

# Connecting Communities on Digital Innovation in Agrifood



**Synergy Days**

BY SMARTAGRIHUBS | BARCELONA

# Connecting Communities on Digital Innovation in Agrifood

**George Beers**

*Chair of the SmartAgriHubs Community*

**Andres Montero**

*Special Advisor of the President of the Spanish Government for Agriculture challenges*

**Doris Marquardt**

*Programme Officer, DG CNECT, European Commission*

**Joost Schuttelaar**

*Managing Partner, Schuttelaar & Partners*





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# CONNECTING COMMUNITIES ON DIGITAL INNOVATION IN AGRIFOOD

October, 14th 2024



## Synergy Days

BY SMARTAGRIHUBS | BARCELONA



The digitization of the agricultural sector has become an opportunity to face the challenges of climate change with more and better tools to capture, analyze and manage agricultural and livestock farms more efficiently, with more welfare for farm workers and more resilience to anticipate the emergency of possible adverse phenomena



# WE NEEDED TO TACKLE THE DIGITAL DIVIDES

- **URBAN VS RURAL: CONNECTIVITY**
- **STRUCTURAL: LARGE VS SMALL FAMILY FARMS**
- **ADOPTION: CAPACITIES**



## WE NEEDED TO TACKLE THE DIGITAL DIVIDES

- **URBAN VS RURAL: CONNECTIVITY**
  - **+675M€ invested** in high fixed very high-capacity networks
    - ES is significantly above the EU average (93% vs 73%) in fixed very high-capacity networks , and in fibre to the premises coverage it exceeds the EU average by a wide margin (91% vs 56%).
  - **+ 1bn € invested** for the deployment of **5G networks in rural areas**
    - 5G coverage (82% vs 81%) although now assigned 98% of all 5G pioneer bands under the RRP
  - High capacity satellite internet **coverage in all the territory** through the program ÚNICO DEMANDA RURAL which is granted by the RRP.
  
- **STRUCTURAL: LARGE VS SMALL FAMILY FARMS**
  
- **ADOPTION: CAPACITIES**



## WE NEEDED TO TACKLE THE DIGITAL DIVIDES

- URBAN VS RURAL: CONNECTIVITY
- **STRUCTURAL: LARGE VS SMALL FAMILY FARMS**
  - MODERNIZATION AND DIGITIZATION OF IRRIGATION COMMUNITIES: +1,5bn euros for the modernization and digitization of irrigation systems
  - DIGITAL Toolkit vouchers: 70.000 FARMERS AND AGRIFOOD SMES HAVE ALREADY BENEFITTED
  - KIT Consulting: 300 M€ to advice and support to SMEs in their digitization process

- **ADOPTION: CAPACITIES**



## WE NEEDED TO TACKLE THE DIGITAL DIVIDES

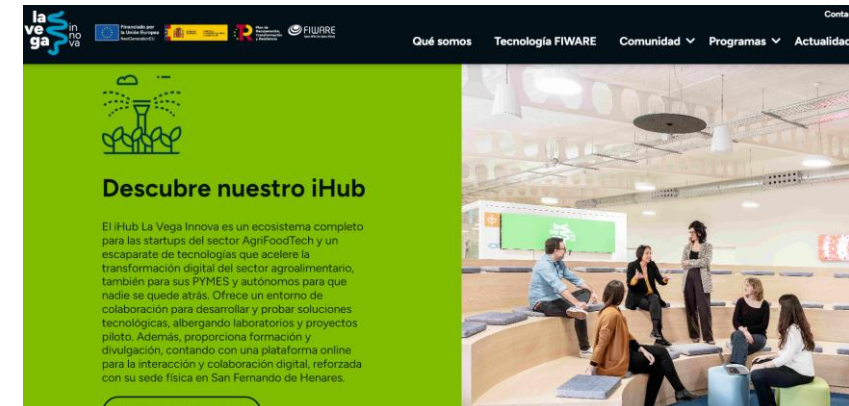
- URBAN VS RURAL: CONNECTIVITY
- STRUCTURAL: LARGE VS SMALL FAMILY FARMS
- **ADOPTION: CAPACITIES**
  - **1bn euros to develop basic digital capacities**
  - **+150.000 women from rural areas** already trained in digital capacities.
    - Spain is above the EU average in at least basic and above basic digital skills, with 64% and 38% of the population benefiting from these skills respectively
  - **Modernisation of VET system**
    - +310.000 new places created ca. 25% in digital areas
    - Re-skilling and up-skilling of workers to contribute to the digital transition





## ALSO ENHANCE THE ECOSYSTEMS

- DIH SUPPORT: +30M€ to complement EDIH actions
- LA VEGA INNOVA: DIH DEVELOPED BY THE MINSITRY OF AGRICULTURE WITH THE PARTICIPATION OF TELEFÓNICA.
- AGROINNPULSO: +30M€ to boost agrifood digital entrepreneurship
- ALLOWING NEW TECHNOLOGIES TO HAPPEN:
  - Satellite: ATLANTIC CONSTELLATION (ES-PT)
  - HAPS
  - IA and Supercomputing capacities
- DATASPACE: +40M€ for demonstration and use cases projects in AGRIFOOD



MANY THANKS



[www.planderecuperacion.gob.es](http://www.planderecuperacion.gob.es)





# The potential of communities to accelerate the impact of policy instruments

14 October 2024  
Synergy Days, Barcelona, Spain

*Dr. Doris MARQUARDT,  
European Commission, DG CNECT, Unit E4*

# *The Vision*



**Research**



**Innovation**



**Deployment**



**Impact**

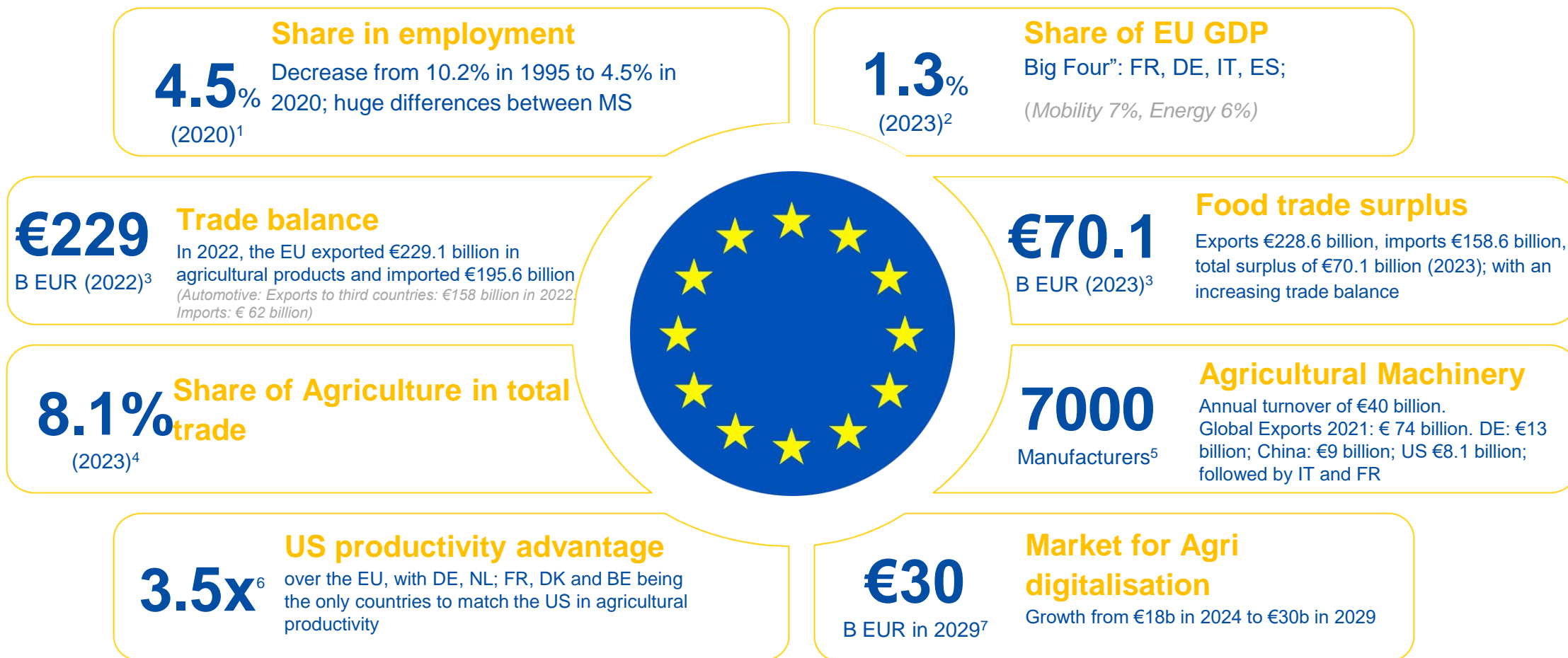
# “Draghi Report”



***The future of European competitiveness***  
***A competitiveness strategy for Europe***

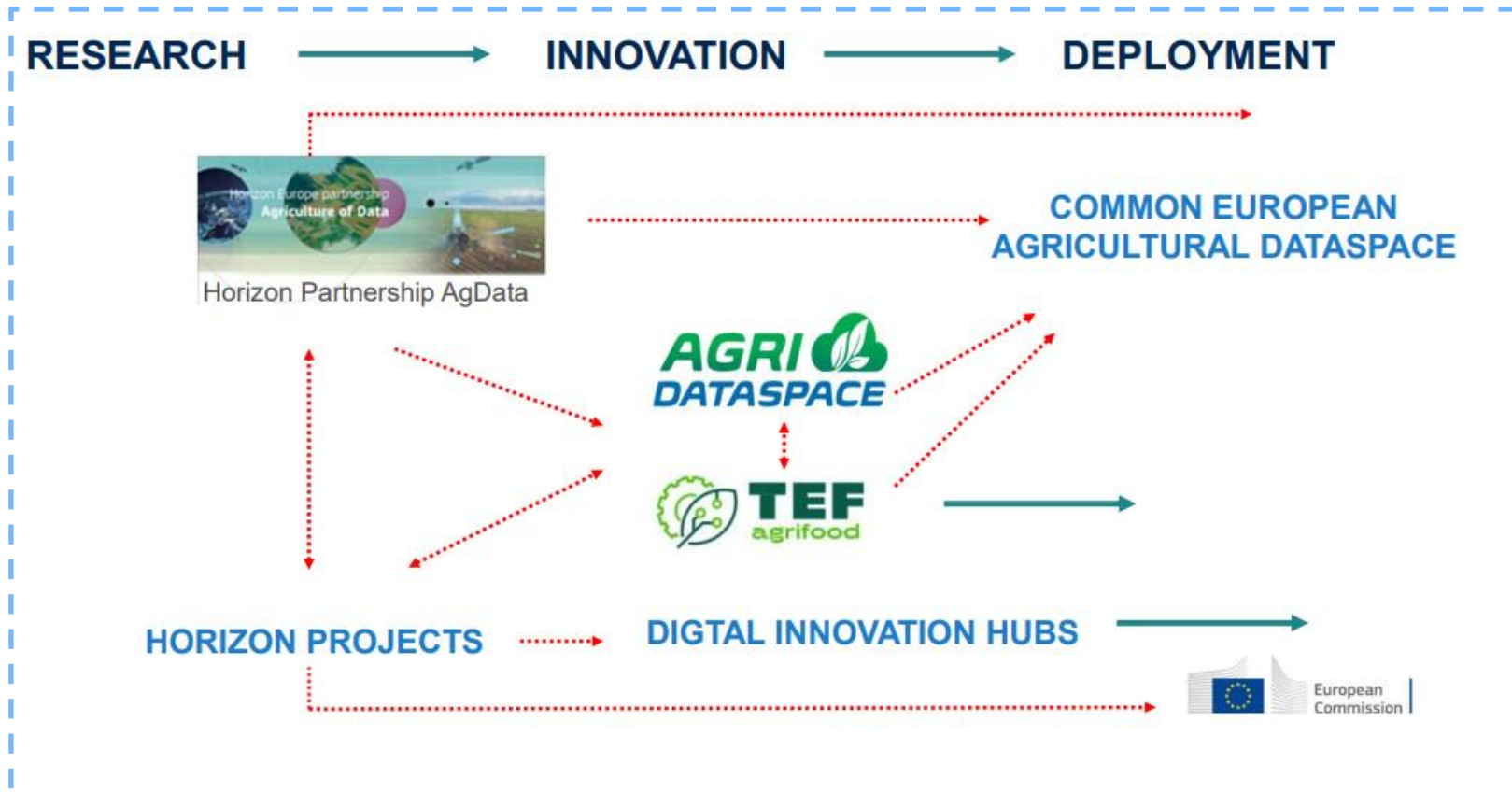
- Proposes to foster the **competitiveness of industry**
- Calls for dedicating attention to the development of **start-ups and SMEs**
- Emphasizes the relevance to **share data across sectors to boost innovation.**

# The sector and the value chain in figures



Notes on sources: 1. [Eurostat](#), October 2023; 2. [Eurostat](#), May 2024; 3. [Euronews](#), based on Eurostat data, February 2024; 4. [Eurostat](#), April 2024; 5. CEMA [Economic Reports](#) 6. [Eurostat](#) 2024, 7. [Forbes](#), 2023

# EU level actions – *A lot has been launched ...*



Private/ Public Investments in & effective use of Digital and Data infrastructure, Digital Tools



**Horizon Europe**

Other instruments

**Digital Europe**

Connecting Europe Facility  
Recovery & Resilience Facility  
Common Agricultural Policy  
European Regional Development Fund

# Selected challenges in the value chains in the digital transformation of the agri-food sector

- Insufficient investment capacities and lack of **cost effectiveness of digital tools**
- A high number of very small businesses as “end users”
- **Lack of trust in data sharing and/ or digital technologies and the “black box” of AI**
- **A limited number of actors with sufficient data for efficient AI application**
- **A limited number of providers of decision-making support tools** (which can run their business sustainably)
- **Lock-in effects**
- Lack of commonly acknowledged **standards and interoperability**
- Lack of **capacities to implement a number of novel legal acts** in the field of digital and data



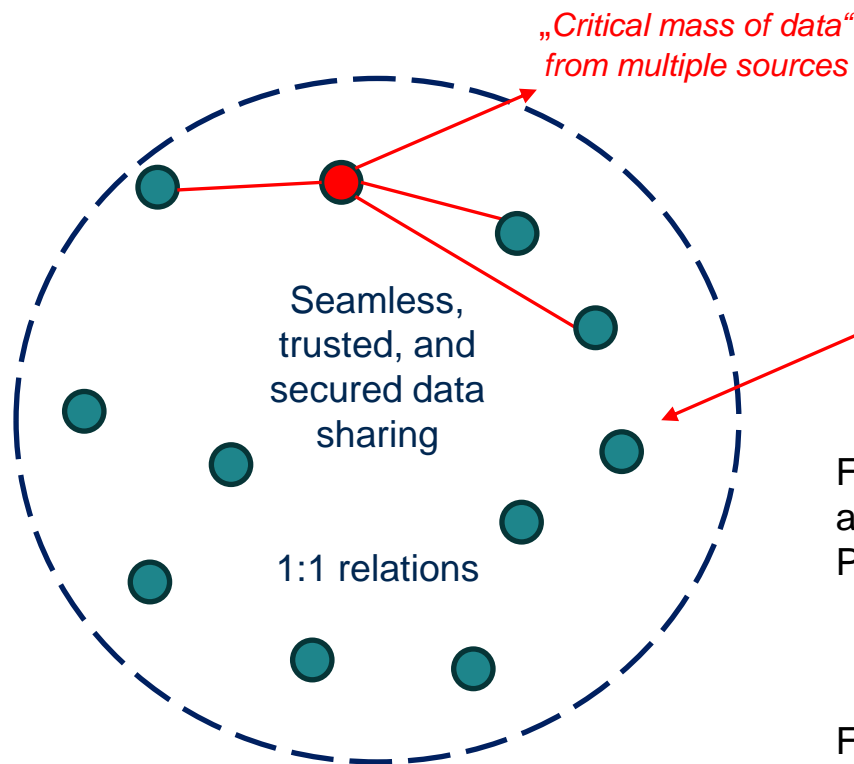
# How achieving impact and delivering on policy objectives?

## - The example of data spaces and AI exploitation

### Data sources/ Data holders

- Public and private data
  - IoT Data
  - Farm attributes
  - Production figures
  - High value data sets
  - Market data
  - .....
- Farmers
  - Manufacturers
  - Public administration
  - Logistic companies
  - Dairies
  - Fertiliser companies
  - .....

### Data space



### Data users

Start-ups, SMEs

Farmers, other actors along the value chain  
Public administration

Farm advisors

*Capitalisation through AI*

### Benefits

Decision-making support

- Products, and services for
- Farmers
  - Food processors
  - Customers
  - Manufacturers
  - Policy-makers
  - .....

Reduction of administrative burdens in B2B, B2G, and G2B settings

Personal advice  
Benchmarking

## Determinants for the success of data spaces

- Mobilisation of stakeholders
- Establishing of trust
- Interplay between stakeholders
- Model contracts under the Data Act
- Low “entry burden”, little administrative effort for users
- Relevance, quality, and quantity of data shareable
- Usability for start-ups to provide and scale data-based solutions and to provide cost-effective services

## Data sharing initiatives in agriculture in the Europe



<https://agridataspace-csa.eu/dsis-m>

# *Is the added value of systemic actions and investments feasible to all stakeholders?*

Added value of data sharing?

Added value of investing time into standards and interoperability?

etc.

***Action  
needed?***

# Exploring Generative AI in Agri-Food

- Generative AI in Agri-Food – widely “untapped territory” in practice.
- Potential of Generative AI is seen among others in the following areas
  - Reducing administrative burdens (e.g. Documentation, Reporting)
  - Personalised remote/ ad hoc assistance
  - Risk prediction
- Opportunities of Generative AI to be explored under consideration of socio-economic (including cultural) context in the sector to ensure cost-effectiveness, and uptake of developed solutions, and avoid risks/ unwanted side-effects.
- R&I in the field of Generative AI is expected to be supported under the forthcoming work programmes of Horizon Europe.

***Where to invest?***

# Conclusions

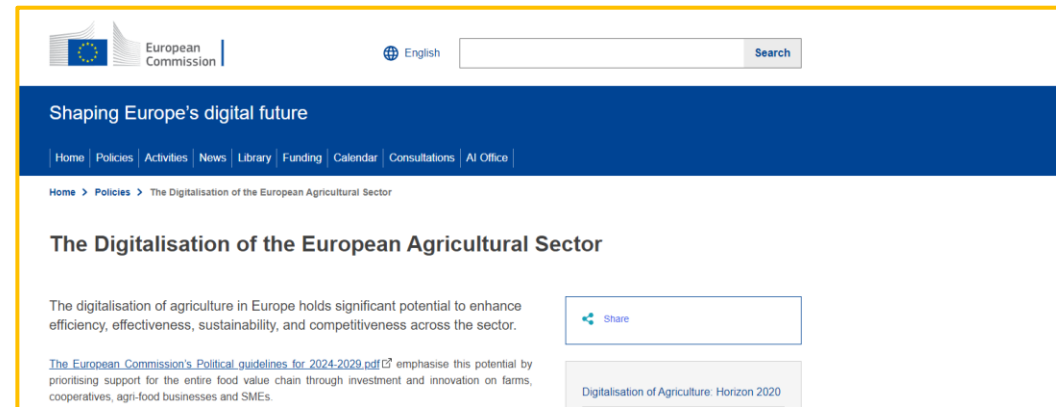
- Taking a holistic view on the value ***chains*** and innovation ecosystem is an asset to boost competitiveness and the twin transition in agri-food.
- **Data-sharing and its effective re-use following a systemic approach through data spaces is key to exploit the potential of AI.** Cross-sectoral data sharing is an additional asset for innovation and the economy.
- **Investing into capacity building to ensure a fair digital transition taking a short-, medium- and long-term perspective,** including into **scaling innovation, systemic digital and data infrastructure,** and capacities to find time to achieve **consensus on, e.g. governance of data spaces and standards.**
- **Demonstrate the added value of systemic investments of larger scale,** e.g. into data spaces and levers for enhanced interoperability, which may not materialize ad hoc and need commitment of multiple stakeholders to be a success.
- **Communities hold the potential to accelerate impacts of policy instruments** beyond achieving synergies; they
  - can speed up **finding consensus on governance and standards**
  - have convincing power in demonstrating and communicating **added value of digital tech** in a targeted manner
  - can identify **scalable R&I results and market failures and help to set (public) intervention and investment priorities; and**
  - **can mobilise private and public resources for strategic investments in Europe.**

# Announcement



## Forthcoming publication of the study

“Boosting the twin transition in agriculture and a resilient innovation ecosystem – **Standards and platformisation** in the spotlight”



Will be released on the [Commission website](#)

A photograph of a golden wheat field. In the foreground, several purple cornflowers (Centaurea) are in bloom, with some buds still visible. The wheat stalks are tall and golden, filling the background. The sky is not visible, but the overall scene is bright and sunny.

**Thank you!**

Dr. Doris Marquardt  
European Commission  
DG CNECT, Unit E4



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Let's talk  
about the  
**Innovation  
Portal**











*Unleashing the **innovation potential**  
for **digital transformation** of the  
**European Agrifood** Sector*



# Discover the great SmartAgriHubs community and the latest developments in the EU agri-tech sector

Sector



Regional cluster



Keyword...



Search

NEWS

## X2.0 launches the 2nd Open Call in AgriTech

X2.0 offers opportunities for players in the AgriTech sector.

**WE ARE LOOKING FOR**

The AgriTech Cohort will focus on supporting startups that leverage technology, innovation and data analysis to improve agricultural production and address the challenges faced by farmers and the agriculture industry as a whole.

**10** deeptech startups selected

**30.000€** in innovation vouchers

**KEY DATES**

Open Call: Start date: 05.04.2023

EVENT

Rotterdam, the Netherlands

## Geospatial World Forum (GWF2023): Geospatial Caravan: Embracing One & All

EVENT

Bilbao, Spain

## Food4Future. Bilbao Foodtech World Summit

16 and 17 May 2023 | Bilbao The food industry is immersed in a complete revolution. It has been called the Food-tech revolution. And there is not only a challenge to face. There is not only one protagonist. From industry to consumers, we must think on sustainable terms, local consumption a...



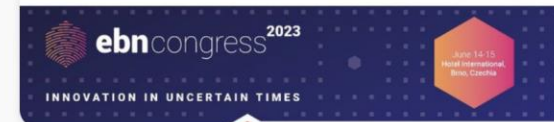
Marián Lora

EVENT

Brno, Republic Czech

## EBN Congress 2023

13 to 15 June 2023 | Brno The urgency for innovation is rising. The uncertainty of our times, caused by back-to-back global crises and existential challenges, must be tackled through innovation. The development of new technologies, business models, and tools is required at a pace...



EVENT

Potsdam, Germany

## Potsdam International Forum – Innovation Hubs for Regional Development: European Challenges



Search

Use matchmaking search

Projects ▾

- GAIA
- INCiTiS-FOOD
- IoF2020
- SmartAgriHubs

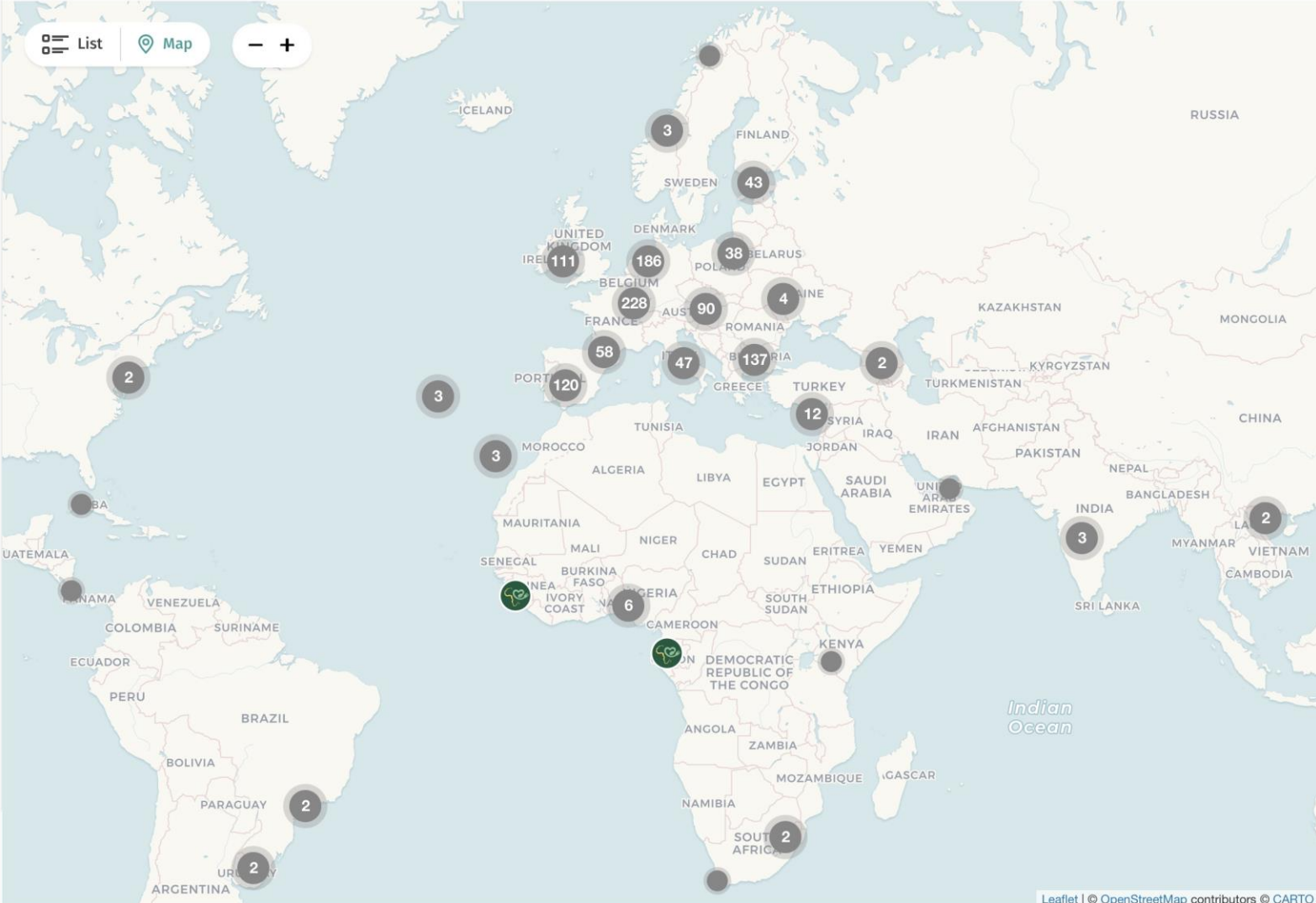
Sectors ▾

- Animal Production
- Aquaculture
- Arable
- Dairy
- Fruit
- Novel Foods
- Vegetables

Regional Cluster ▾

Organisation Type ▾

You can add a new organisation here







**SMART  
AGRI  
HUBS**







# Synergy Portal

Login at:

**www.synerg  
yportal.eu**

Interested in a tailor-made portal for your European research project or grant? [Contact now](#)



Synergy Days

Contact

Get started

Log in

# Amplify Your AgriTech Innovations

Are you leading a groundbreaking research project or an innovative solution in the AgriTech sector? The Synergy Portal is here to help you maximize the visibility and impact of your work.

Join now and connect with a broad network of professionals, innovators, and organizations across Europe.

Get Started

## Why Choose the Synergy Portal?



Make your project stand out

Make your research or project stand out



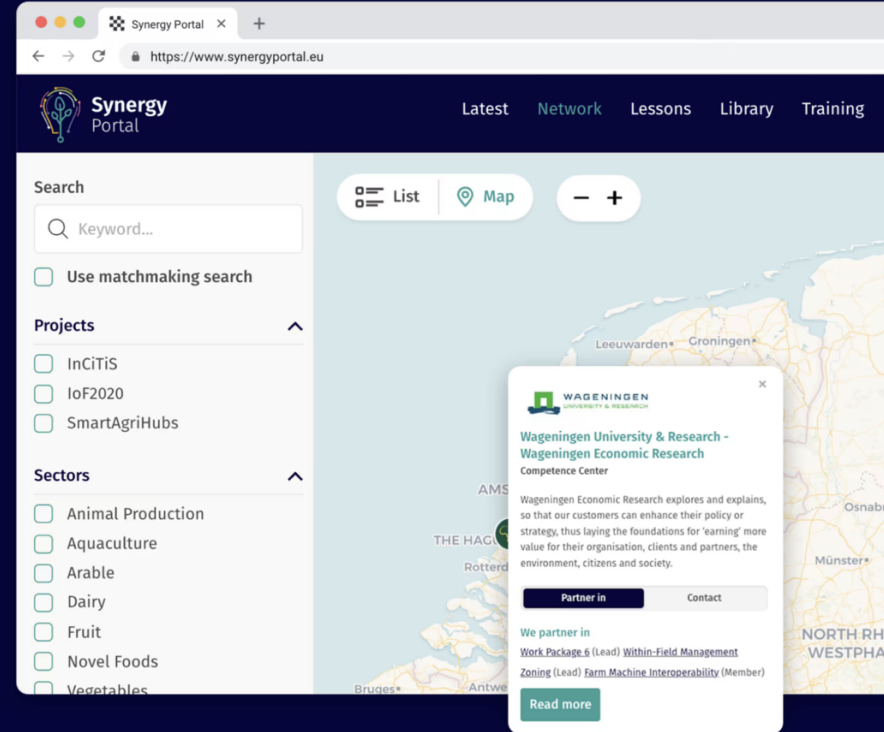
Engage with the Community

Whether you're looking to collaborate,



Enhance Communication

Utilize the portal to effectively







Lorena van de Kolk



Elka Hubenova



Philipp Erbach



Felix Lengers



Joost Schuttelaar



Sign up at  
[www.synergyportal.eu](http://www.synergyportal.eu)

*-and-*

**Enjoy Synergy Days 2024!**



# Synergy Days

BY SMARTAGRIHUBS | BARCELONA

# Food and Innovation: Why It's Time to Take Food Processing Seriously



**Synergy Days**

BY SMARTAGRIHUBS | BARCELONA

# Food & Innovation

Why it's time to take food processing seriously!

# Welcome & panelists

**Wim Haentjens**, Policy Officer, DG Research & Innovation

**Veerle De Graef**, Programme Manager, Flanders' FOOD

**Prof. Laurette Dube**, Professor, McGill University

**Gert-Jan van Fessem**, Owner, Food For Analytics

Moderator:

**Simon Maas**, International Collaboration & Projects, AgriFood Capital

# Food processing: what are we talking about?

		<i>Food Technologies</i>		
		<b>Traditional</b>	<b>Novel</b>	
			<b>Applicable</b>	<b>Emerging</b>
<i>Principle</i>	<b>Physical</b>	Washing	Robotics	Additive Manufacturing
		Cutting	Extrusion	Nanotechnology
		Mixing	Modified Atmospheres	Edible Coating
		Forming	Membrane Separation	Membrane Emulsification
	<b>Physicochemical</b>	Frying	Ohmic Heating	UV & Pulsed Light
		Baking	Microwave Heating	
		Boiling	High Pressure Processing HPP	Pulsed X-Rays
		Blanching	Irradiation	Cold Plasma
		Thawing	Ultrasound	Oscillating Magnetic Fields
		Fermentation	Pulsed Electric Fields	Vacuum Cooling
	Distillation	Freeze Drying	High Pressure Freezing	
	Drying	Osmotic Dehydration	Electric Arc Discharges	
	Pasteurisation	Spray Drying	Microfluidics	
	Heat Sterilisation	Superheated Steam Drying		
	Chilling			
	Freezing			

# Food processing: why?

## The benefits of food processing:



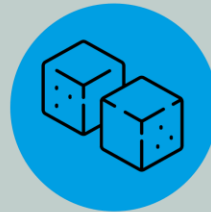
Turns raw ingredients into safe edible food



Increases shelf life and stability of foods, reducing waste and supporting food security



Offers consumers a variety of convenient options



Reformulation to reduce fat, salt and sugar in foods



Increased choice and availability of foods throughout the year



Improves and maintains texture



Fortification to help the population reach nutritional recommendations



Increased range of plant based options



Catering for specific diets



# Food processing: is it really relevant?



## Unleashing Europe's largest manufacturing industry

The size, scale and strategic importance of the industry demonstrates why food and drink should be at the heart of the EU's competitiveness, sustainability and security ambition.

### **291,000 manufacturers:**

The EU hosts 291,000 food and drink companies, of which 99% are SMEs, with a collective turnover of €1.1 trillion

### **Largest employer in manufacturing:**

The sector provides 4.6 million jobs, paying €110 billion in wages

### **Supporting Europe's rural communities:**

Processing companies are part of Europe's rural socio-economic and cultural DNA

### **Closely connected to European agriculture:**

The sector turns approx. 70% of Europe's farmers' produce into high value-added products

### **Mostly micro enterprises:**

235,000 food and drink companies employ fewer than 9 people

### **#1 exporter:**

The EU is the world's #1 food and drink exporter, with €182 billion in exports (and #2 importer)

### **Investing in innovation:**

€2.1 billion is spent on research and innovation by just 10 EU companies

### **Reaching consumers with 1.5 billion meals a day:**

The sector takes pride in producing safe, quality food and drink products which are enjoyed all over the world

Food processing: time to go digital!



# Benefits Of Automation In The Food And Beverage Industry



# Future-proofing food systems

*Which data sets will drive change?*

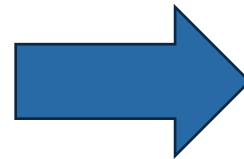
Wim HAENTJENS,  
European Commission, DG Research & Innovation  
Unit “Bioeconomy & Food Systems”



# R&I framework to future-proofing food systems



System approach  
to R&I



- R&I programming under Horizon Europe/ Pillar 2: co-creation to ensure system approach
- Over 100 Projects - over 760 M EUR (for Food 2030's 11 "Pathways for Change")
- **New:** Horizon Europe partnership "FutureFoods", 29 countries, 529 M EUR, 10 years

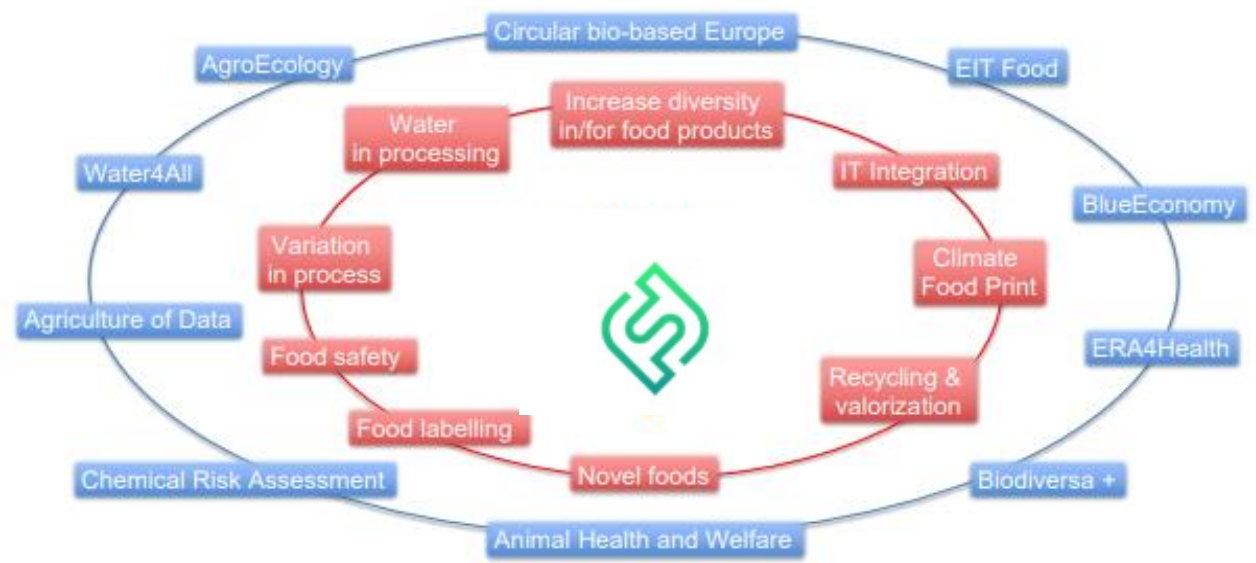
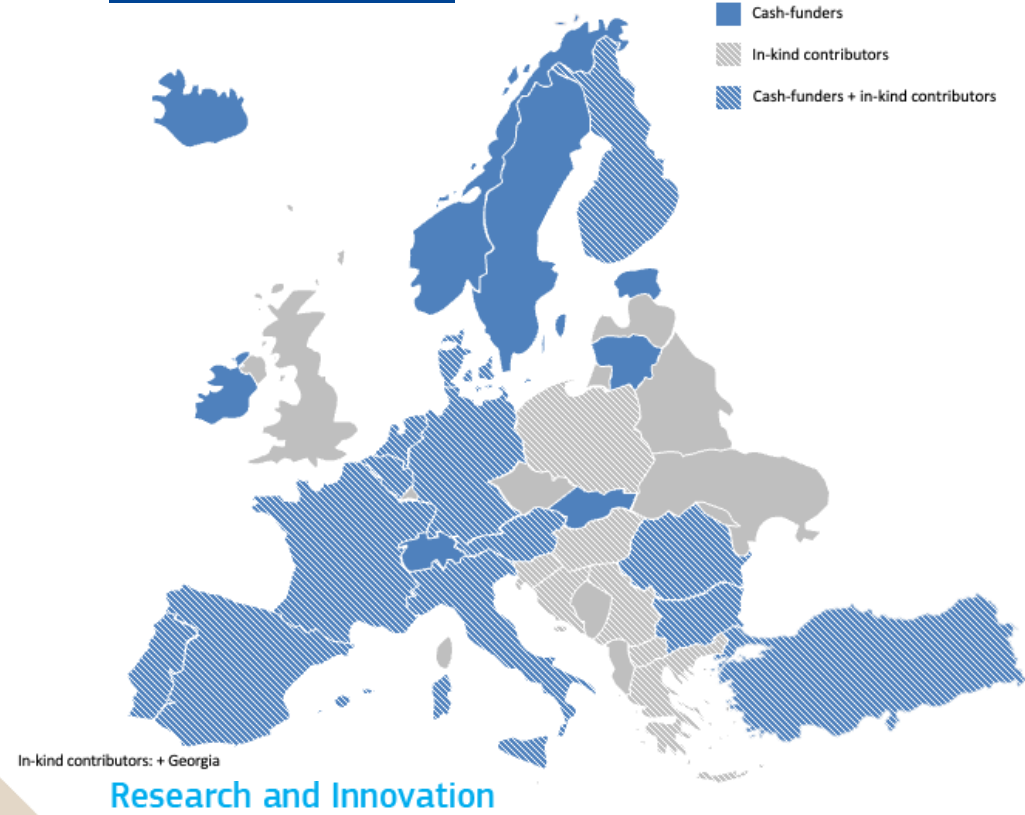


# FutureFoodS key facts



- **84 partners from 29 countries**
- Operative within the next **10 years** with a total anticipated budget of **EUR 529 Mio.** (30% co-fund rate)
- Part of a **partnership landscape.**

[Website FutureFoodS](#)



# What data sets will drive change?

- What are key challenges to which data sharing can make a difference?
  - Challenges shared between: Food processors, Consumers, EU and Member State policy makers
  - Challenges like: Energy, water, consumer labelling on health & sustainability
- Which data sets could be prioritized?
- What is missing to build these data sets ? What are research gaps?

# Food processing SMEs: small scale, big impact

Veerle De Graef,  
Programme manager  
Flanders' FOOD

# Food processing SMEs



99% of the EU food processing industry



High level of diversity: products, processes, ...



Shared challenges: improve efficiency to make production more environmentally sustainable



Shared solutions: Technology and digitalisation are key components of SME growth



# Connecting challenges to solutions



Improved efficiency



Higher quality



Sustainable production & product



Better food safety



Sensors to monitor real-time critical control parameters



Sensor integration and implementation



Smart data management



Connectivity in food companies and in the food value chain

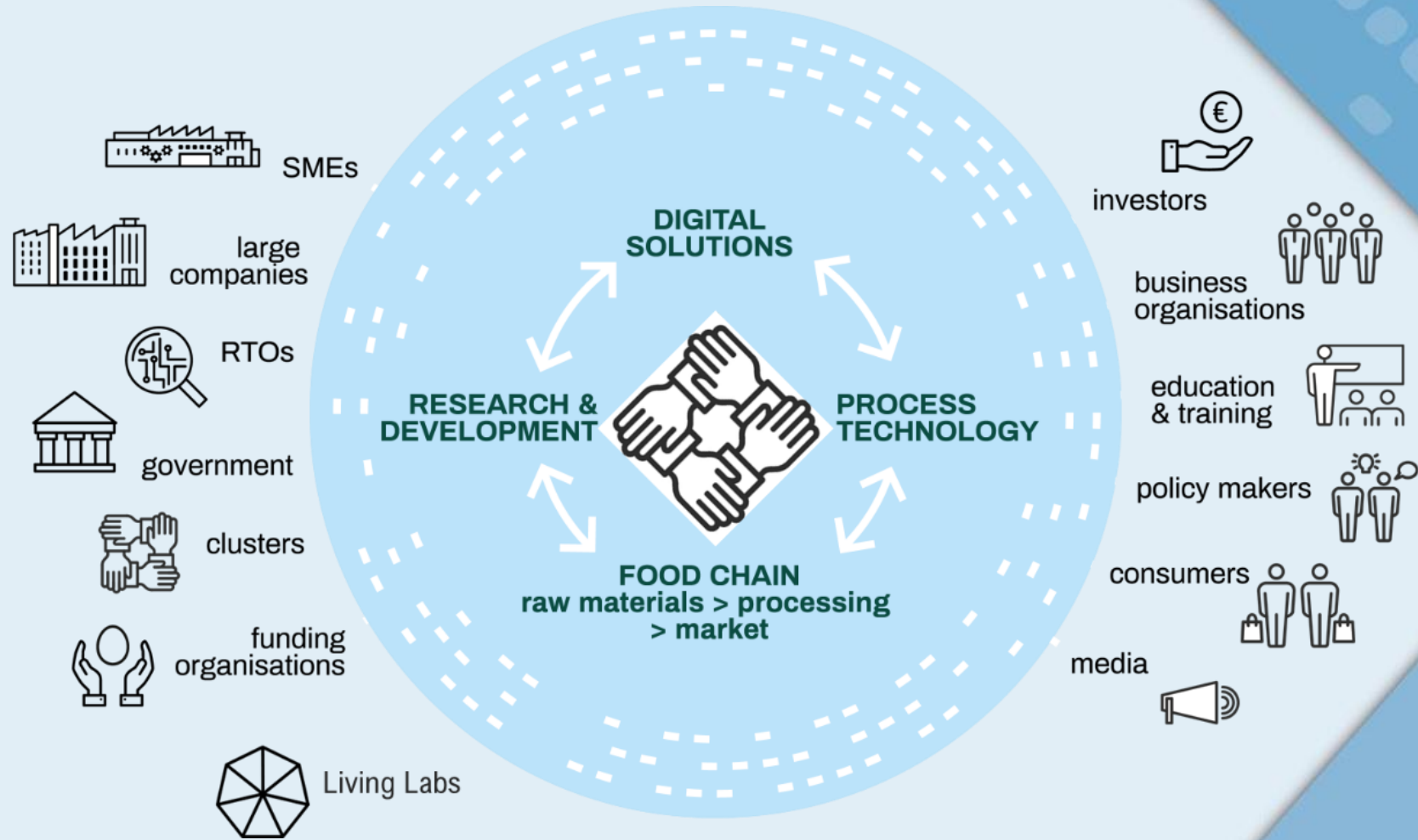


Human centric transformation and implementation strategy

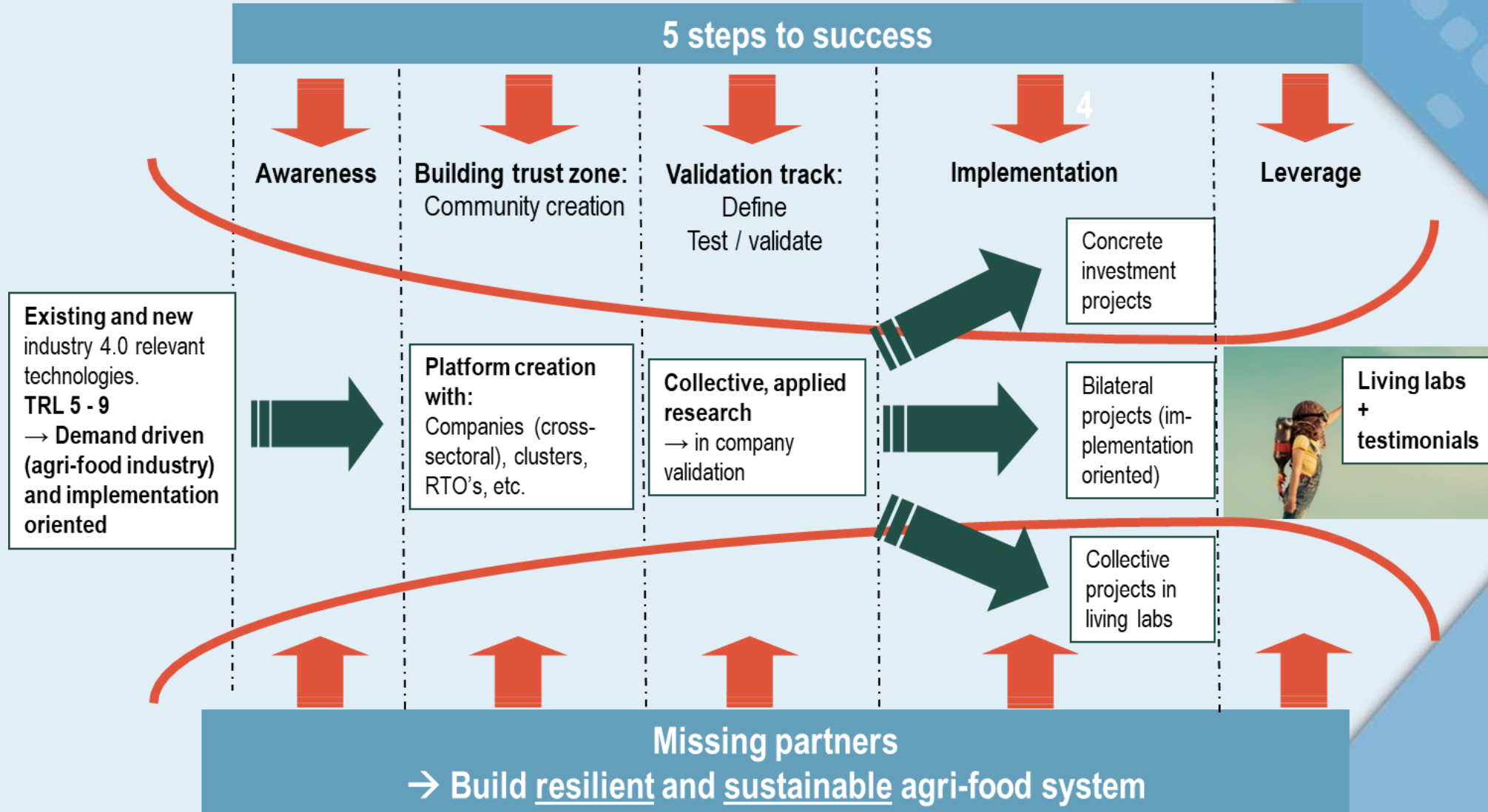
# Connecting the ecosystem

Clusters as linking pin

Trust  
Proximity  
Collaboration



# Stepwise approach



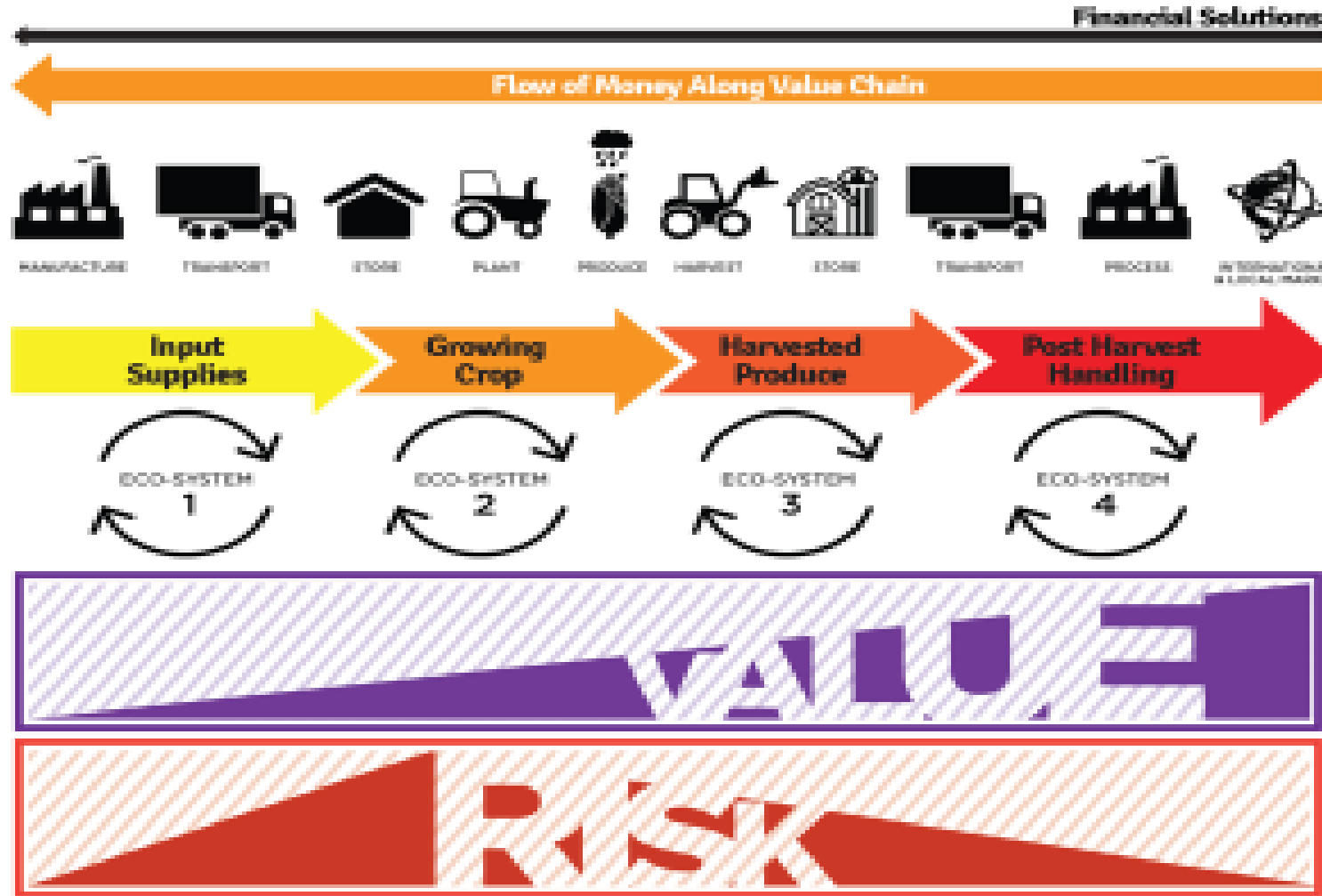


# Food processing Innovation:

*Entry points for a Digital-Powered  
World Reset from Economic Convergence to  
Convergence Economy*

Laurette Dube  
Professor  
McGill University

# Diversity in Ability to Bear the Brunt of Value vs Risk Inequality Along the Chain and Over Time and Jurisdiction



foodsafety4africa.eu

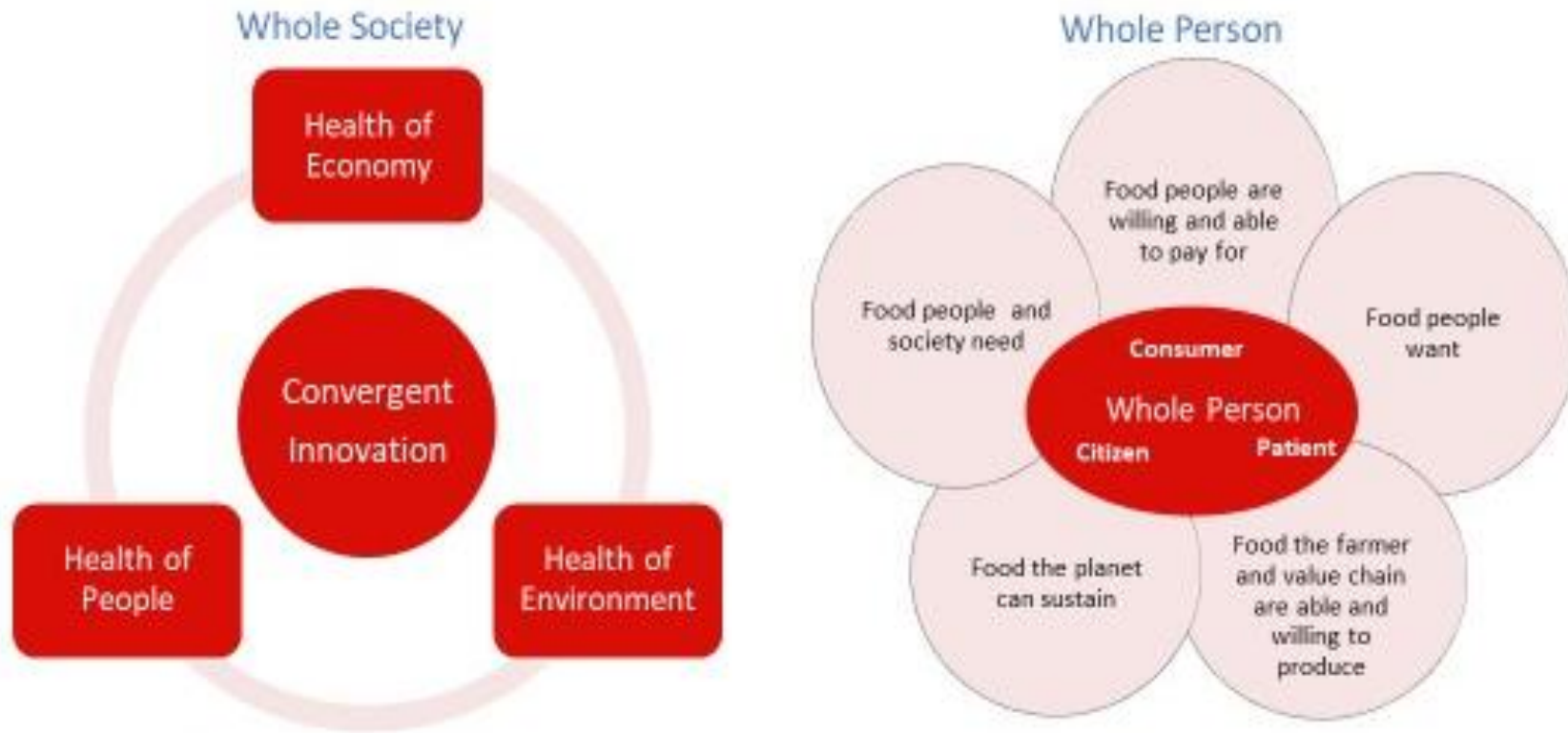
# Accelerating the Development of “Mezzanine” level for All Actors in Traditional and Modern Agri-Food Systems



- Access to profitable local and regional markets
- Development of Cooperatives
- Build core capabilities
- Digital literacy
- Digital empowerment: farming and food processing practice, traceability, market access



# Convergence Innovation-Food



Mission

A transformational discovery & innovation platform to produce, promote and consume food that sustains the health of people, planet and economy for sustainable development and affordable healthcare



UNIVERSITY OF GHANA

Carnegie Mellon University



University of Pittsburgh

IITA  
Transforming African Agriculture



GODAN  
Global Open Data  
for Agriculture & Nutrition

McGill

Centre for the Convergence of Health and Economics

Innovate the Way We Innovate in Agri-Food Sector and in Society

# Data-driven solutions for the food industry

Gert-Jan van Fessem,  
Owner  
Food For Analytics



# Gert-Jan van Fessem | Food For Analytics

## Hobbies:

Working out

Foody

## Education:

Avans Hogeschool (Accountancy)

Post HBO Master Business Information

Executive Master Finance & Control

## Carreer till now:

CSB-System SA (1997 – 2015)

Self-employed (2016 – present)

VION (2016 – 2023)

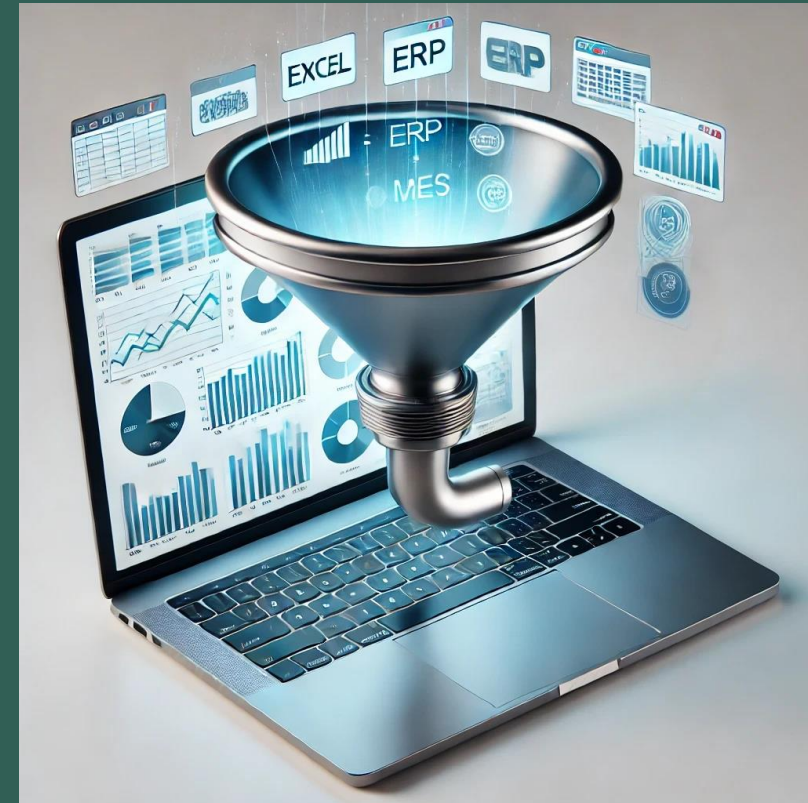
Food For Analytics co-founder (2018 – present)

# Food For Analytics

FFA Titan is our ISO27001 certified data analytics platform that acts as your digital twin.

Food For Analytics provides a scalable, flexible and robust platform to enable decision making.

Food For Analytics enables organizations to collect, connect and consume the relevant internal and external data.



# Food & Innovation

Why it's time to take **food processing** seriously!



# Synergy Days

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# Smart Farming



**Synergy Days**

BY SMARTAGRIHUBS | BARCELONA

# Smart Farming

Moderated by [Vanja Bisevac](#), *European Agricultural Machinery Association (CEMA)*

**Francesco Iadecola**

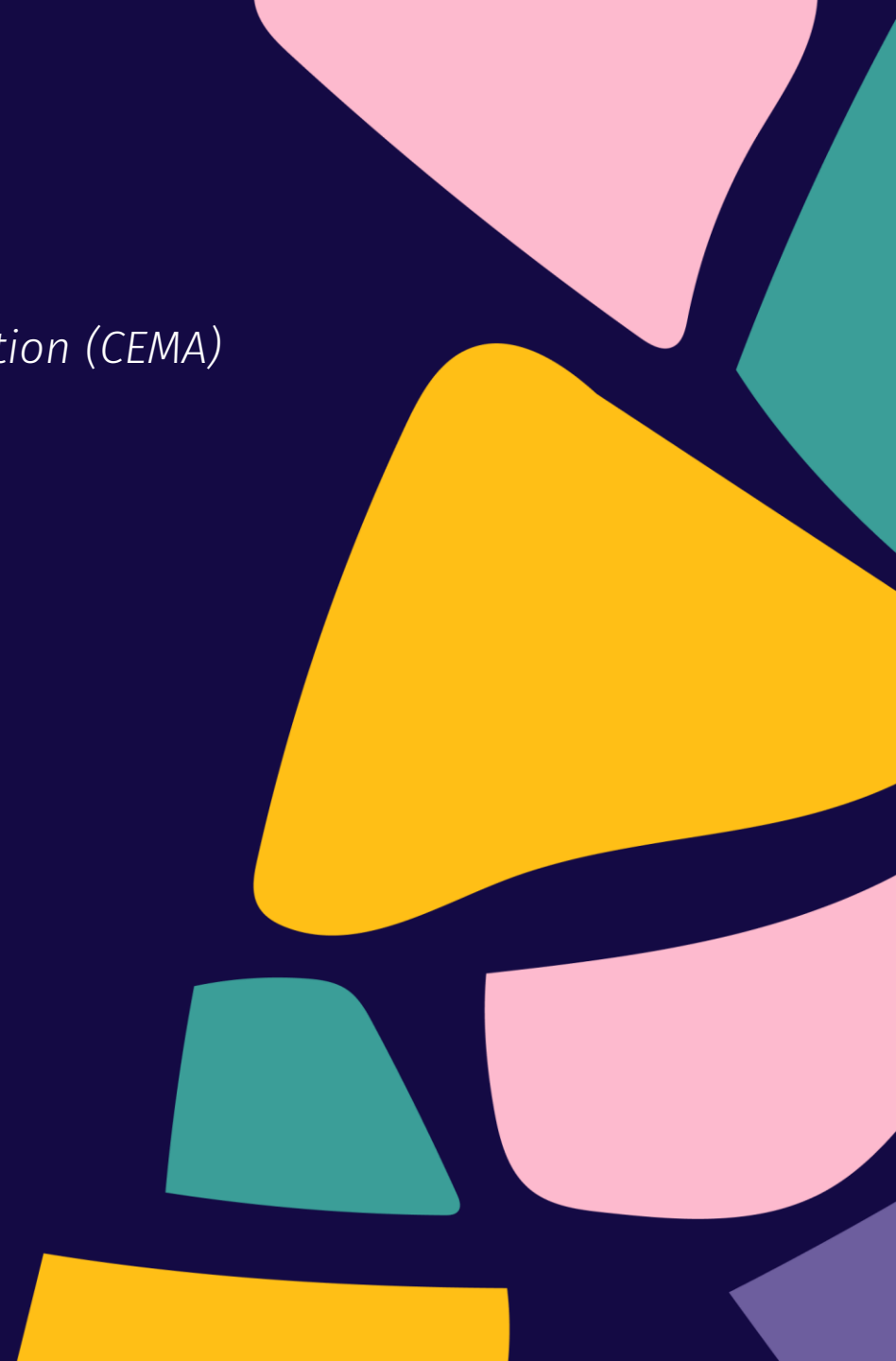
*Research Programme Officer, DG AGRI, European Commission*

**Ignacio Ruiz**

*Secretary General, ANSEMAT*

**Dr. Filippo Maria Renga**

*Founder of the Smart AgriFood Observatory, Digital Innovation Observatories,  
Politecnico di Milano*





# EU policies and R&I priorities supporting digitalisation of agriculture and rural areas

***SYNERGY DAYS***

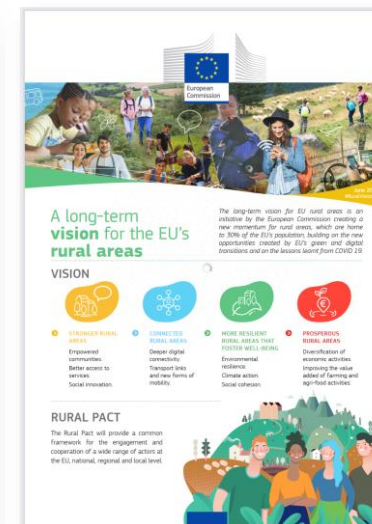
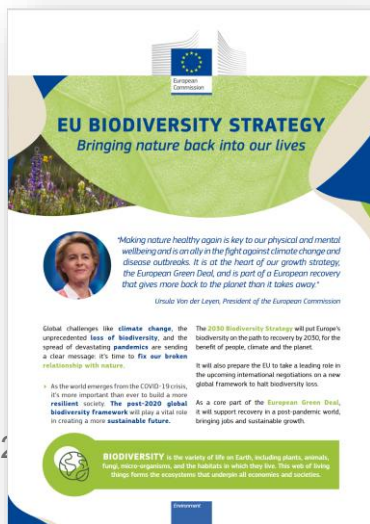
*Barcelona, Spain  
14 October 2024*

Francesco Iadecola, European Commission  
DG AGRI – Unit F2. Research and Innovation

# EU policy priorities for agriculture, forestry, rural areas and digitalisation

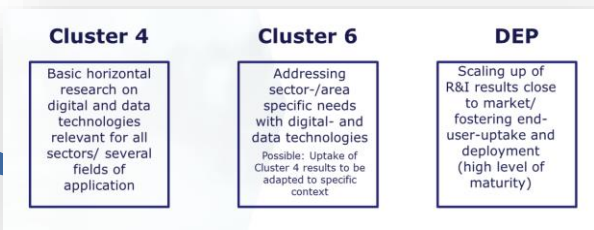
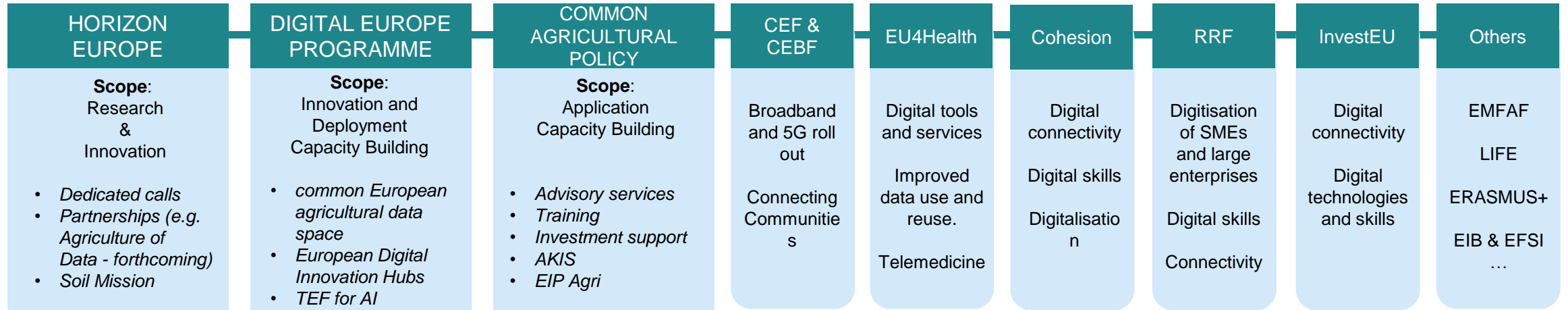


## EU COMMON AGRICULTURAL POLICY

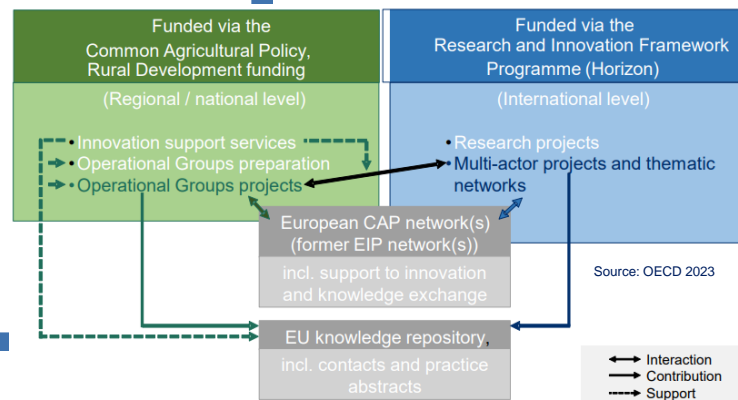




# Innovation & Digital technologies: complementarity of EU actions



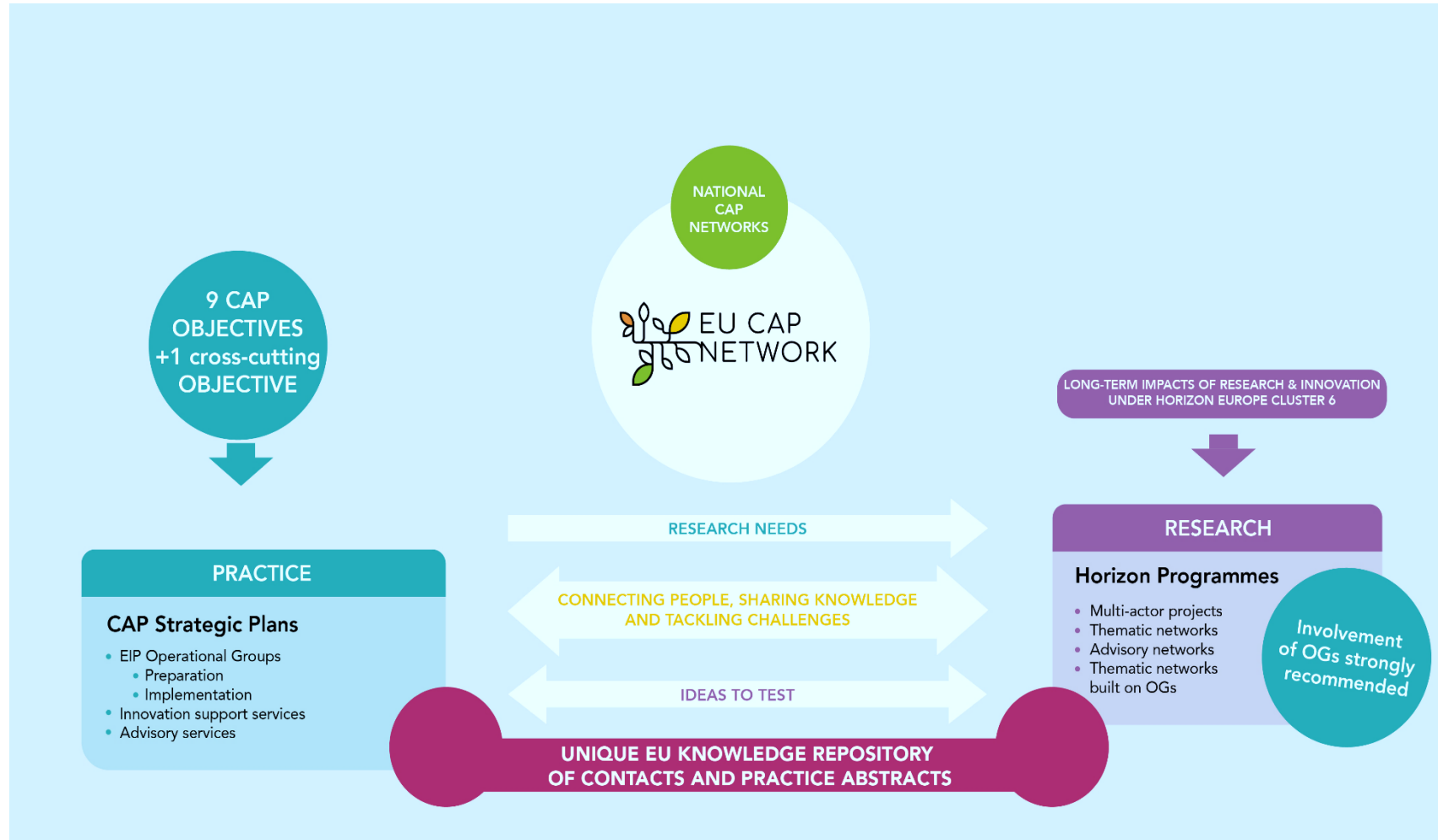
Interplay of HE clusters and DEP



Interplay of HE and CAP



# EIP-AGRI bridging practice and research



# Operational Group nominee for the EIP-AGRI Innovation Awards 2024

## Digitalisation



EIP-AGRI Operational Groups that demonstrate how digitalisation has great potential to increase profitability, improve working conditions for farmers, foresters and others, as well as to improve the environmental and climate impact of agriculture and forestry.

### Precision liming in Brandenburg

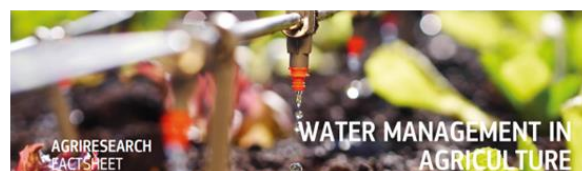
In Brandenburg (Germany), only 26% of arable land is in the optimal soil pH range, which results in considerable yield losses and reduced nutrient efficiency. To counteract soil acidification, this Operational Group has developed a **fully digitised site-specific soil acidity management** process and **decision support system** for **variable-rate liming**. It **includes sensor-based mapping**, a novel approach for lime requirement calculation and generates **variable-rate lime application maps**. The partnership consisted of research institutes, three farms, a consulting company and an IT service provider. The tool can also be used **in various other smart farming applications throughout Germany**.



CHECK THE **VIDEO PRESENTATION**  
[HERE!](#)

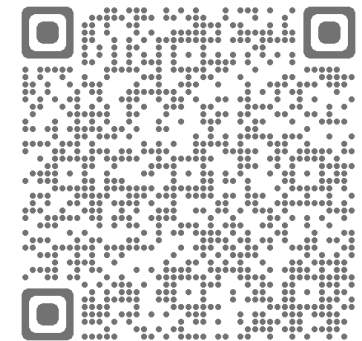


# What are the EU agricultural R&I priorities?



CHECK IT OUT  
↓

AgriResearch Factsheets



#Farm2Fork

#EUAgriFood

#EUSpace

# Innovation and digital technologies for farmers and rural communities

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

## DIGITAL AND DATA PROJECTS FOR AGRICULTURE AND RURAL AREAS

Key topics (2021-2024):

Assessing the impacts of digital technologies in agriculture

Potential of drones as multi-purpose vehicle

Data economy: effects of data sharing

Digital technologies for small- and medium-sized, farms and farm structures

Digital and data technologies for livestock tracking

Blockchain technologies in the agri-food sector

Open source solutions for edge, cloud and mixed model

Smart XG, last-mile and edge solutions for remote farming, forestry and rural areas

Markets for data, and digital technologies and infrastructure

Upscaling (real-time) sensor data for EU-wide monitoring of production and agri-environmental conditions

Enhancing working conditions and strengthening the work force through digital and data technologies

Digitalisation as an enabler of agroecological farming systems

Digital technologies supporting plant health early detection, territory surveillance and phytosanitary measures

## MISSION SOIL:

Validating and further developing indicators for soil health and functions

On site digital technologies to monitor stressors in plant and soil

CODECS

Digi4Live

HAMELEON

QuantiFarm

CRACK SENSE

ICAERUS

SCALEAGDATA  
MAKING DATA COUNT

4Growth

Phito

Spade  
Sustainable Precision Agriculture

CONNECT

GUARDIANS

XGain

And much more...



AGRIRESEARCH  
FACTSHEET

Digital transformation in  
agriculture and rural areas



WHEATWATCHER  
E-SPFdigit  
...

# R&I and digitalisation role for smart farming and rural areas

R&I has pivotal role to play to boost effectiveness, acceptance, and uptake of innovation and digital technologies, e.g. by



Increasing cost-effectiveness of digital solutions



Enhancing performance assessment opportunities



Developing technical solutions facilitating trust in data sharing

**Data and digital technologies** are instrumental to achieve competitiveness, environmental and socio-economic sustainability ambitions for agriculture and rural areas, for instance by:



- Supporting farmer's decisions
- Optimising the use of resources
- Automatising tasks
- Improving traceability and transparency along the supply chain
- Help farmers deal with greater complexity of sustainable farming approaches



- Providing access to e-services such as eHealth, retail, online banking
- Supporting decision making
- Access to information, entertainment and knowledge exchange
- Business opportunities

# Interactive innovation model

→ *multi-actor approach*



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

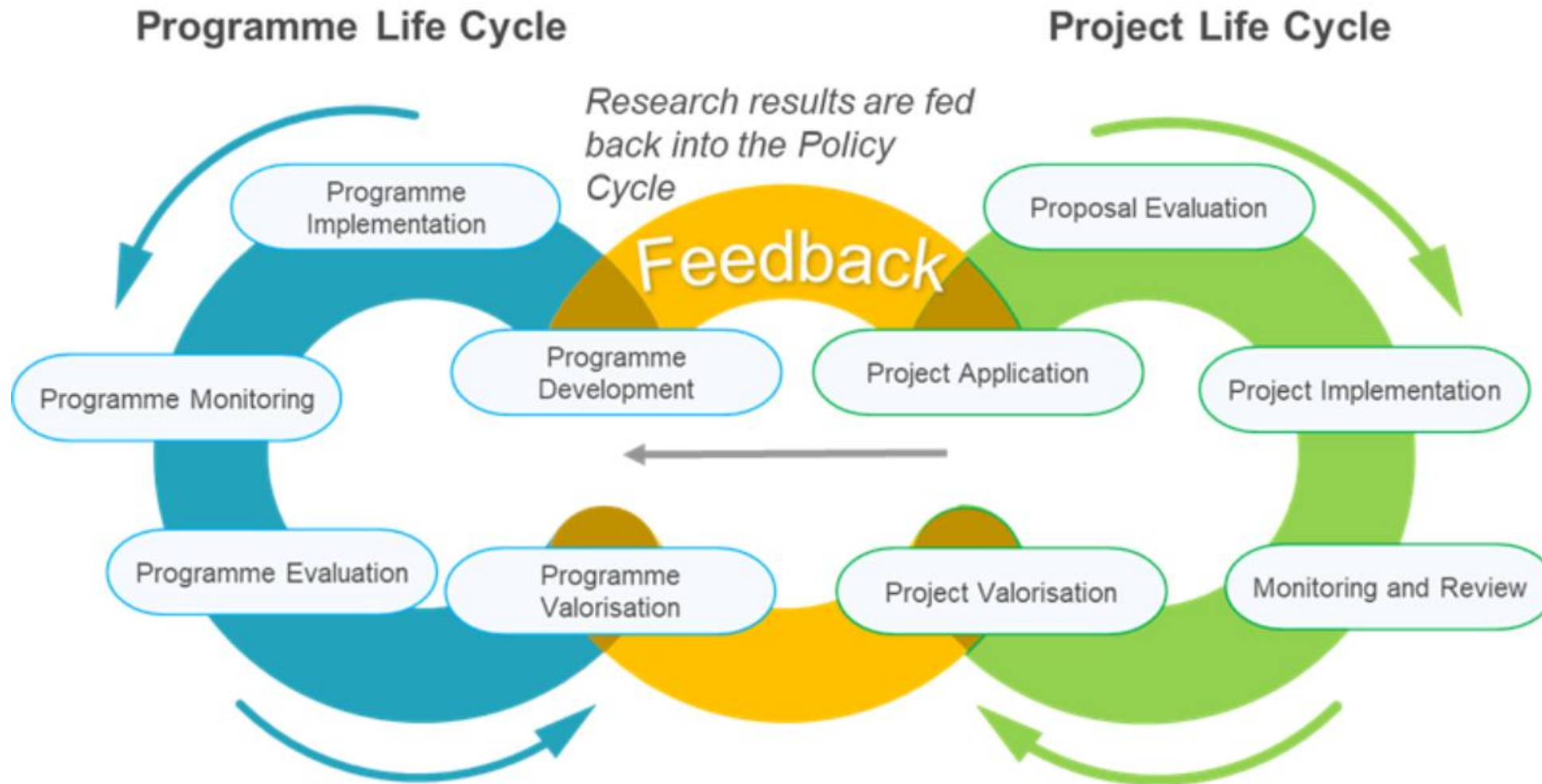
*– Commissioner Janusz Wojciechowski*

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!

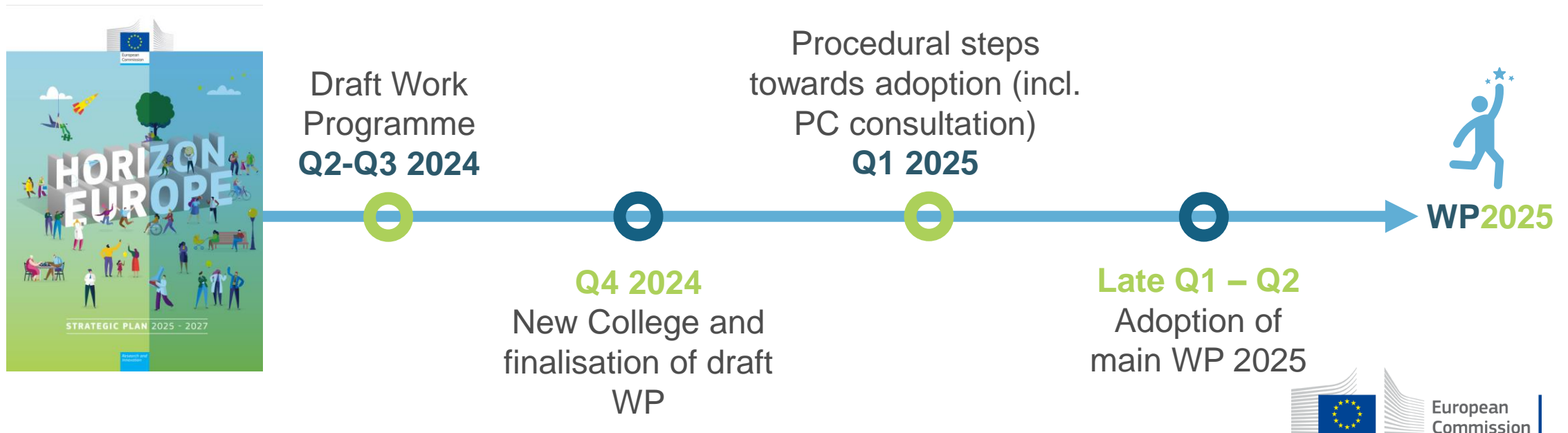
# Feedback to Policy





# Horizon Europe: Strategic Plan 2025-2027

- R&I supporting the **digital transformation** of food systems and agriculture, forestry, fisheries and aquaculture sectors will increase their sustainability.
- Emphasis will be placed on the **use of data in agriculture** and **sustainability performance of applied digital and data technologies**.
- The **data governance** including the **sharing of data** will be taken into account.
- The opportunities that **environmental observations** and use of data might offer to enable sustainable, resilient, effective and efficient food systems could be further explored
- Environmental observations will be made more accessible and interoperable, building user-tailored, integrated products and metrics using advanced **digital methodologies including AI**.



# Horizon Europe candidate partnership Agriculture of Data

## European Partnership Agriculture of Data

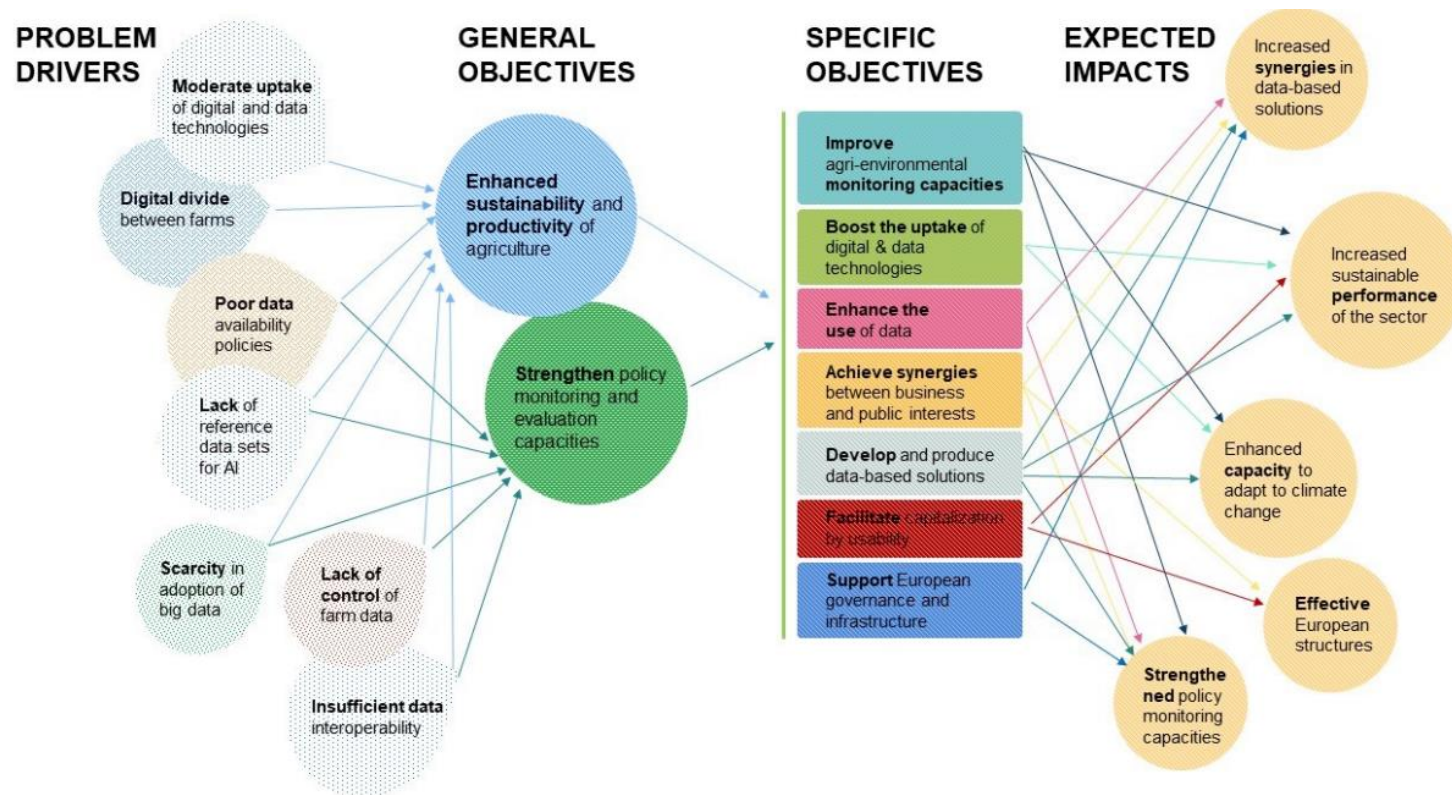
**What:** Support sustainable agriculture in Europe as well as policy monitoring and implementation by using the possibilities offered by digital and data technologies in combination with environmental observation and other agricultural data

**Who:** Co-funded by EU, with Member States and Associated Countries, involving ministries, funding organizations, research organisations, and key stakeholders (policy makers, sectoral organisations, space agencies, industry, etc.)

**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





# EUROPE'S CHOICE

POLITICAL GUIDELINES  
FOR THE NEXT EUROPEAN COMMISSION  
2024–2029

**Ursula von der Leyen**  
Candidate for the European Commission President



*“Farming is a core part of the European way of life and it must always stay that way”*

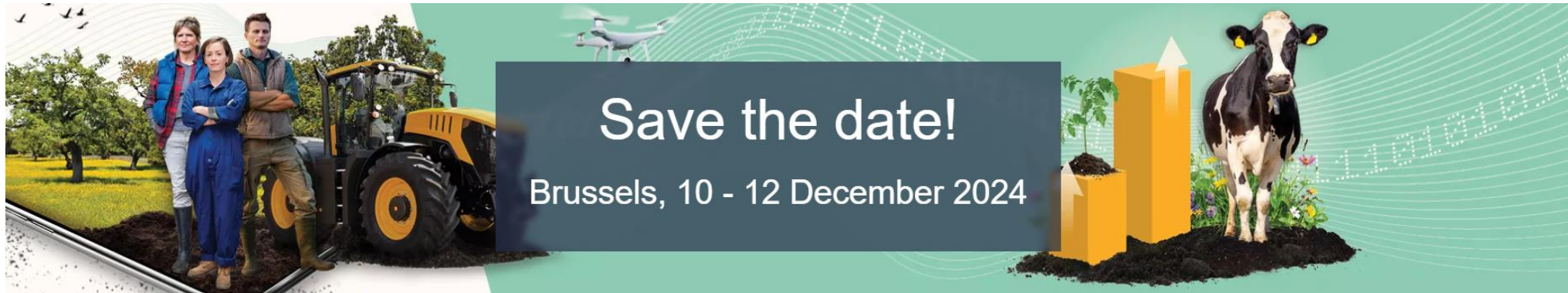
*“Put research and innovation at the heart of our economy”*

*“Boost productivity with digital tech diffusion”*

# Concluding remarks

- Several key initiatives at EU level supporting advancements in innovation, **digital and data technologies for agriculture** have been launched and new ones will start soon.
- Involvement of end users in the co-creation of **innovative solutions** is essential to **foster their uptake** and **improve their effectiveness**.
- Active exchanges across the actors involved in the **innovation ecosystem** (e.g. end users, industry, policy-makers) are necessary to fully exploit its potential for the agricultural sector and beyond.
- **Digital and data technologies** will continue to play a role in the future of EU agriculture by leveraging their **potential to address different challenges** (e.g. competitiveness, sustainability, resilience, profitability of the sector) and by **adapting to specific needs**.

# Looking Ahead: EU Agri-Food-days



## Programme

This year's event programme includes sessions on:

- the future of agriculture and food, building on the **conclusions of the Strategic Dialogue** and **in light of the upcoming Vision for Agriculture and Food**,
- the farmers' perspective on navigating modern agriculture,
- the **position of farmers in the food value chain**,
- **the outlook for EU agricultural markets, including drivers, trends, challenges and opportunities**,
- **sustainable competitiveness and trade policies** supporting food sovereignty,
- **research and innovation** for a competitive, sustainable and resilient agricultural sector,
- how **digitalisation and data sharing** contribute to a dynamic and forward-looking sector and
- what it is like to be a young farmer today.

More info: [EU Agri-Food Days - European Commission \(europa.eu\)](https://european-council.europa.eu/media/en/press-operations/infographic-117444.pdf)

# Thank you



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# EU strategy for digitalisation in agriculture and rural areas



- This **foresight** exercise aims to **explore the interplay between digital transition, policies and the resilience of the agricultural sector and rural areas**, against the backdrop of potential disruptive and transformative changes.
- Several **workshops** have been organized with COM experts, **MS representatives** and other stakeholders to discuss elements of the future strategy, such as enablers and building blocks.
- **Ongoing reflections** on how this will be integrated into **future policies**.

# Uptake: JRC Study

- Survey-based study on the state of play of Digitalisation in EU agriculture:
  - **assessment of the state of play of digitalization in the EU agriculture.**
  - It covers technologies such as precision farming, real time applications, terrestrial and aerial drones, tools on prices, sensors, artificial intelligence, blockchain, satellite imagery, big data and analytics, agricultural decision support systems, etc
  - investigate (i) **the use of digital technologies and services** on the farm, the scope of their use and its **implications for sustainability and resilience**, (ii) **bottlenecks and drivers for the adoption** of digitalization, by investigating financial support (i.e. investments, credits) and support services (such as advisors), infrastructure, skills and digital and data governance aspects, as well as (iii) the **propensity of EU farmers to pursue investments** in digitalization in the future. The target population of the survey will be **EU farmers.**
- Results foreseen by **end of 2024**



# Smart Farming

Moderated by [Vanja Bisevac](#), *European Agricultural Machinery Association (CEMA)*

**Francesco Iadecola**

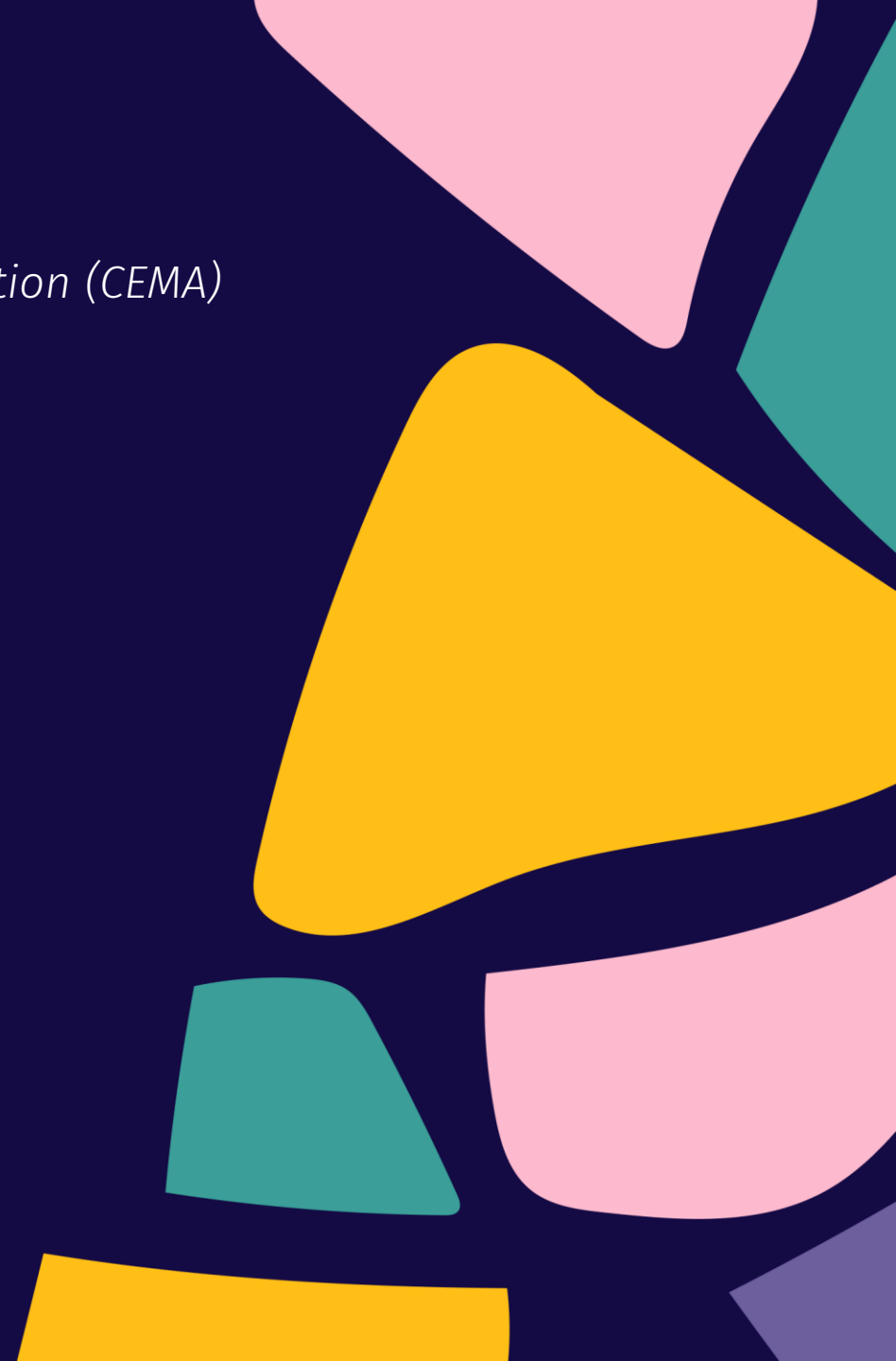
*Research Programme Officer, DG AGRI, European Commission*

**Ignacio Ruiz**

*Secretary General, ANSEMAT*

**Dr. Filippo Maria Renga**

*Founder of the Smart AgriFood Observatory, Digital Innovation Observatories,  
Politecnico di Milano*





# Synergy Days

BY SMARTAGRIHUBS | BARCELONA