



Agriculture of Data - general

Main 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
- Start: 2023/2024
- Co-funded partnership (30% Commission 70% Country partners)





Agriculture of Data – 4 domains covered by the partnership

Technical domains

EO, other environmental and agricultural data

Digital & data technologies

Researchoriented actions

Targeted end users

Policy monitoring / evaluation

Agricultural production / farmers

End useroriented actions





Intervention logic



Agricultural production in the EU has to become more sustainable, while still being profitable Increased needs for sustainable biomass production and production of food in a sustainable manner with improved environmental and climate performance

EU policies, including CAP and other EU policies, are becoming more performance oriented, requiring more evidence on the impact achieved Need to improve systems for monitoring use of agro-ecosystems, biodiversity, environmental and climate policy actions and for supporting the Green Deal objectives



Increase the capacities for sustainable agricultural production

Use the potential environmental/ Earth observation and data technologies offer

Increase the capacities for policy monitoring and evaluation

Specific objective



Improve monitoring tools and the integration of data sets to assess agri-environmental/ climatic conditions

Boost uptake of data/digital technologies and (EO) data-based agricultural applications for tailored, end-user oriented databased solutions Improve climate adaptation and resilience of agriculture through promotion of EO environmental and other data and data/technology applications and minimise undesired impact

Synergies in the development/ utilisation of data-based solutions for agriculture and policy monitoring / evaluation

Facilitate (re)use of EO, environmental and other data for tools/services adopted by end-



Facilitate (re)use and sharing of data from different sources of data Develop/ implement/ maintain common monitoring/evalue on approaches Develop novel/build on current approaches for EO data technology use and explore transfer of innovative methods Develop data-based solutions to support the agricultural sector to adapt production to climate change.

Further development/ creation of institutional/ data infrastructures needed for databased solutions

Enhanced use of data and exploiting/ generating new data sources/sets/flows in the public and private domain, enabling fast adoption of data based solutions

Ensure coordination and alignment of EU/ National/Regional programmes and continuum actions from R&

Expected impact



Increased environmental, climate and socio-economic sustainability performance of Enhanced contribution from agriculture to protecting environment and halting/ reversing biodiversity loss and reduction of greenhouse gasses emission

Contribution to creating an institutional structure, to provide data-based solutions for both the sector and policy making.

Increased synergies/ integration of actors in the digital Earth, environmental observation and agricultural communities in Europe, transforming both R&I- and economic ecosystems delivering more/ better databased solutions to, and users Enable the sector and strengthen its capacity to adapt to climate change and meet objectives set by sustainability-related policies

Strengthened capacities to evaluate the effectiveness of policies

Agriculture and Rural Development



Expected EU added value

- Umbrella effect consolidating the efforts of many use cases and pilot projects in the field of the development of (EO) data-based solutions for the agricultural sector and policy monitoring
- Contribution to "Defragmentation" of EO, agricultural data landscapes
- Achieving systemic effects and creating sustainable structures for the provision of data-based solutions, including upscaling of piloted approaches
- Achieving a critical mass in creating «Big data» and geospatial reference data sets
- Covering several biogeographic zones to allow for the development of climate adaptation approached for the sector
- Covering whole Europe to create data sets for policy monitoring and evaluation and avoiding «white spots» in the provision of independent data services to the sector and stakeholders





Process of co-creation

- Short fiche has been sent to country representatives in summer 2020 for comments
- On the basis of the short fiche: 2 large webinars
 (country representatives (27/4) + stakeholders (26/5)) +
 surveys

→ gap analysis

- Presentation/promotion of the partnership and feedback gathered at formal meetings and thematic meetings
- 2 more webinars organised to get feedback on partnership document: for country representatives (2/12) + stakeholders (10/12)





Core group AgData

- Core group has taken up work in September 2021
- Countries involved: Austria, Belgium, Bulgaria, Germany, Denmark (co-chair), Estonia, Spain (co-chair), Finland, France, Hungary, Ireland, Italy (co-chair), Latvia, Lithuania, The Netherlands, Norway, Poland, Portugal and Slovakia.
- Also participating: ERA-nets (ERA-PLANET and ICT-AGRI-FOOD)
- Currently: The Core group has delivered the partnership document and is now working on the Strategic Research and Innovation Agenda

The Core group still welcomes new members.



