demeter

Data 4 Nature

May 2021

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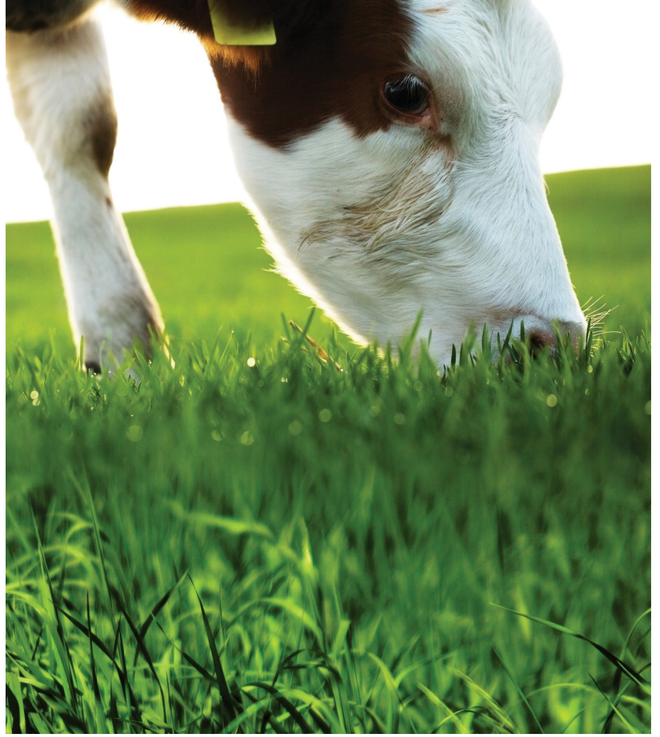
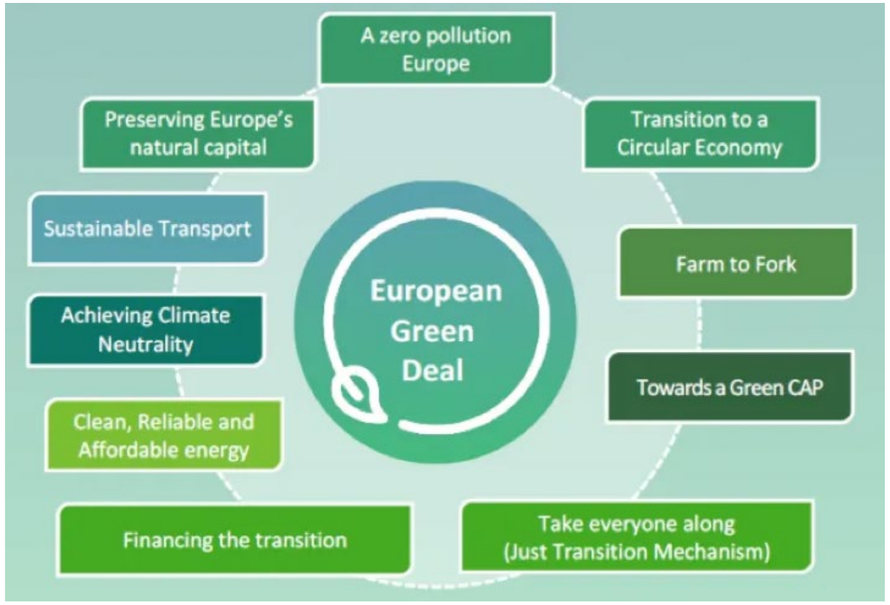
(formerly TSSG)

European Union
European Regional Development Fund

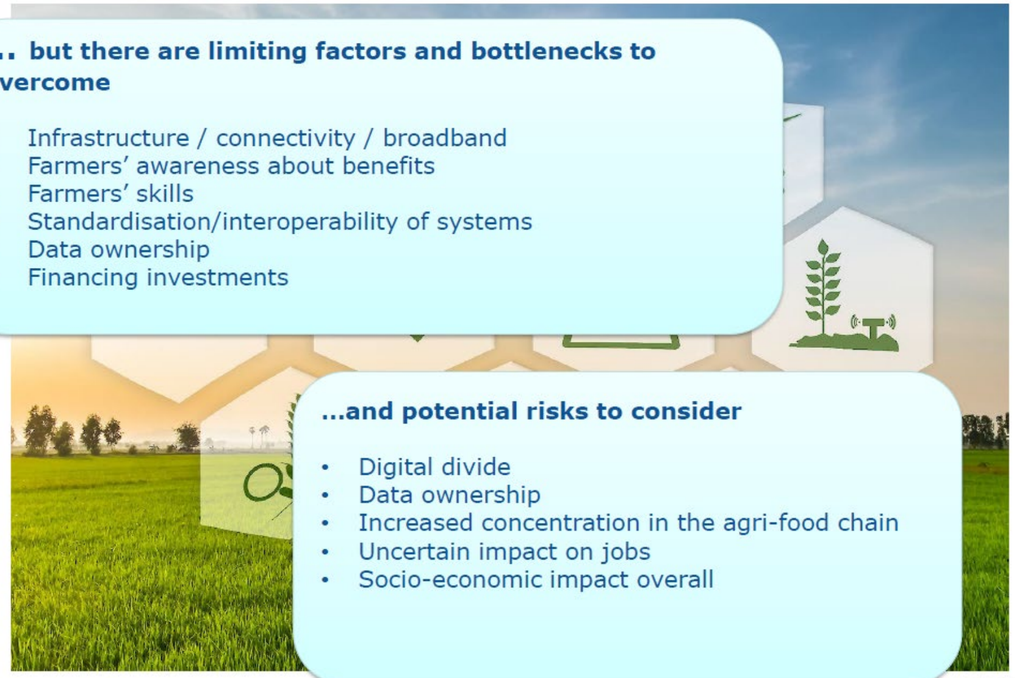
European Commission
Horizon 2020
European Union funding for Research & Innovation



Sectoral Challenges



Digitalisation brings opportunities to the EU farming sector and rural areas...



... but there are limiting factors and bottlenecks to overcome

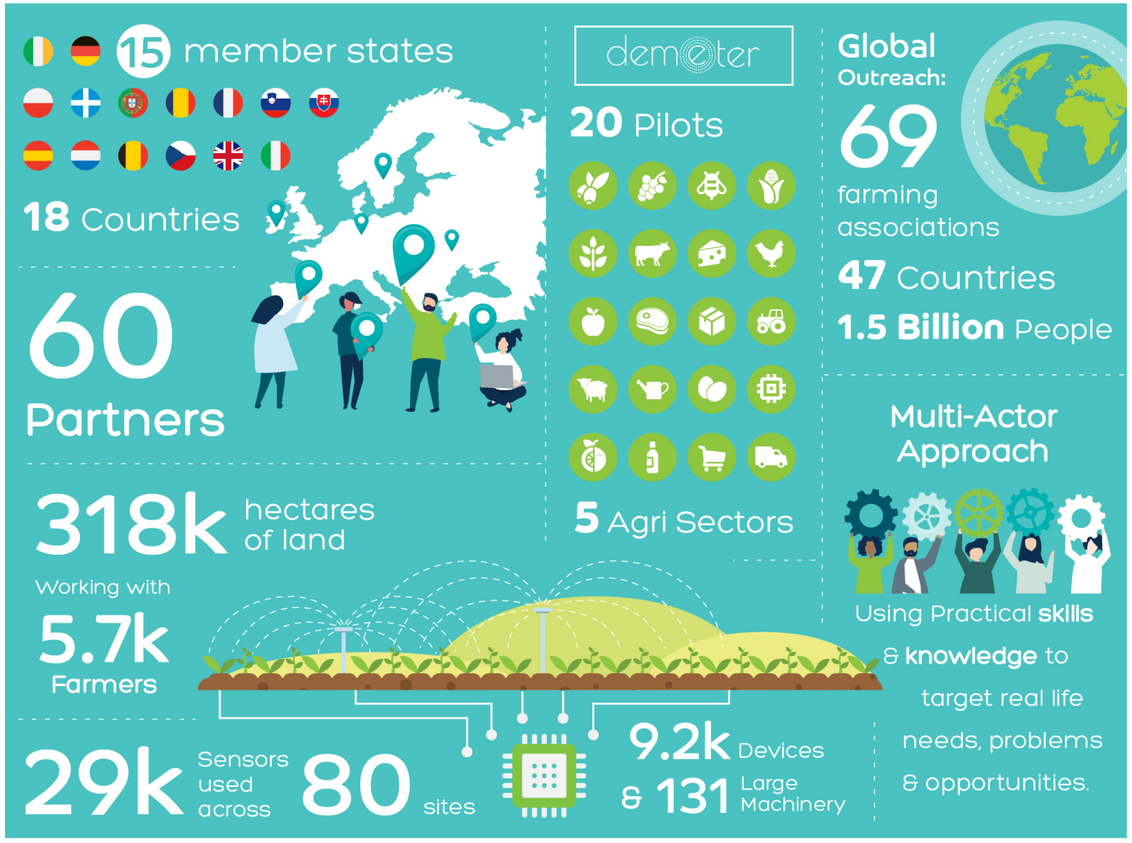
- Infrastructure / connectivity / broadband
- Farmers' awareness about benefits
- Farmers' skills
- Standardisation/interoperability of systems
- Data ownership
- Financing investments

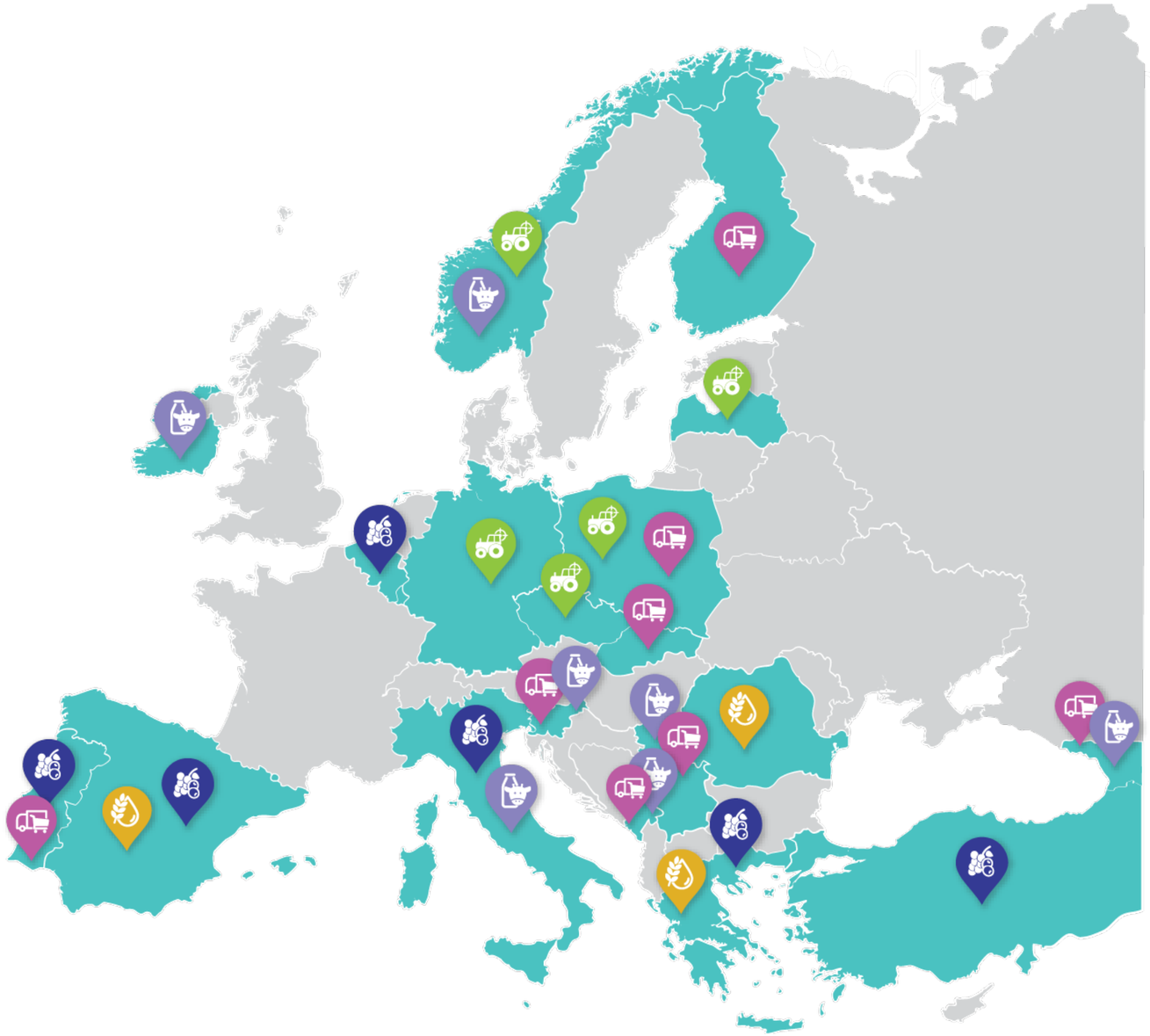
...and potential risks to consider

- Digital divide
- Data ownership
- Increased concentration in the agri-food chain
- Uncertain impact on jobs
- Socio-economic impact overall

European Commission

DEMETER - In a nutshell





Utilising Nature's Data – DEMETER Pilots

Sector: Arable Crops

Focus: Water & Energy Management

- Water savings in irrigated crops
- Smart energy management in irrigated & arable crops
- Optimal Quality Rice Irrigation
- IoT Corn Management & Decision Support Platform

Sector: Arable Crops

Focus: Agricultural Machinery, Precision Farming

- In-Service Condition Monitoring of Agricultural Machinery
- Automated documentation of arable crop farming processes
- (Farming)Data Brokerage Service and Decision Support System for Farm Management
- Benchmarking at Farm Level Decision Support System

Sector: Fruit & Vegetables

Focus: Health and high-quality crops

- Decision Support System to support olive growers
- Precision Farming for Mediterranean Woody Crops
- Pest Management Control on Fruit Fly
- Open platform for improved crop monitoring in potato farms

Sector: Livestock

Focus: Animal Health, High Quality

- Dairy Farmers Dashboard for the entire milk and meat production value chain
- Consumer awareness: Milk quality and animal welfare tracking
- Proactive milk quality control
- Optimal chicken farm management

Sector: Cross-sectorial

Focus: Full supply chain, interoperability, robotics

- Disease prediction and supply chain transparency for orchards/vineyards
- Farm of things in extensive cattle holdings
- Pollination optimisation in apiculture
- Transparent supply chain in poultry industry

Challenges and Recommendations

- FAIR Principles
- Benchmarking for Quality and Comparison
- Data Semantics
- Data Ownership

- Engage all stakeholders
- Demonstrate Value
- Data Openness
- Don’t reinvent the wheel

More Information and Get Involved

- www.h2020-demeter.eu
- twitter.com/H2020DEMETER
- facebook.com/H2020Demeter
- linkedin.com/company/h2020-demeter
- Youtube

WALTON Institute for Information and Communication Systems Science

Thank you.

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European Union
European Regional Development Fund
Ireland's European Structural and Investment Funds Programmes 2014-2020
Co-funded by the Irish Government and the European Union
HORIZON 2020
SFI
ENTERPRISE IRELAND