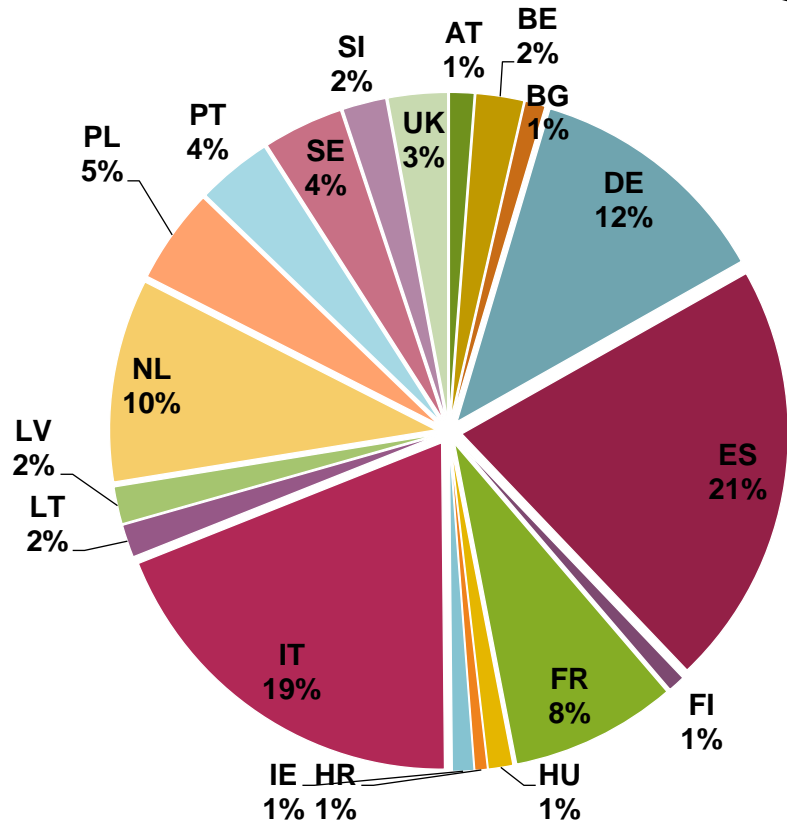
Aniko Seregelyi
DG AGRI, Unit D.1 Rural areas and networks, European Commission



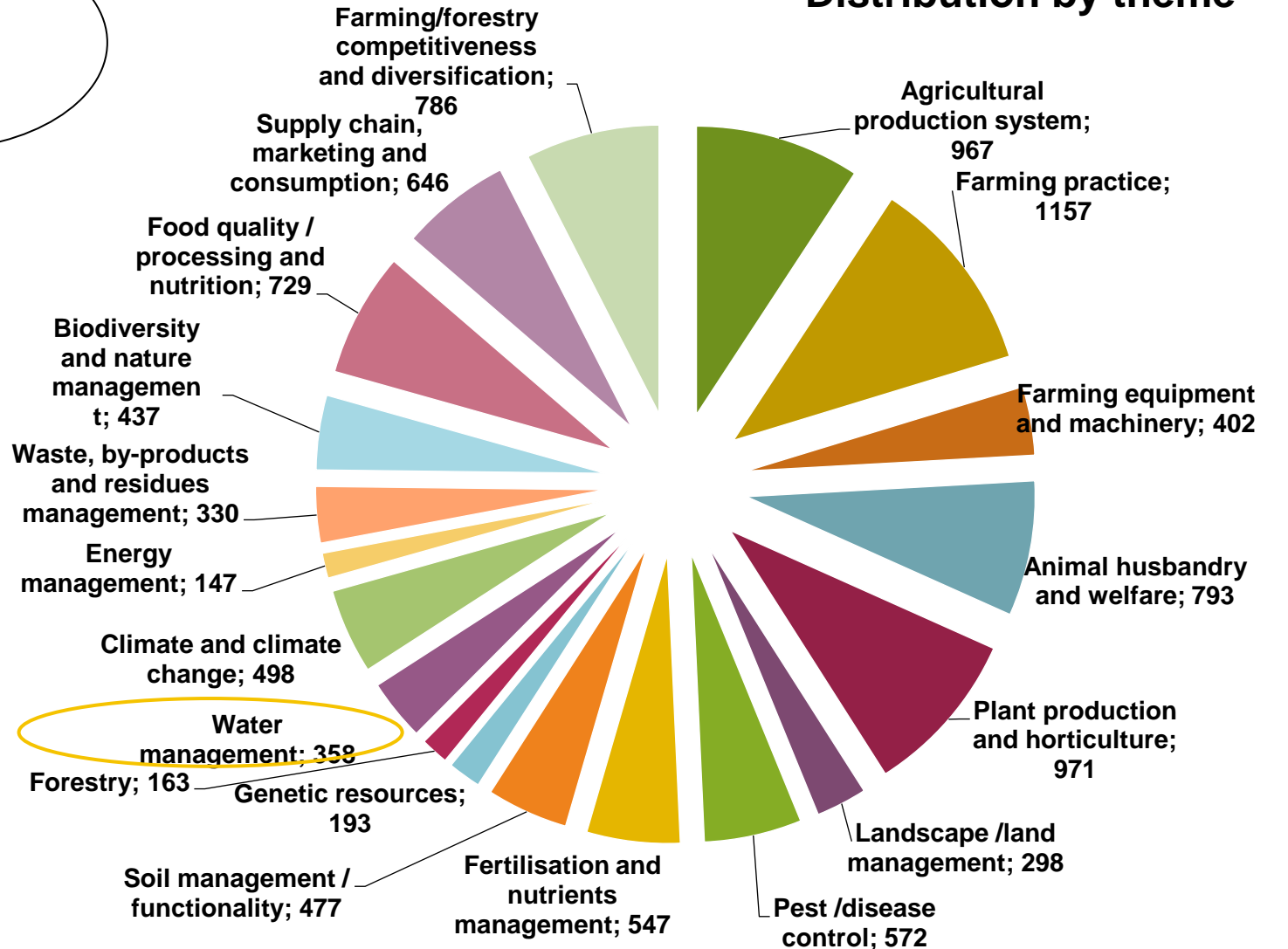
Distribution of EIP-AGRI OGs

3461 OGs

Distribution by country (%)



Distribution by theme

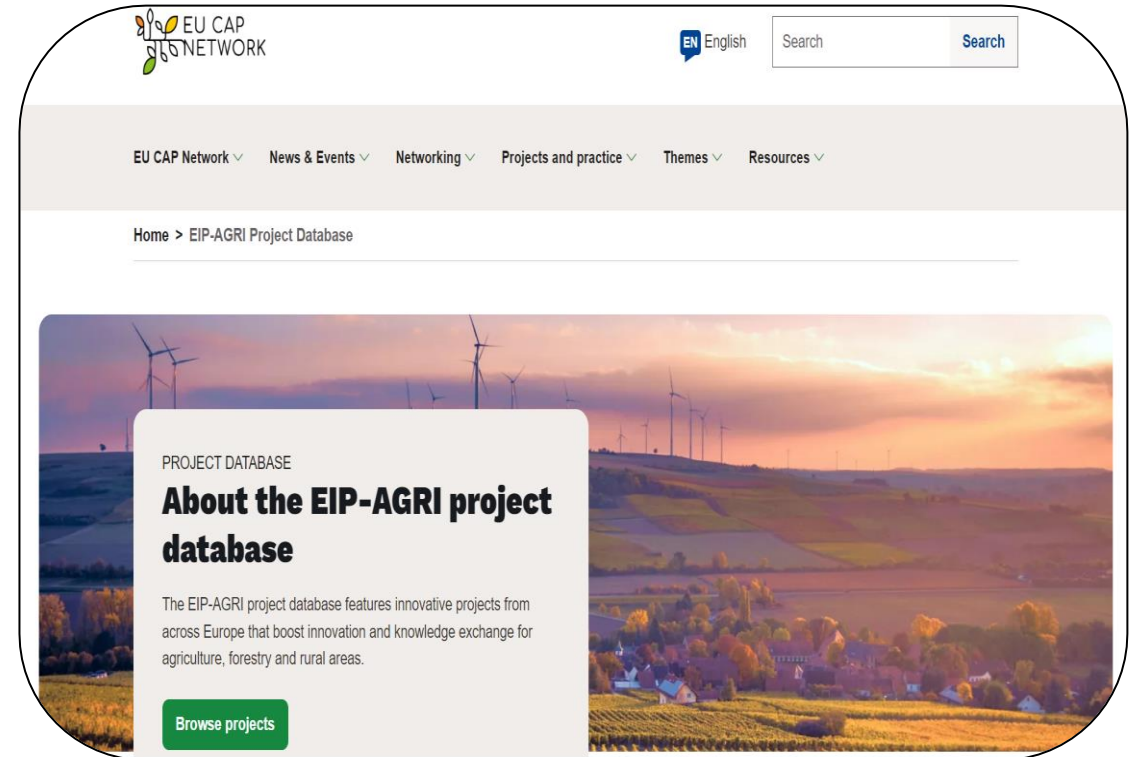


Source: EC, 29 February 2024



EIP-AGRI project database

- **New database** launched December 2023 on the [EU CAP Network website](#)
- Around **3000** EIP OGs and **500** research and innovation projects including Horizon multi-actor projects
- To be regularly updated with new projects funded under **CAP 2023-2027** and **Horizon Europe**
- **82 projects** in the database working on 'circular water management' (free text search)



Networking activities in the past

EIP-AGRI Focus group **Water & Agriculture: adaptive strategies at farm level (2016)**

- › Main question: **What farm-level adaptation strategies exist or can be developed to deal with water scarcity?**

EIP-AGRI Focus group **Nature-based solutions for water management under climate change (2022)**

- › Main question: **How nature-based solutions could have an impact on water management and water availability at farm level and contribute to sustainable farming under climate change?**

EIP-AGRI workshop **Connecting innovative projects: Water & Agriculture (2018, Spain)**

- › The workshop was dedicated to **Operational Groups, research and other type of projects** working on water-related innovation in agriculture with the main goal **to promote cross-border knowledge exchange and networking** among the actors of the projects.





Publications

EU CAP Network Factsheet
Innovation, Knowledge exchange | EIP-AGRI

Nature-based solutions for water management under climate change

How nature-based solutions could have an impact on water management and water availability at farm level and contribute to sustainable farming under climate change?

Water is increasingly a major challenge for the agricultural sector. Agriculture is the main user of fresh water both in Europe and around the world. The sector also contributes significantly to water pollution. At the same time, we are experiencing higher temperatures and rainfall variability. On top of that, a growing global population means a growing demand for food, therefore farmers are having to rethink how they produce their crops. Water and agricultural policies can support farmers, particularly in areas which are specifically impacted by water challenges. Innovation projects can foster competitive, sustainable farming by developing solutions to address issues relating to, for example, water scarcity and the degradation of the quality of water.

This Focus Group was about the deployment of nature-based solutions (NBS) at farm level and how they can provide solutions to water challenges. The aim was to promote a better understanding of NBS and to facilitate knowledge and innovation exchange between farmers, farm advisors, researchers and other relevant actors at local, regional and national levels. The experts identified existing NBS in different farming systems and in different climate zones, highlighting the socio-economic and environmental benefits of each of these measures.

The Focus Group defined NBS for agricultural water management as "solutions that, inspire and support by nature, improve the availability of water and its quality, the efficiency of its use and/or the protection of the farm against flooding or excess water." These solutions must:

- be cost-effective, simultaneously provide environmental, social and economic benefits, help build resilience, and contribute to good water governance;
- bring more diverse natural features and processes into farms and landscapes, through locally adapted, resource-efficient and systemic interventions;
- benefit biodiversity and support the delivery of a range of ecosystem services.

"It is very important that agricultural production and NBS support each other and can be combined with daily farm life in a cost-effective manner. We need win-win solutions."

- Aini Kuimala (Finland) expert from the EIP-AGRI Focus Group on Nature-based solutions for water management under climate change.

Water & agriculture: adaptive strategies at farm level

What farm-level adaptation strategies exist or can be developed to deal with water scarcity?

The 19 experts of the EIP-AGRI Focus Group on Water and Agriculture collected and classified these strategies into three main categories:

- practices to increase water availability for crops and livestock;
- the efficient use of water (including irrigation efficiency), and
- farm resilience under water scarcity

They highlighted that many other factors than water affect productivity in both rainfed and irrigated commercial farms, and that these must be understood and dealt with. Based on their practical experience, the experts suggested 5 types of actions:

- Manage soil and residues to improve water availability: increasing soil organic matter, conservation agriculture, soil mulching, controlled traffic, sporadic subsoiling if necessary
- Choose improved well-adapted cultivars and introduce new drought-tolerant crops
- Use tools such as decision support systems to improve crop/farm management
- Use tools to improve irrigation scheduling: plant sensors, on line services for irrigation scheduling, regulated deficit irrigation, precision irrigation
- Manage water quality and salinity

To facilitate the adoption of best practices:

- Clearly identify economic and/or environmental benefits, in the short and long term
- Identify and solve any technical and operational problems through knowledge exchange among all concerned, such as farmers, equipment manufacturers, advisers, consumers and others
- Set up demonstration plots, preferably on real farms
- Provide clear user guides when promoting complex techniques

"Water scarcity and climate change are serious challenges for agriculture, worldwide. A wide range of multidisciplinary strategies need to be adopted, from breeding to soil and crop management, to secure the sustainability of EU yields and quality of production."

- Brunella MORANDI (Italy), expert from the EIP-AGRI Focus Group on Water and Agriculture -

Water & agriculture
Smart solutions for on-farm water management

Water & agriculture: adaptive strategies at farm level

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Thank you!



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All information on the workshop is available on the event webpage:

<https://eu-cap-network.ec.europa.eu/events/eu-cap-network-workshop-circular-water-management>

