



The Role of R & D Community

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GEO past 20 year-legacy

2005 – 2015 Data for society (9 SBAs: disaster, health, energy, climate, water, weather, ecosystems, agriculture and biodiversity)

2016 – 2025 Services for society (3+1 GEPs)

- **Global Engagement Priorities:**


- SDGs
- Climate Action
- Disaster Risk Reduction
- **Urban Agenda**



EUROGEO WORKSHOP 2023



EU projects: ended

 Funded by the European Union
Financé par l'Union Européenne
Financiado pela União Europeia



e-shape



ENERGOC
OPEN DATA



Earth Server

ERA-PLANET

EuroGEO Showcases: Applications Powered by Europe

The European network for observing our changing planet



GEOVIQUA



BIO_SOS



EGIDA PROJECT



EOSC-hub



FAIR-EASE

Building Interoperable Earth Science & Environmental Services

BIO_SOS



EGIDA PROJECT

ConnectinGEO



COHECO



GEOWOW



MED-SUV



uncert|web



Blue-Cloud2026

A federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters



EuroGEOSS

A EUROPEAN APPROACH TO GEOSS



BOLZANO 2-4 OCTOBER 2023



GEO's vision, mission, value proposition / 1

(report: GEO post-25 Strategy, JRC)

Urgency

- **The planet faces** environmental challenges, not only in their quantity, but also in their increasing complexity in a rapidly changing world. Of particular significance is the **triple planetary crisis** of climate change, biodiversity loss and pollution.
- **Public and private organizations that are challenged with finding solutions** to the multi-crisis are further confronted with **fragmentation and proliferation** among themselves and of data sources and information.
- **Global partnerships and multilateralism** need to be open and become more inclusive of all actors.
- **Young people are catalysts for sustainable development.** Yet, more than 1 in 5 youths are not acquiring livelihood skills through education or work. Young people should play a central role in data-driven economies.



GEO's vision, mission, value proposition

(report: GEO post-25 Strategy, JRC)

- **Vision:**
 - **Be the leading intergovernmental body** with a broad partnership of contributing organizations for trusted, integrated, and sustained Earth intelligence;
 - **Allow everyone to have access** to trusted, timely, integrated, and sustained Earth intelligence about our planet **for all** will be made possible through our broad intergovernmental membership and variety of contributing organizations.



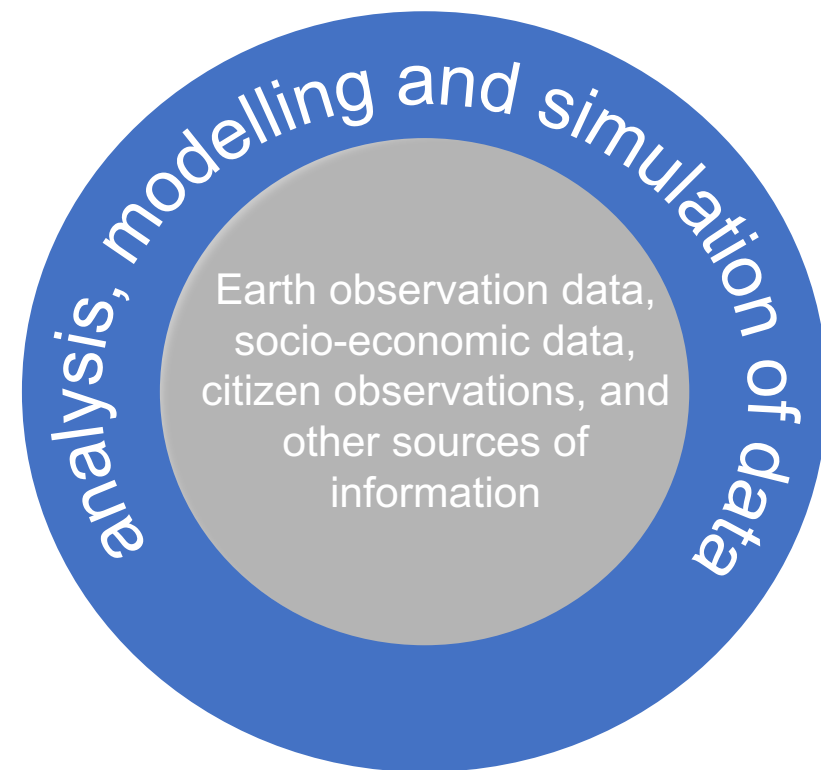
Earth intelligence

(report: GEO post-25 Strategy, JRC)

It integrates analysis, modelling and simulation of data to create a predictive narrative that enables sound decision-making about our planet.

GEO will leverage **Earth intelligence** to:

1. **derive** new knowledge,
2. **provide** valuable insights
3. **inform** strategic decisions
4. and **empower society** to protect/ pursue a sustainable planet.





GEO and the Earth observation value chain approach



Earth observation infrastructure



Data availability and access, research and assessments



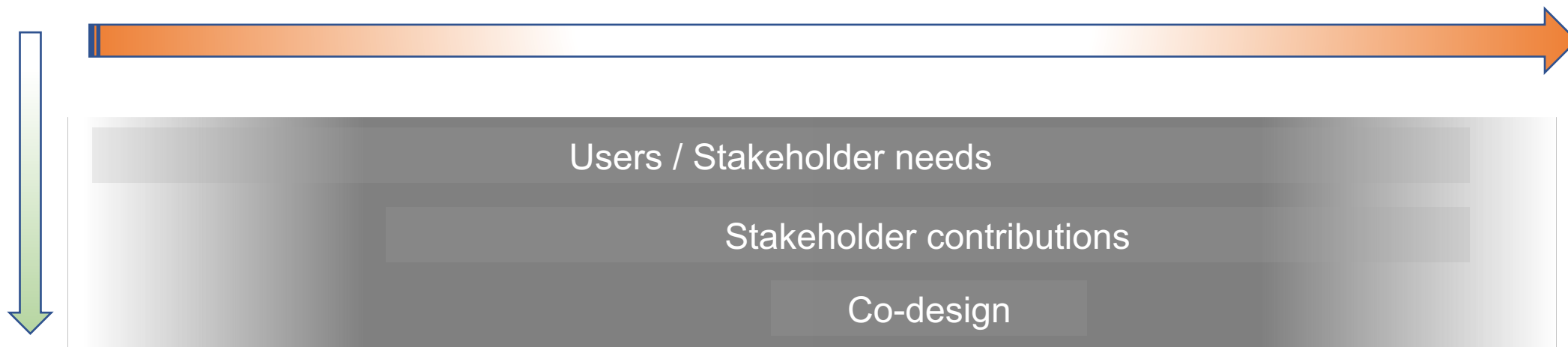
EO products and services



Policy and decision-making




Societal, environmental and economic benefits as well as equity





EU projects: on-going

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Financiado pela União Europeia



NewLife4Drylands
LIFE20 PRE/IT/000007

NBFC
NATIONAL BIODIVERSITY FUTURE CENTRE



GREAT
Green Deal Data Space



trigger





Opportunities in the GEO post-2025 decade

Overview of 49 candidate European Partnerships

PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...	ET	SUPPORT TO INNOVATION ECOSYSTEMS
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe	InnoEnergy	Innovative SMEs
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth	Climate	
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy	Digital	
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All	Food	
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*	Health	
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*	Raw Materials	
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*	Manufacturing	
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*	Urban Mobility	
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People		Cultural and Creative Industries	
	Global competitive space systems**	Clean Energy Transition			
		Driving Urban Transitions			

- Institutionalised Partnerships (Art 185/7)
- Institutionalised partnerships / ET
- Co-Programmed
- Co-Funded

* Calls with opening dates in 2023-24
** Calls with opening dates not before 2022

PILLAR III - Innovative Europe

ET	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

CROSS-PILLARS II AND III
European Open Science Cloud



The nine initial Common European data spaces will be the following:

- **An Industrial data space**, to support the competitiveness and performance of the EU's industry
- **A Green Deal data space**, to use the major potential of data in support of the Green Deal priority actions on issues such as climate change, circular economy, pollution, biodiversity, and deforestation
- **A Mobility data space**, to position Europe at the forefront of the development of an intelligent transport system
- **A Health data space**, essential for advances in preventing, detecting and treating diseases as well as for informed, evidence-based decisions to improve the healthcare systems
- **A Financial data space**, to stimulate innovation, market transparency, sustainable finance, as well as access to finance for European businesses and a more integrated market
- **An Energy data space**, to promote a stronger availability and cross-sector sharing of data, in a customer-centric, secure and trustworthy manner
- **An Agriculture data space**, to enhance the sustainability performance and competitiveness of the agricultural sector through the processing and analysis of data
- **Data spaces for Public Administrations**, to improve transparency and accountability of public spending and spending quality, fighting corruption, both at EU and national level
- **A Skills data space**, to reduce the skills mismatches between the education and training systems and the labour market needs

Figure 2: Building blocks pertaining to interoperability, trust, data value and governance



■ Technical Building Blocks ■ Governance Building Blocks



Agriculture of Data – general objectives and domains

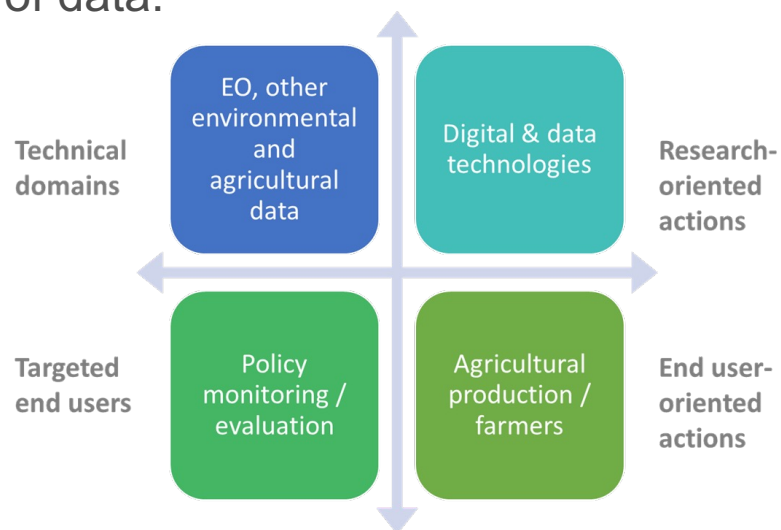
What?

Support to **sustainable agriculture** in Europe as well as **policy monitoring and implementation** by using the possibilities that **digital and data technologies** in combination with **environmental observation and other data** offer.

How?

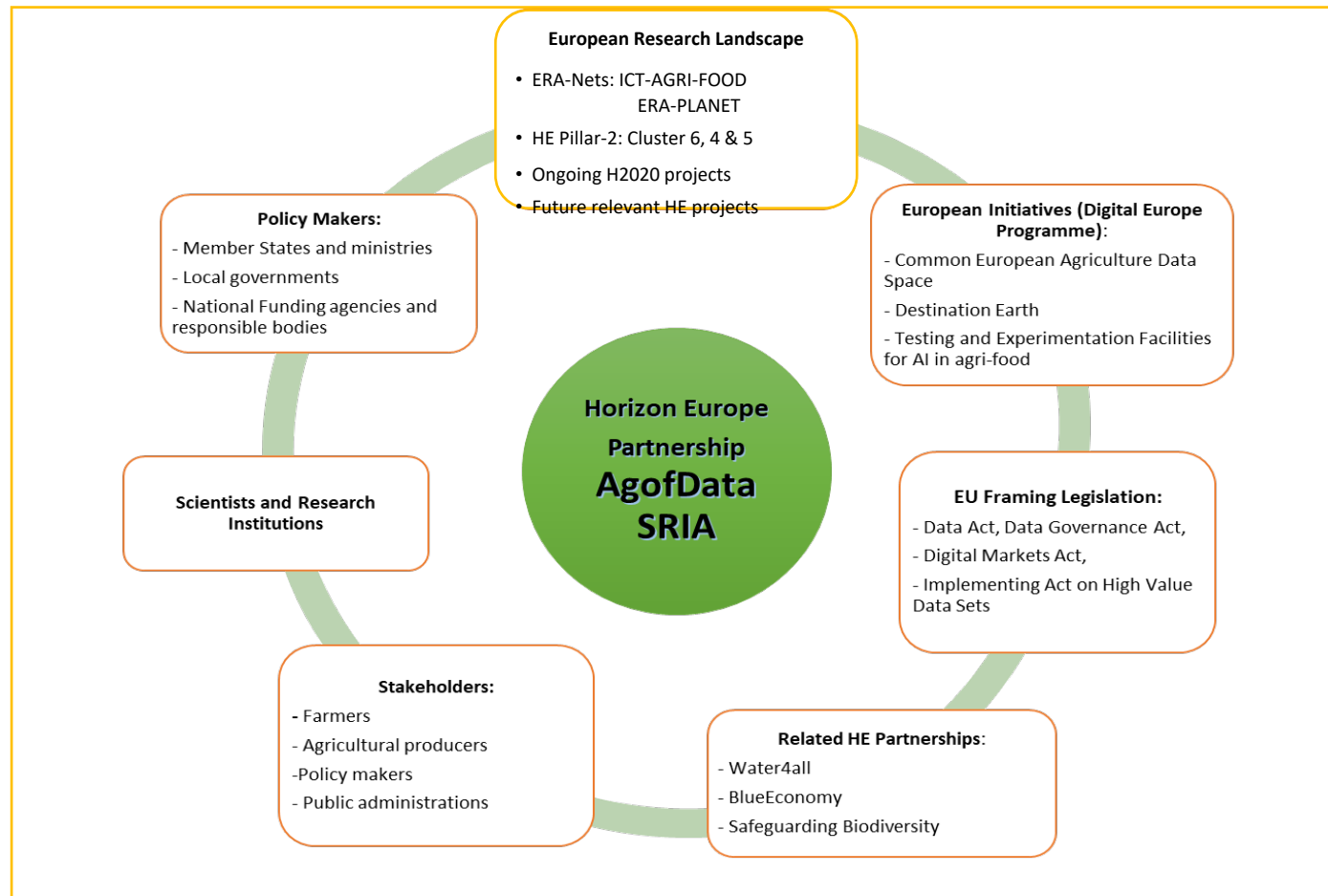
- Development of **innovative data-based solutions and services** for the private and public domain **through** the capitalization of data.

Domains covered:



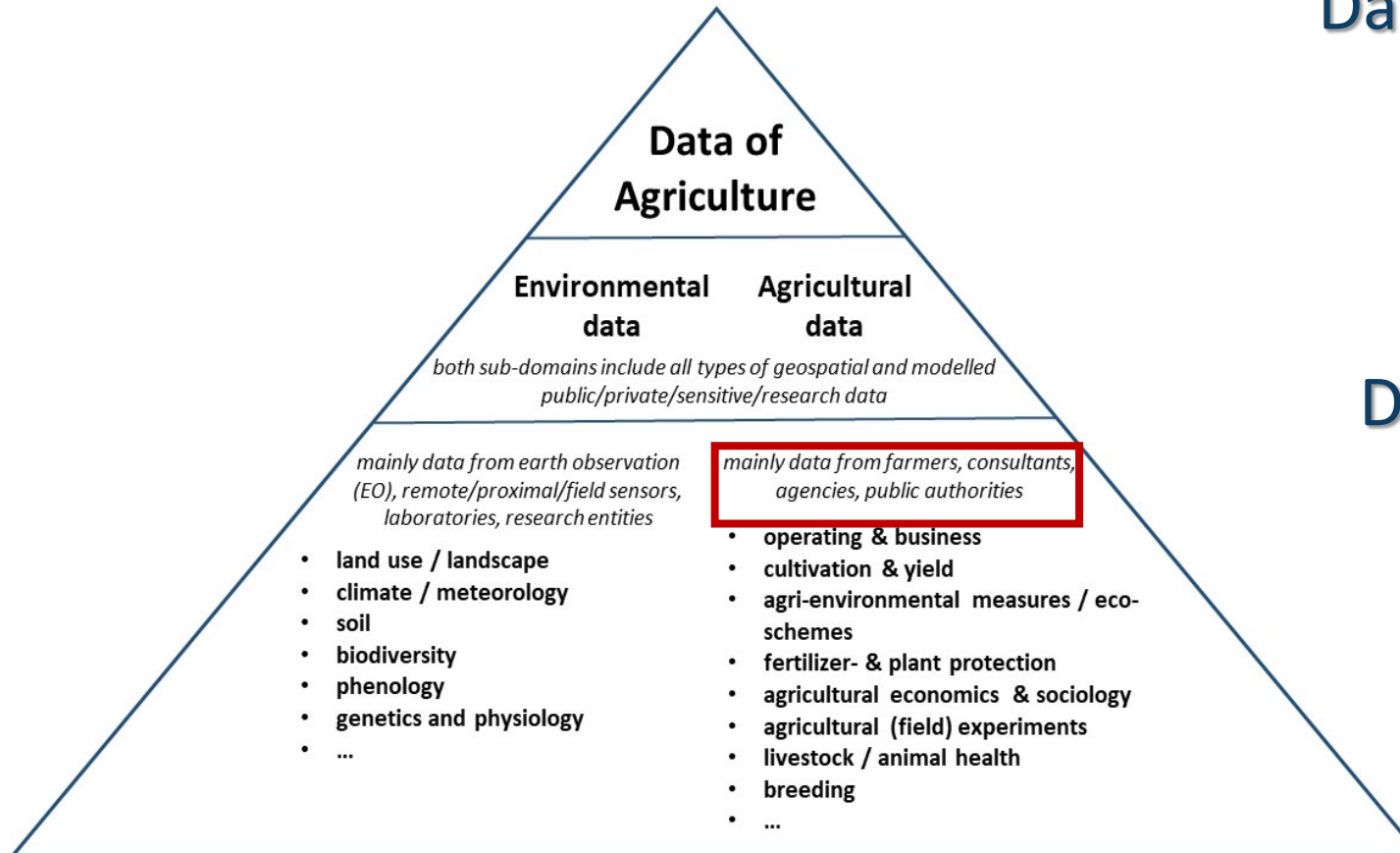


Stocktaking and initiatives expected to run in parallel, “umbrella effect”





Which data?



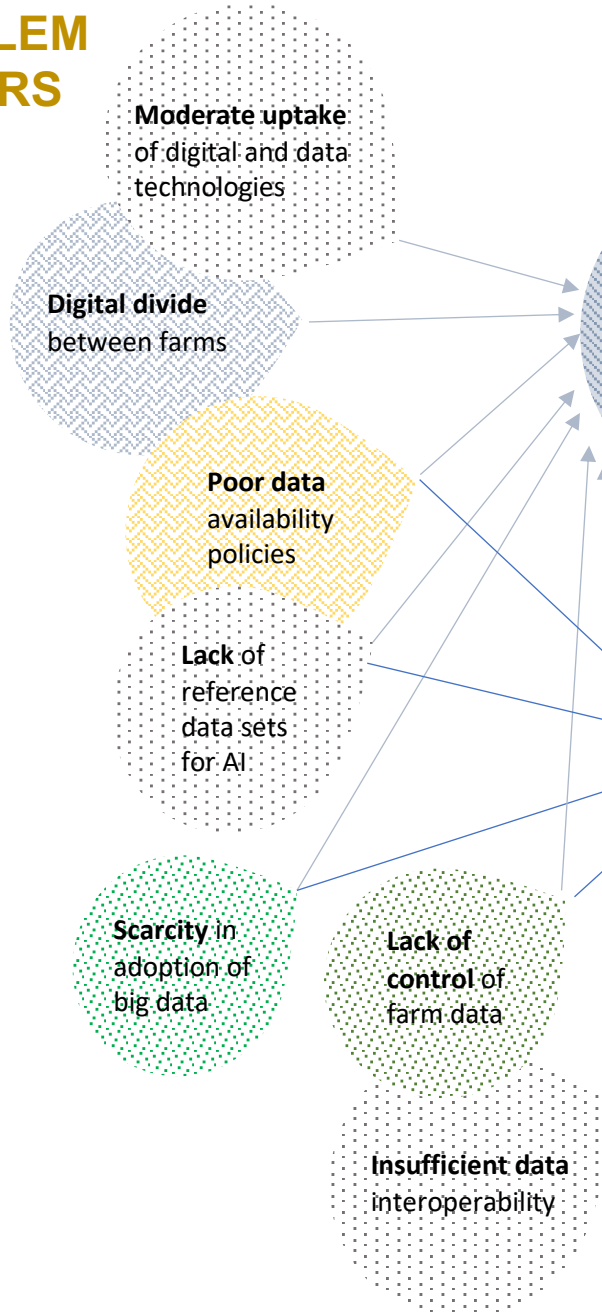
Data + Data Technology



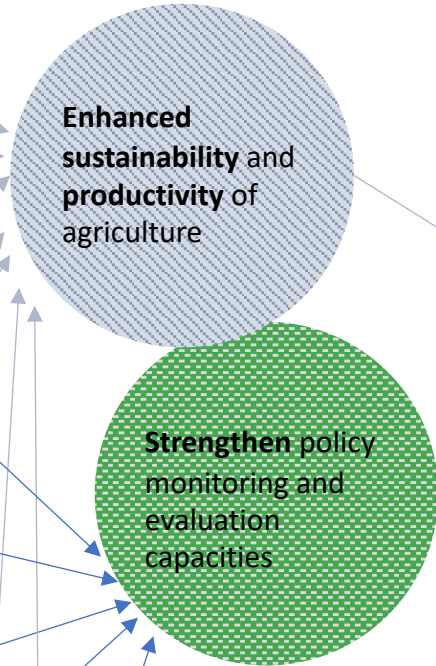
Data-based solutions

Vision / Intervention Logic → from Drivers to Expected Impacts

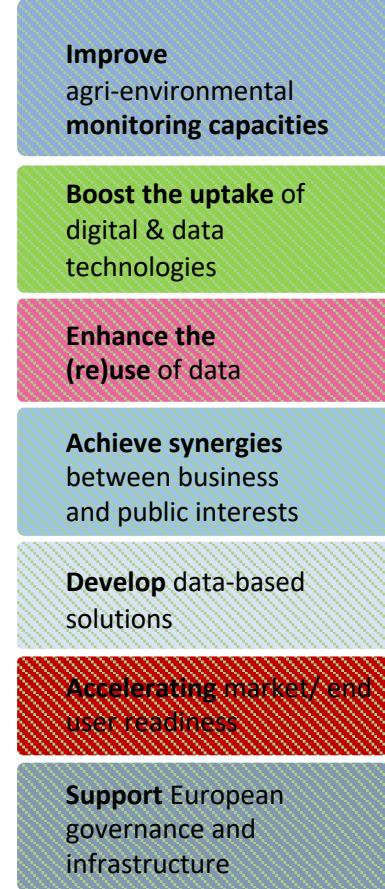
PROBLEM DRIVERS



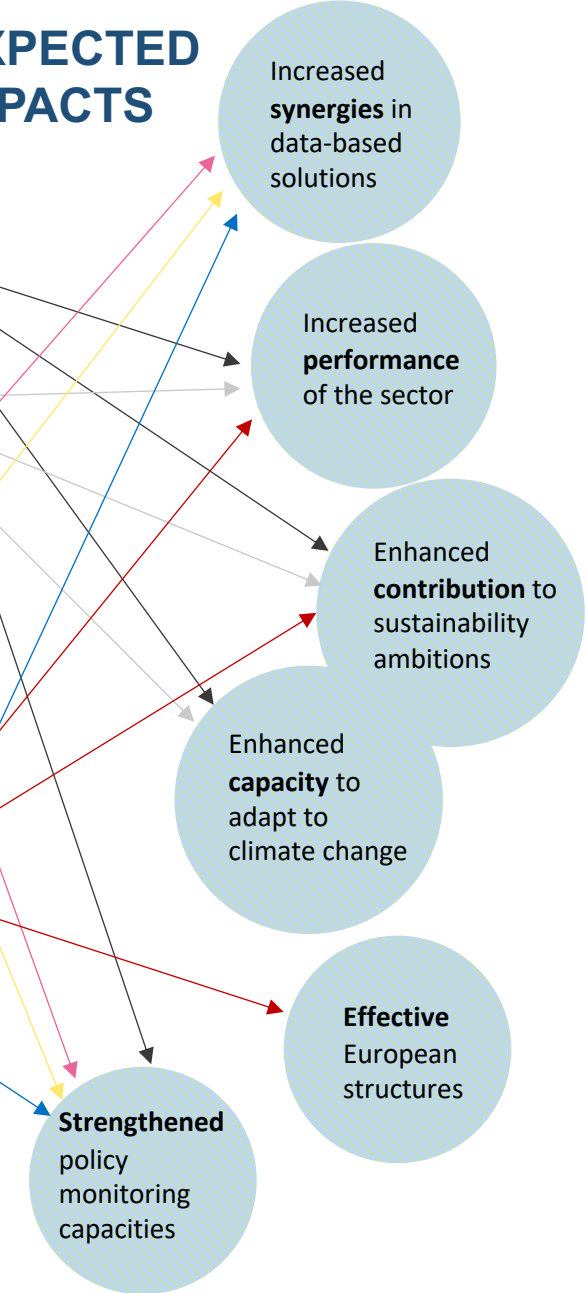
GENERAL OBJECTIVES



SPECIFIC OBJECTIVES



EXPECTED IMPACTS





Conclusions

- ✓ **A win-win approach** between research organizations and private sectors may certainly lead to increase our capacity to reinforcing the data value chain.
- ✓ **Strengthening** NCMs in the context of the GEO post-25 strategy would allow to better link end users needs and cross-cutting edge research.
- ✓ **Increase the engagement of the private sector** in national and European context would enhance the development of more competitive EO products & services on the international market (estimated to reach 25 Trillion \$ by 2030).
- ✓ **A back-to-back cooperation** of the Research Organizations and Private Sectors would lead to EO products and services fit-for-purposes capable to improve the policy- and decision-making processes having as outcome **increased social benefits and equity**.



Thank you