



Digital technologies and data-based solutions can help farmers work more precisely, efficiently and sustainably. They can improve farming practices and decision making, and help increase the environmental performance of farms, whilst also making farming jobs more attractive to younger generations. Collaborative data sharing models play a key role in ensuring that data-driven strategies add value to the agri-food chain. On the other hand, data sharing also raises challenges for farmers, such as privacy concerns, data protection and ownership.

The aims of the workshop were:

- Take stock of ongoing successful projects and initiatives that collect and make use of farm-generated data to improve farm performance.
- Explore the role of different stakeholders in on-farm data collection, and explore the use of on-farm data for agricultural production.
- Provide an environment to exchange best practices on collecting, using and sharing farm data.

There are some important challenges ahead of us. First, farmers need further support on how to evaluate the benefits of using farm data, and specifically medium to longer-term benefits. It is not always very clear for farmers what these potential longer-term benefits are and when they can be expected. Second, farmers need more fairness. Farmers argue that despite investments in digital technologies, the return on these investments is sometimes made outside the farm. Furthermore, many farmers feel that they are contributing data, but that no or not enough value is coming back. Real improvement will only be possible if there is trust between the actors who share and work with the available data. To overcome these challenges and better evaluate the benefits, to assess the fairness and trust the digital exchange of data, there is an overall need for more digital skills and for better capacities to make investments in digital technologies.



"Mutual trust between farmers as data providers and the organisations that are using the data, as well as enhancing trust in the data itself are very important success factors."



- Bianca Pusterla (Italy), participant at the EIP-AGRI workshop on Farm data for better farm performance.

Farm data for better farm performance

Knowledge gaps and research needs

Integrating farmers' knowledge to improve digital services

Digital technologies and data-based solutions should be tested through on-farm experimentation. Farmers should be involved in the development and improvement of digital applications (and the related algorithms). To involve farmers, education plays a crucial role. Study programmes need to be updated, and providers of agricultural education and training should be engaged to focus more on digital knowledge.

Integrating data for better and more complex decision making

There is an urgent need to integrate data from different sources and to scale up to create harmonised, easily accessible and qualitative data sets. A key requisite to create such data sets is taking the step to enhance interoperability, including interoperable digital solutions that support complex data-driven decision making. This is linked to the development of the Common European Data Spaces and to the Horizon Europe candidate partnership "Agriculture of Data".

Simplified, visualised and demonstrated data solutions for better use by farmers

Domain experts and IT experts should come together to ensure that they are 'speaking the same language'. Specialised advisors could become data interpreters, demonstrating the value and benefits of data. Costs should be made clear and should be demonstrated.

Exploring the cooperative model for trusted data sharing

Farm data cooperatives have many advantages, such as cost-effectiveness and easier access to many data providers and data users. They can also consider the regional perspective and its associated needs. They can be the basis of enhance cooperation with researchers and provide extra support for education, advice, testing and investments.

Two-way data flows to improve the value for all

Farm data can help suppliers to show the sustainability of their production systems in a traceable way. Consumers value this information and appreciate transparency. Data from slaughterhouses, processors, suppliers, retail, and even from the consumer, all need to flow back to the farmer.

More Information

- Workshop report 'Farm data for better farm performance'
- EIP-AGRI workshop 'Farm data for better farm performance'
- Digital agriculture section on the EIP-AGRI website
- Project videos on farm data:
 - Animal production
 - Arable crops
 - Permanent crops
- EIP-AGRI Operational Groups on farm data
- Horizon projects on farm data

Inspirational ideas:

- Certification of pesticide residue free fruit & veg (Poland)
- Everything you need to know about sheep on one digital platform (Bulgaria)
- Using data to manage environmental impact of livestock (France)

Feedback and questions:

Support Facility Innovation & knowledge exchange | EIP-AGRI Koning Albert II laan 15 - 1210 Brussels – BELGIUM Tel +32 2 543 72 81 innovation-knowledge@eucapnetwork.eu https://eu-cap-network.ec.europa.eu/

Find out more about the EU CAP Network

Visit the <u>EU CAP Network website</u> to discover projects, ideas and resources to catalyse innovation in agriculture, forestry and rural areas.



