



EU CAP Network seminar 'Robotics and Artificial Intelligence in farming and forestry'

Utrecht, Netherlands
19 & 20 February 2025



Funded by
the European Union



R&I initiatives on the benefits of digitalisation and data for farmers, foresters and rural actors

Francesco Iadecola
DG AGRI – European Commission



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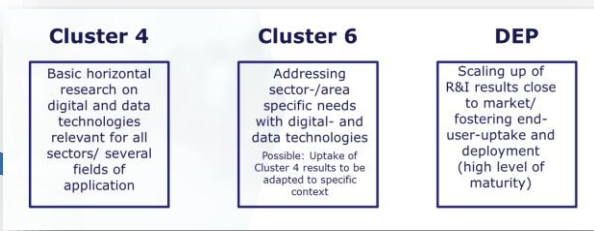
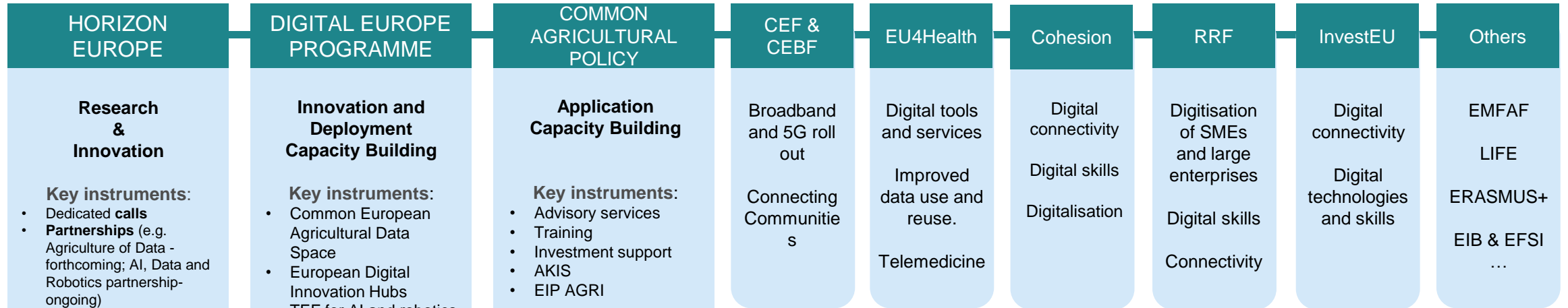


R&I initiatives on the benefits of digitalisation and data for farmers, foresters and rural actors

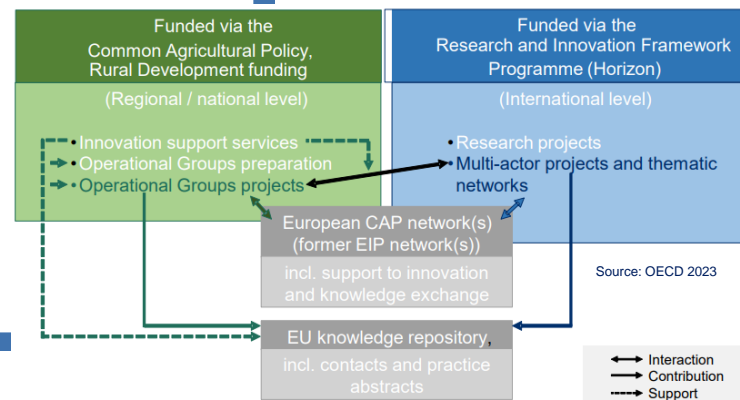
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*Francesco IADECOLA
DG Agriculture and Rural Development
European Commission*

Innovation & Digital technologies: complementarity of EU programmes



Interplay of HE clusters and DEP



Interplay of HE and CAP



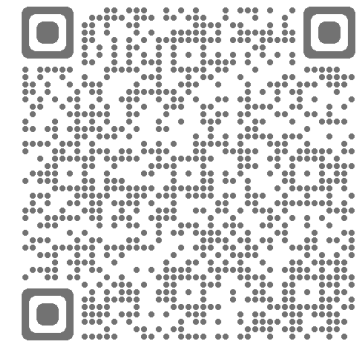


What are the EU agricultural R&I priorities?



CHECK IT OUT
↓

AgriResearch Factsheets



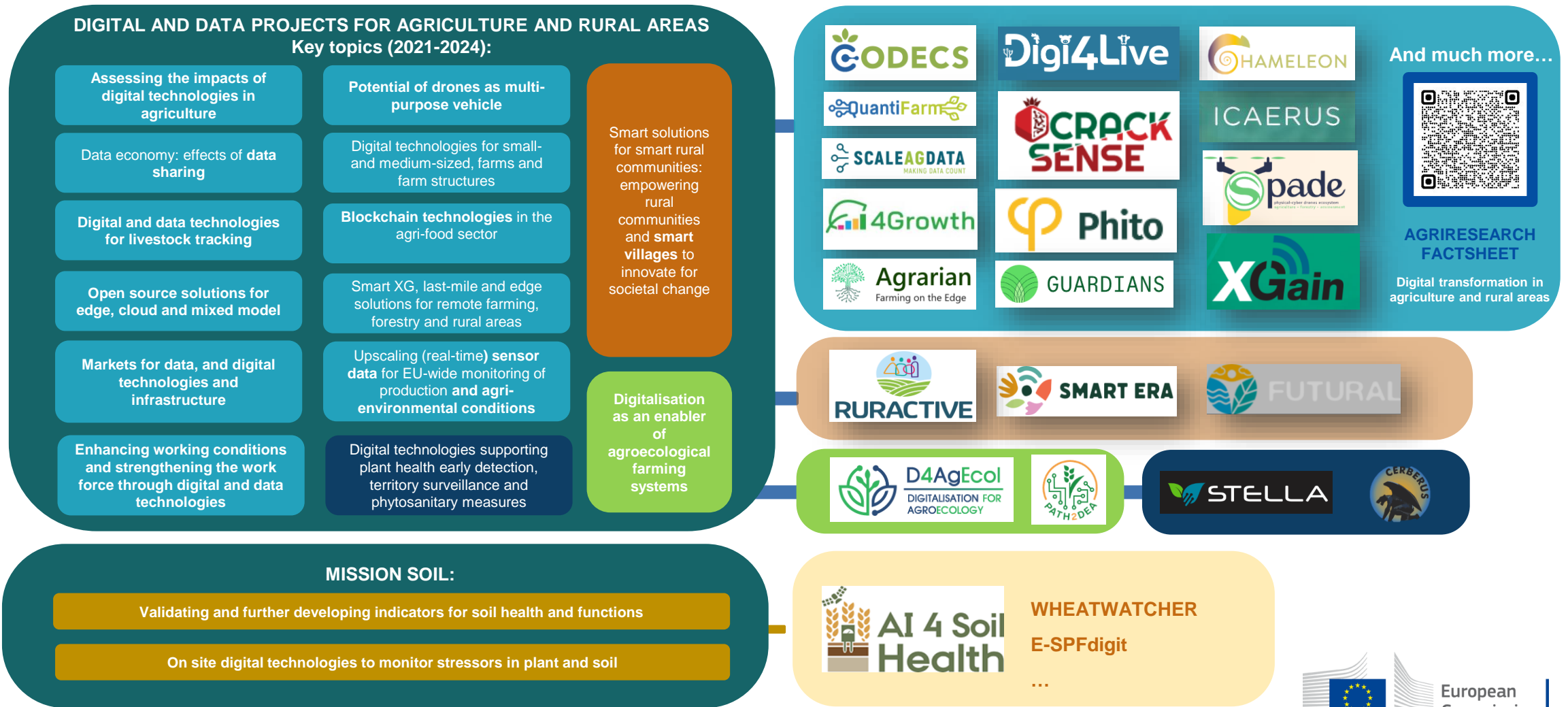
#Farm2Fork

#EUAgriFood

#EUSpace

Innovation and digital technologies in agriculture and rural areas

Horizon Europe **Cluster 6** fosters research and innovation in food, agriculture, rural development, environment and the bioeconomy.



Horizon projects in the field of robotics and AI for agriculture and forestry



Source: Youtube



Source: Youtube



Source: Youtube



Source: Youtube



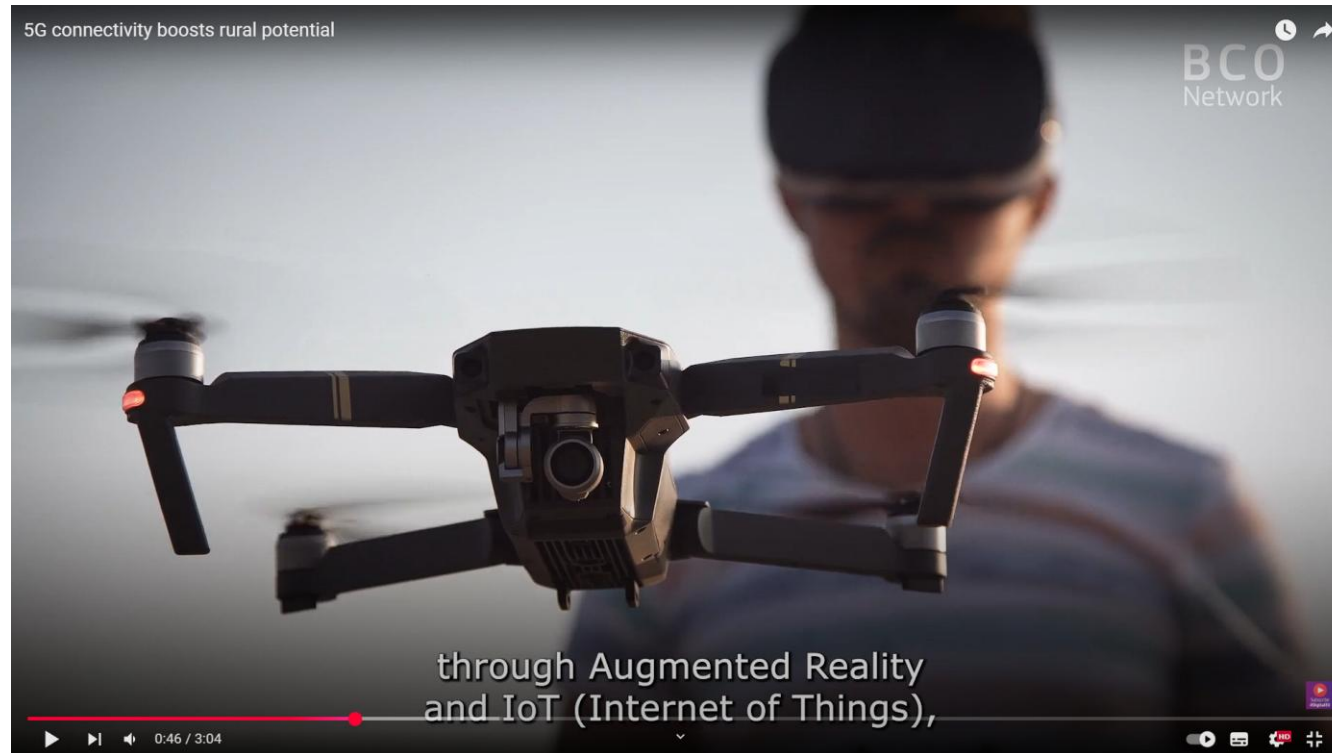
Source: ROMI website



And more...



Video examples of initiatives supporting development of digital and data-enabled solutions



[5G connectivity boosts rural potential](#)

Horizon Europe candidate partnership Agriculture of Data

European Partnership Agriculture of Data

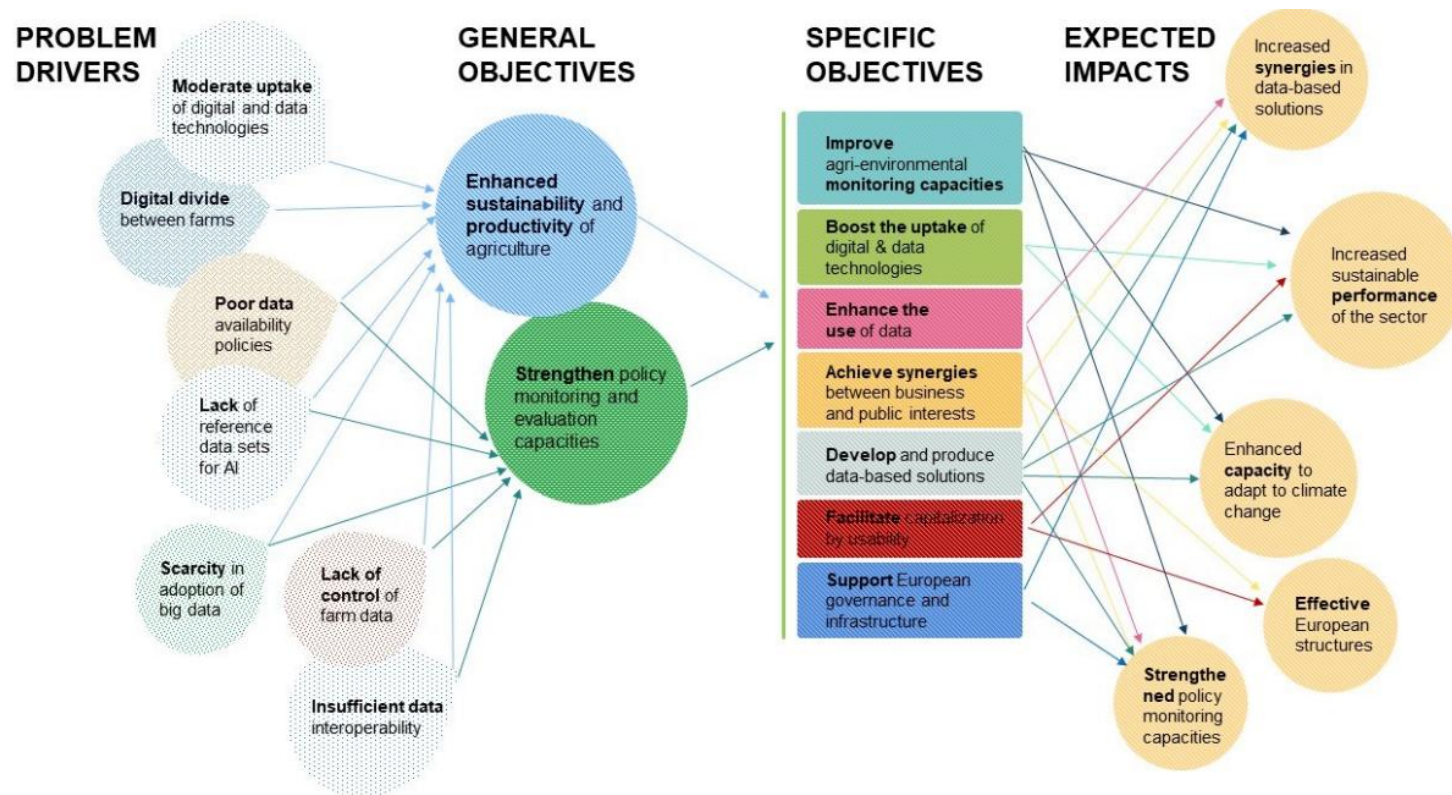
What: Support sustainable agriculture in Europe as well as policy monitoring and implementation by using the possibilities offered by digital and data technologies in combination with environmental observation and other agricultural data

Who: Co-funded by EU, with Member States and Associated Countries, involving ministries, funding organizations, research organisations, and key stakeholders

How: Capitalisation of data through the development of innovative data-based solutions and services for the private and public domain, and scaling them up

Where: Europe-wide

When: from 2025; 7-10 years duration



Fostering interactive innovation model

CAP

EIP-AGRI operational groups
= innovation projects at local level



Horizon transnational
multi-actor R&I projects at EU level

*“We do not only do R&I **for** practitioners,
but also **with** practitioners.”*

– Commissioner Janusz Wojciechowski

Multi-actor approach = practitioners (end-users) are put at the center of the R&I activities all over the whole course of the project.

- ✓ *their **practical expertise** is used to co-create innovative solutions;*
- ✓ *it makes them **co-owner** of the results;*
- ✓ *they **implement** them in practice;*
- ✓ *they **share** them in peer-to-peer meetings*

In this way we can achieve much quicker and bigger impact in practice!

R&I and digitalisation role for agriculture and rural areas

R&I involving **directly end users** has pivotal role to play to boost effectiveness, acceptance, and uptake of innovation and digital technologies, including robotics and AI for instance by:



Increasing **cost-effectiveness** of digital solutions

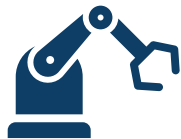


Enhancing **performance assessment** opportunities



Developing technical solutions **adapted to specific needs**

Robotics and AI are instrumental to achieve environmental and socio-economic sustainability ambitions for agriculture and forestry, for instance by:



- Effective and targeted elimination of weeds
- Targeted irrigation
- Selective application of pesticides
- Harvesting specialised crops
- Collect information
- Picking and packing

- Drive precision agriculture technologies e.g. AI-powered robots for planting, harvesting and weeding
- Support decision-making
- Prediction of weather patterns and crop health
- Plant disease detection
- Assessment of livestock health conditions

Thank you

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

<https://eu-cap-network.ec.europa.eu/events/eu-cap-network-seminar-robotics-and-artificial-intelligence-farming-and-forestry>

