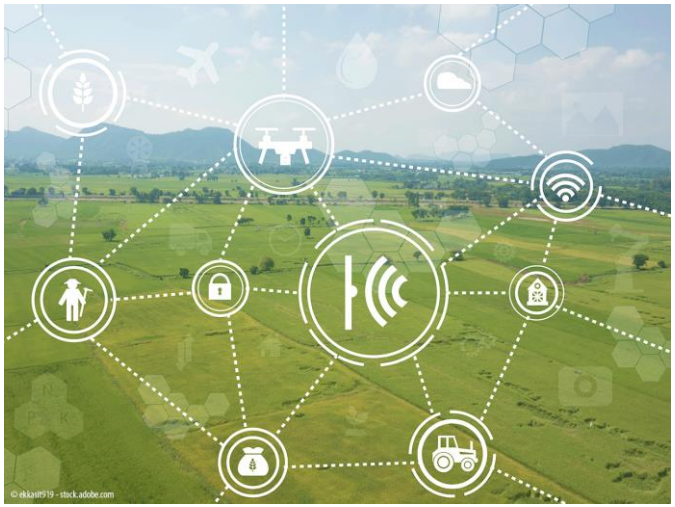
European Commission

A comprehensive approach towards boosting digital and data technologies and sustainability in agriculture



DIGITALISATION IN AQUACULTURE – FROM VISION TO ACTION

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Doris Marquardt and Marjan van Meerloo, EU Commission

Agriculture and Rural Development

European Commission

Digital technologies can …

- *help farmers to work more precisely and efficiently;*
- *increase the sector's competitiveness and sustainability performance;*
- *make the job of a farmer more attractive to younger generations;*
- *increase transparency for the consumer;*
- *can support all types of farming.*

Digitalisation as « enabler »

- *Digitalisation is one key to achieve environmental and socio-economic sustainability ambitions.*
- *Effectiveness of digital technologies strongly depends on data and data technologies.*

Exploiting the potential of digitalisation in agriculture as « enabler »

Challenges

- *Infrastructure (e.g. broadband)*
- *Lack of awareness of and belief in digital technologies*
- *Gaps in digital skills*
- *Cost-effectiveness of some technologies*
- *Trust in data sharing*
- *Lack of interoperability and risk of lock-in*
- *Many digital applications exist but no links between apps*
- *Changing employment structures*

Creating an "enabling environment"

- *Strengthening broadband capacities*
- *Exchanging information and experiences, Demonstration projects*
- *Capacity building in digital skills*
- *Providing advisory services*
- *Facilitating investments*
- *Promoting targeted Research & Innovation, e.g. tailored to needs of small farms*
- *Providing data and facilitating data sharing*

Digital transition – Challenges to be met (a selection)

- *Ability to monitor and benchmark – **Lack of data on the uptake of digital technologies** in the agricultural sector.*

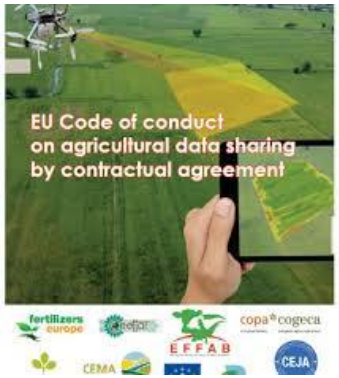
- *Avoiding a **digital divide** between regions and types of farms.*

- *Preparing rural communities for **changes in employment structures** and for making use of digital technologies.*

Framing conditions for the digital transformations in agriculture in the EU

(selected elements)

Code of Conduct on agricultural data sharing (2018)



Digital Declaration (2019)

A European Strategy for Data (2020)

Common Agricultural Policy post 2020

The role of R&I in digitalisation of the sector

R&I in Agri-Tech has pivotal role to boost effectiveness, acceptance, and uptake of digital technologies, e.g. by

- *increasing cost-effectiveness of digital solutions,*
- *enhance performance assessment opportunities,*
- *developing technical solutions facilitating trust in data sharing.*

Important aspects

- *Demonstration effect (e.g. through pilot projects)*
- *Need-driven and end-user orientation*
- *Technical innovation in combination with business models and social innovation*

Selected policy instruments post 2020

Common Agricultural Policy

- *European Partnership for Agricultural productivity and Sustainability*
- *Measures supporting capacity building among famers and their advisors*

Digital Europe Programme

- *Common European Agriculture Data Space*
- *Testing and Experimentation facilities for AI in agri-food*
- *Digital Innovation Hubs*

Horizon Europe

- *Tailored Horizon Europe themes/actions*
- ***Horizon Europe Candidate Partnership "Agriculture of Data"***

Introduction partnerships (1) – new approach

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

Key features

- **Simple architecture and toolbox**
- **Coherent life-cycle approach**
- **Strategic orientation**

Co-programmed

Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

Co-funded

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and in-kind contributions

Institutionalised

Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe

Introduction partnerships (2)

- Bringing the European Commission and private and/or public partners together
- Addressing some of Europe's most pressing challenges through concerted research and innovation initiatives.
- They are a key implementation tool of Horizon Europe, and contribute significantly to achieving the EU's political priorities.
- European Partnerships help to avoid the duplication of investments and contribute to reducing the fragmentation
- 49 candidate partnership across HE WP (mostly second pillar)

Candidate co-funded partnership "Agriculture of Data"

Principle objective:

Using the possibilities offered by data technologies in the field of Environmental Observation to

- provide support to improve the sustainability performance of agriculture
- improve the capacities for policy monitoring and evaluation.

*Planned for the **Horizon Europe work programme 2023/24***

*Elaboration of the Implementation Plan and Strategic Research and Innovation Agenda with Member States and stakeholders in **2021/22**.*

Current state of play

- In 2020: Initial collection of feedback from Member States on short partnership fiche
- In 2021: finalising short fiche, elaboration of an extended partnership document and a Strategic Research and Innovation Agenda (SRIA)
- Questionnaires and webinars planned for April/May 2021 (Dates to be announced)
- Questions?

AGRI-DATA-RI-PARTNERSHIP@ec.europa.eu

Thank you!

Contact
Dr. Doris Marquardt
DG AGRI, Unit B2
doris.marquardt@ec.europa.eu