Auditorium

8:30 - 9:45   **The interplay between the challenges, objectives, skills and capabilities of the players to foster the genesis and adoption of innovations**

Keynote speaker: Eduardo Cuoco, Director, IFOAM Organics Europe

Panel speakers:
- **Jaume Sio, General Director for Agriculture in the Catalan Government**
- **Bill O'Gorman, Professor, Director for Research, CEDRE, School of Business, South East Technological University (SETU)**
- **Thomas Lainé, European Project Manager, Bretagne Développement Innovation – EDIH Bretagne**

Moderated by: Adrien Guichaoua, ACTA (The French Agricultural Technical Institute)

9:45 - 10:00   **EDIHs pitches**

ENTIRE, Location Innovation Hub, DigiAgriFood & BOOST

10:00 - 10:30   **Empowering women in rural communities**

- **Irene López de Vallejo, Head of EU Affairs, CTIC Centro Tecnológico**
- **Sally Shortall, Duke of Northumberland Chair of Rural Economy**
- **Sara Cosgrove, Behavioural Coach**

Moderated by: Lorena van de Kolk, Schuttelaar & Partners

10:30 - 11:00   **Coffee break**

11:00 - 12:30   **Project workshops III - 11 running in parallel**

12:30 - 13:30   **Lunch break**

Auditorium

13:30 - 14:00 **European Digital Innovation Hubs: Building digital capacity in your region**

Presentation by 3 SMEs that have engaged EDIH services: The CUBE (Ireland), Asefor (Spain) & Dungarvan Enterprise Centre (Ireland). This will be followed by a panel discussion, hosted by EDIH ENTIRE, featuring the Location Innovation Hub, DigiAgriFood and BOOST.

14:00 - 14:10 **Inspiration talk: food losses and food waste**

A presentation by: Alba Graells Roca, Technician on Food Losses and Food Waste (Catalan Ministry Department of Agriculture, Farming, Fisheries and Food (DARPA)

14:10 - 15:00 **Boosting the potentialities of the agri-food sector by generating synergies with tourism**

Panel speakers:
- Dana Bonaldi, Coordinator of EU project activities, Digital Innovation Observatories, Politecnico di Milano
- Nina Cvar, Associate Researcher and Assistant Professor, University of Ljubljana
- Alfonso Bonet Pastor, Coordinator of European projects, Fundación Dieta Mediterránea

Moderated by: Dolores Ordoñez, AnySolution

15:00 - 16:15 **Project workshops IV - 10 running in parallel**

Auditorium

16:15 - 16:30 **Closing plenary**

The interplay between the challenges, objectives, skills and capabilities of the players to foster the genesis and adoption of innovations

Synergy Days

The interplay between the challenges, objectives, skills and capabilities of the players to foster the genesis and adoption of innovations

Moderated by Adrien Guichaoua, *The French Agricultural Technical Institute (ACTA)*

Jaume Sio

General Director for Agriculture in the Catalan Government

Eduardo Cuoco

TP Organics Head of Secretariat

Bill O'Gorman

Professor, Director for Research, CEDRE, School of Business,
South East Technological University (SETU)

Thomas Lainé

European Project Manager, Bretagne Développement Innovation, EDIH Bretagne

Introduction to Catalonia

Jaume Sió Torres

Head of the Technical Office

Department of Agriculture, Livestock, Fisheries and Food

October 2024

Cofinançat per la Unió Europea

Generalitat de Catalunya

Key Sociodemographic and Socioeconomic Features of Catalonia:

A Foundation for Agri-Food and Forestry Innovation

o Catalonia has **8 M inhabitants** (5 in the Barcelona metropolitan area)
  - o Approximately **10%** of the population lives in **rural areas**

o Catalonia's **economy is highly diversified**, with a strong presence in the industrial and service sectors
  - o **Agri-food sector** accounts for a significant part of industrial GDP

o Agricultural and forestry play fundamental role in the **rural economy**
  - o Additionally, they carry significant **cultural and historical weight**

o Catalonia faces an **aging population** and **rural depopulation**
  - o But certain rural counties integrated into agri-industrial economic circuits have experienced strong demographic growth
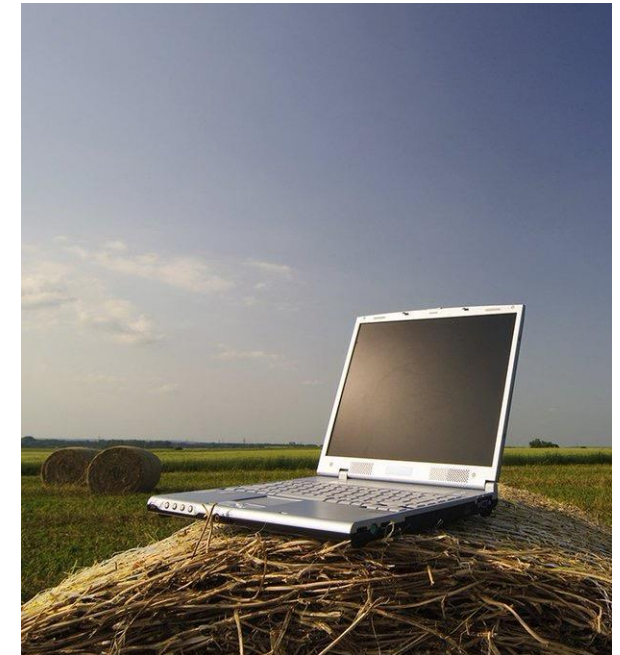
The Catalan food system

Some basic facts

o Agri-food is **the largest sector** of the Catalan economy, equivalent to **19% of its GDP**

o It is **one of the most dynamic export sectors**. The volume and value of its exports are growing year after year

o The **meat sector** is the largest processed food sub-sector, followed by fine food, vegetable oils and wine

o The food and drink industry in Catalonia accounts for **23% of the sector turnover in Spain**

Agri-food exports 2023

€ 15,328 M
exports

90%
export value growth
(2013-2023)
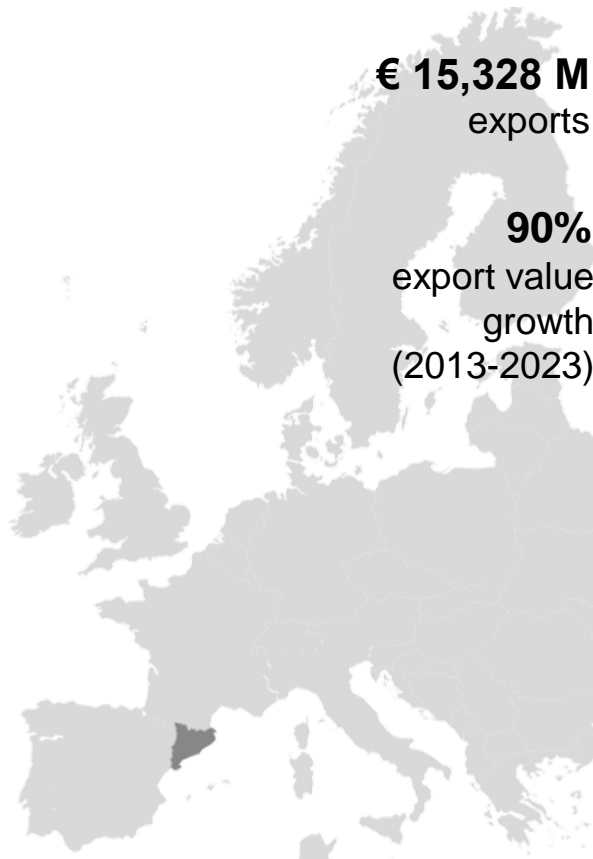
The agri-food sector in figures (2021)

| Primary food sector | € 6,040 M annual turnover |
| 54,972 agricultural holdings | 55,022 employees |

| Food and beverage processing industries | € 31,729 M annual turnover |
| 5,017 companies | 92,888 employees |

| Auxiliary industry | € 10,462 M annual turnover |
| 872 establishments | 27,690 employees |

The R+D+i system in Catalonia

Annual expenditure on R&D (2021)

Public sector: € 1,573 M
Private sector: € 2,509 M

Number of researchers (2021)

Public sector: 30.955
Private sector: 16.719

Number of scientific publications (2020)
(per million inhabitants)

Catalonia: 4.473
European Union: 1.289
United States: 1.357

- **3,1% of European funds on R+D+i** from the current Framework Programme obtained by Catalonia (2022)

- **362 spin-offs** from universities, research centers and ICTS (1997-2021)

- **42 CERCA** research centers
- **276 ICREA** researchers

- **Strong innovator** in the 2023 European Innovator Ranking
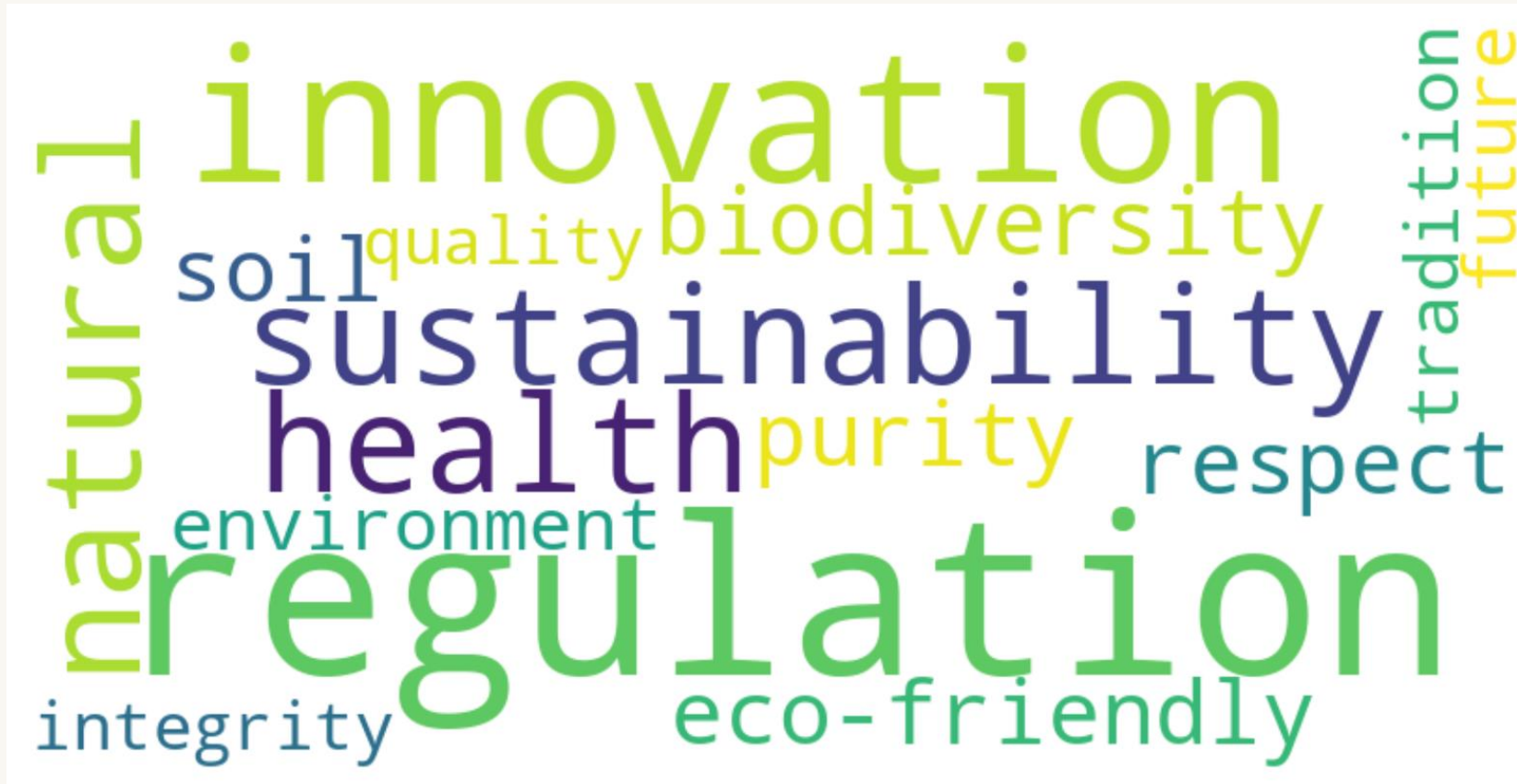
Main DARP's R+D+i assets

IRTA — Institute of Agrifood Research and Technology

INCAVI — Institut Català de la Vinya i el Vi

CTFC — SCIENCE FOR FOREST MANAGEMENT, BIODIVERSITY & BIOECONOMY

Organic, naturally innovative!

Eduardo Cuoco,

TP Organics Head of Secretariat

Synergy Days 2024

Naturally innovative

Organic Agriculture is a production system that sustains the health of soils, ecosystems, and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects.

Organic Agriculture combines tradition, innovation, and science *to benefit the shared environment and promote fair relationships and good quality of life for all involved.*

Definition of Organic, IFOAM General Assembly, 2008

https://www.ifoam.bio/why-organic/organic-landmarks/definition-organic

TPorganics
Shaping Research & Innovation

» Organic Innovations

Organisational Innovation - Loof&Bezen (BE)

Kaat, Ona and Tom

Organisational Innovation - Loof&Bezen (BE)

» Challenges
  » Limited access to land
  » Costs and risks to start a farm
  » Instability/insecurity of incomes for farmers
  » Limited awareness of consumers regarding farmers challenges
  » Limited access to fresh and seasonal fruits and vegetables

TPorganics
Shaping Research & Innovation

Organisational Innovation - Loof&Bezen (BE)

» Results
  » Lively CSA with a community of ~250 families (around 500 persons, adults and kids)
  » Use of public land
  » 3 fulltime farmer jobs paid,
  » Green space at disposal from the members
  » Educational center for members, schools and other group: Ona and Kaat will give you a comprehensive tour of their farm and project!
  » Social farming

https://www.fao.org/agroecology/overview/overview10elements/en/

16

TPorganics

Shaping Research & Innovation

Social innovation – Cilento Bio-District (IT)

Social innovation – Cilento Bio-District (IT)

» Challenges
  » "Turistification" of the coastal area and desertification of the rural area
  » declining agricultural practices
  » economic hardship
  » environmental degradation

https://www.fao.org/agroecology/overview/overview10elements/en/

TPorganics
Shaping Research & Innovation

Social innovation – Cilento Bio-District (IT)

https://www.fao.org/agroecology/overview/overview10elements/en/
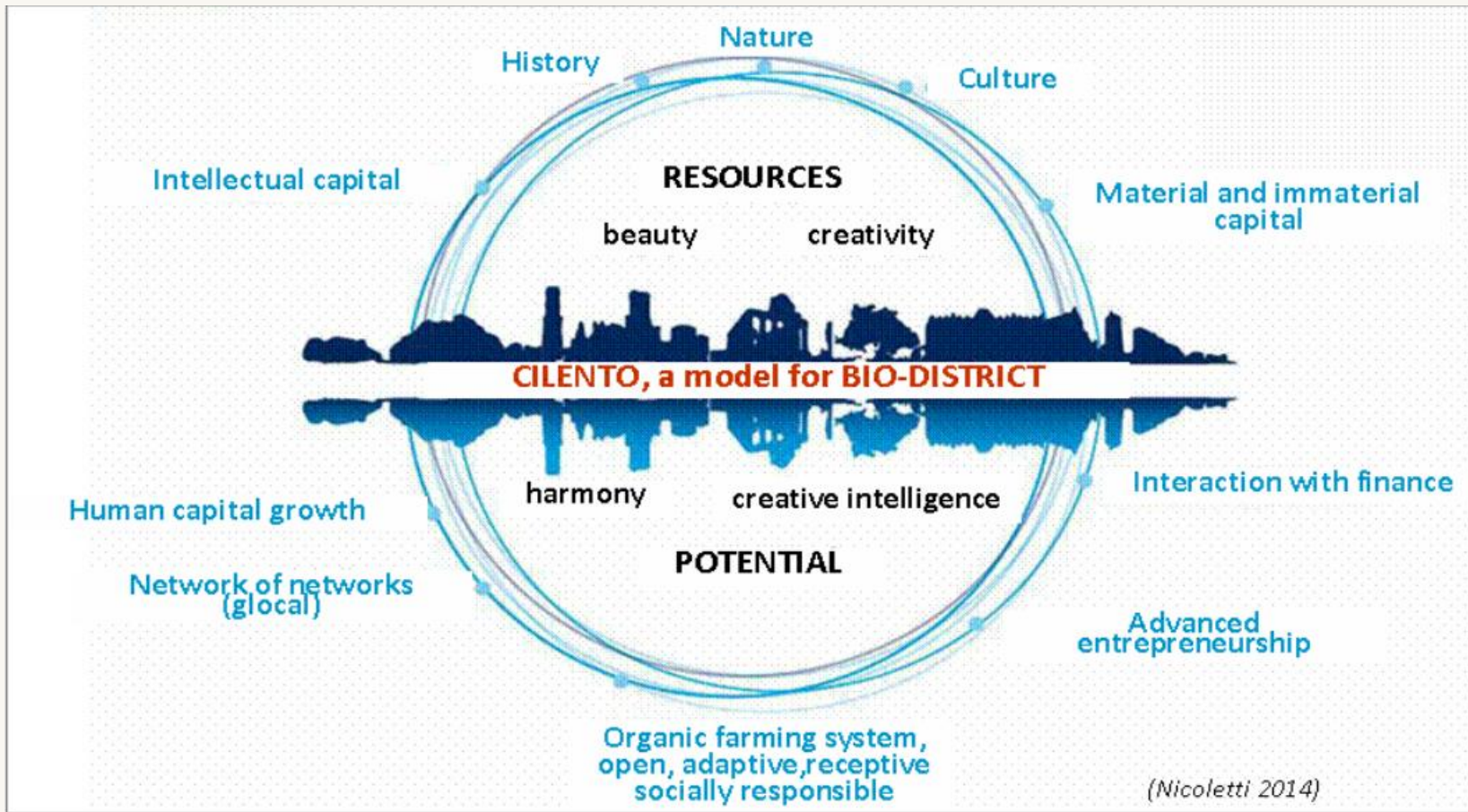
Social innovation – Cilento Bio-District (IT)

» Results
  » Partnership of organic operators, Local Authorities, HORECA and citizens
  » Increased Organic Production
  » Job Creation
  » Tourism Growth
  » Community Development
  » Organic Awards in 2022

https://www.fao.org/agroecology/overview/overview10elements/en/

TPorganics

Shaping Research & Innovation

Technological innovation – Retailing - Naturasì (IT)

naturasì
bio per vocazione

Mario Cicolecchia
Head of Logistics

Today, we are convinced that technological innovation
is capable of helping many of our daily activities.

TPorganics
Shaping Research & Innovation

Objectives Improve working conditions

» Improve quality
» Improve efficacy
» Improve efficiency

Technological innovation – Naturasì (IT)

» Results
  » Better working conditions
  » New career paths for employees
  » Improved cost and space optimisation
  » Better traceability
  » Decreased electricity consumption

Technological Innovation – Valoritalia

Valoritalia, a leader in certification and control in the agri-food sector, has contributed to the **IOF2020** project by applying **IoT technologies** to improve the certification process of organic and quality food products.

Objective:
•Streamline and **digitize certification processes** in agriculture, making controls more efficient and accurate through **real-time data** and automated systems.

Innovative Application:
•Development of a **smart certification system** that uses IoT devices to **monitor farming activities** (e.g., soil conditions, pesticide usage) and ensure compliance with organic and quality standards.

Continuous data collection from the field allows for **remote verification**, reducing the need for on-site inspections and improving **traceability**.

Impact:
•**Increased transparency** and **trust** in certified products, with **faster and more accurate** certification procedures.
•Supports farmers in ensuring **compliance with regulations** while improving **sustainability** and **resource management**.
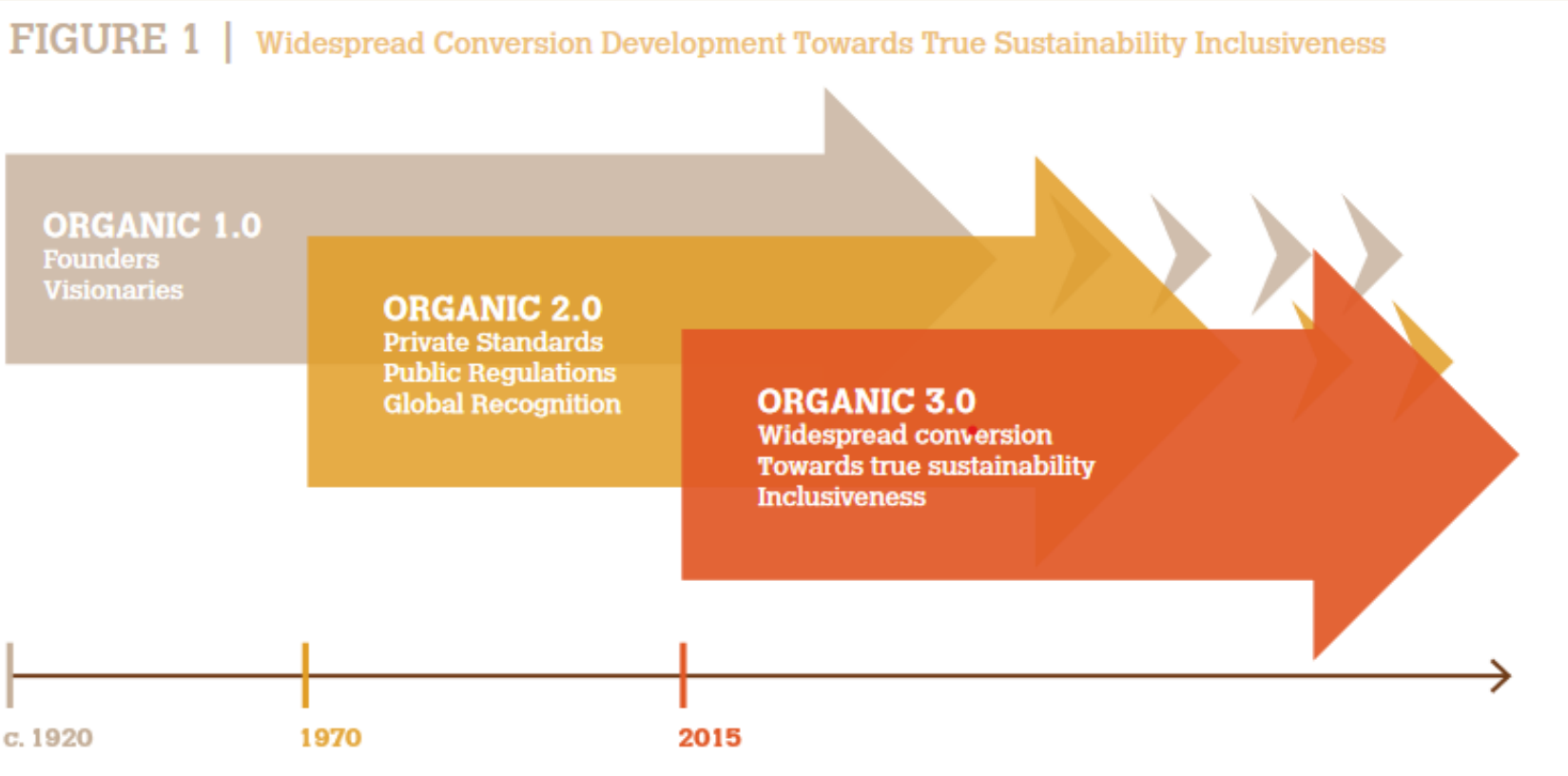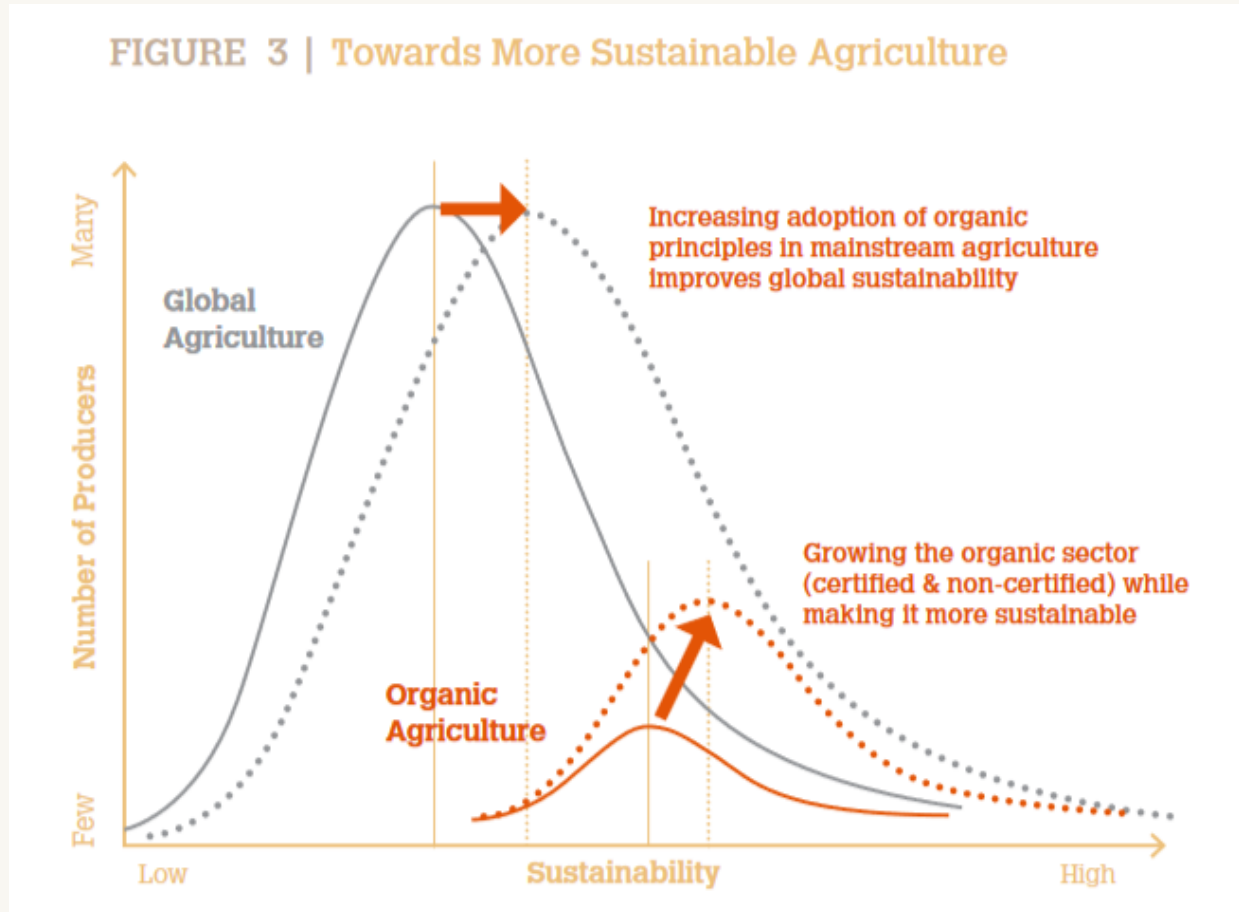

Watch the video:
https://youtu.be/yq5mm-3drmk

» Conclusion

Evolution of the Organic movement

FIGURE 1 | Widespread Conversion Development Towards True Sustainability Inclusiveness

ORGANIC 1.0
Founders
Visionaries

ORGANIC 2.0
Private Standards
Public Regulations
Global Recognition

ORGANIC 3.0
Widespread conversion
Towards true sustainability
Inclusiveness

c. 1920   1970   2015

Organic 3.0: For Truly Sustainable Farming & Consumption,
https://www.ifoam.bio/why-organic/organic-landmarks/organic-30-truly-sustainable

Innovation for public good

FIGURE 3 | Towards More Sustainable Agriculture

Organic 3.0: For Truly Sustainable Farming & Consumption,
https://www.ifoam.bio/why-organic/organic-landmarks/organic-30-truly-sustainable

TP Organics

» European Technology Platforms recognised by the European Commission.

» Following the 4 Principles of Organic Agriculture, FAO's 10 Elements of Agroecology, and an inclusive concept of innovation

» Represent 150 members, including 9 National Technology Platforms (NTPs), 5,8 millions farmers, 5 000 companies, 2 500 researchers, 20 millions citizens

» Co-creation process with major stakeholders for the Strategic Research & Innovation Agenda

» Follow us on online!

Fostering agrifood innovation in the Catalan S3 context

Jaume Sió Torres

Head of the Technical Office

Department of Agriculture, Livestock, Fisheries and Food

October 2024

Cofinançat per la Unió Europea

Generalitat de Catalunya

Science, innovation and policy needs: timeframe differences

o   Societal challenges are complex

o   Science and research need time

o   Knowledge transfer is not always successful

o   Innovation: trial and error

o   Policy makers need science-based data

o   Public demands immediate action

The theory: three coexisting frames for innovation policy

1. **Support for fundamental science and R&D**: contribute to growth and address market failure in private provision of new knowledge.

2. **Innovation for knowledge creation and commercialization:** building links, clusters and networks, and on stimulating learning between elements in the systems, and enabling entrepreneurship.

3. **Transformative innovation:** linked to contemporary social and environmental challenges such as the Sustainable Development Goals – RIS3CAT
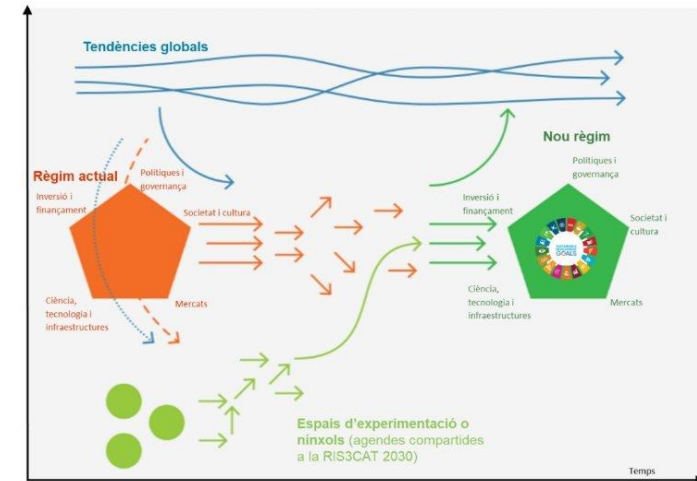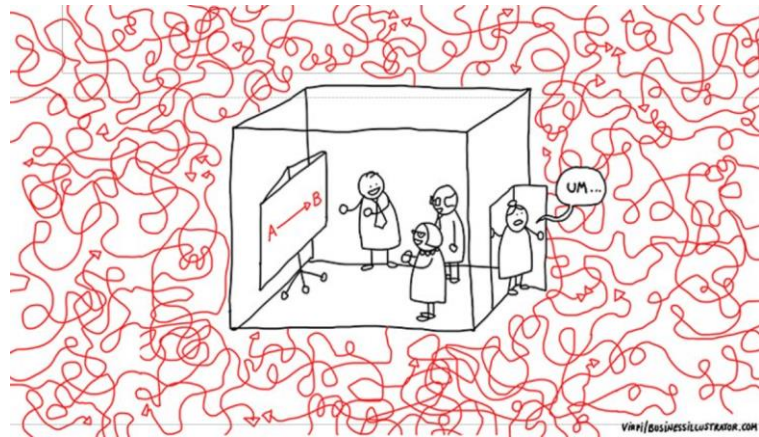
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What role can play a Regional Ministry of Agriculture?

1. Support for fundamental science and R&D:

o Direct finantial support to agrifood research centers: IRTA, AGROTECNIO, CTFC,...)

o Financing applied research: Climate Funds (Activities for climate mitigation and adaptation)

o Information Exchange and Networking facilitation between agrifood research centres and universities. Discovering sinergies, complementarities, shortages for complex issues: Soil Carbon Sequestration

What role can play a Regional Ministry of Agriculture?

2. Innovation for knowledge creation and commercialization

o Technology and Knowledge Transfer: Annual Plan for Knowledge Transfer

o Training: Agricultural Schools

o Open calls for demostrative projects from research centers

o Operational Groups. Open calls for innovative pilot projects, involving universities and research centers.

o Open calls for cooperation between research centers and private companies for climate mitigation and adaptation (Fons Climàtic)

o Public support to innovative initiatives under the umbrella of a variety of Government Strategies:

- CAP Strategic Plan,
- Food Strategic Plan for Catalonia
- Innovation for agrifood industries

o Participation in European Projects (Administration stakeholder)

o Data provider

What role can play a Regional Ministry of Agriculture?

3.Transformative innovation

- Addressing very complex place-based social, environmental and economic challenges

- No entity or actor can address those challenges in isolation from their area of knowledge or their competences

- Complex challenges do not have obvious solutions, they require coordinated multilevel interventions by multiple actors guided by a directional goal and the transformation of the current socio-technical systems

- Challenge Office – Administration and Agrifood Reserach Centers cooperating and co-creating policy oriented data, for science-based policy making

- BioEconomy Strategy:
  - BIOHUB CAT
  - CIDAF

- Resilience Landscapes

- Shared Agendas – RIS3CAT

From 8 villages to the entire country: the growth of a strategic need
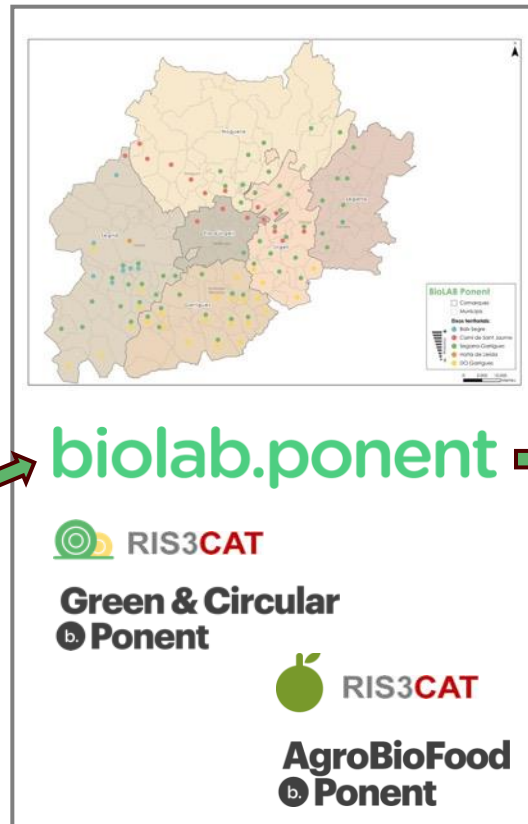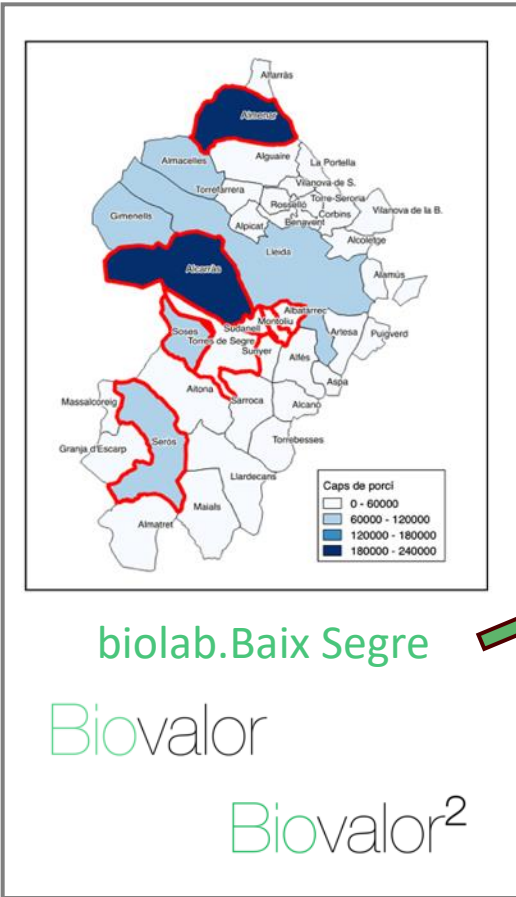
BIOHUB CAT one-stop-shop to support the development of circular and sustainable bioeconomy

Objectives

1. Promoting services for entrepreneurship and innovation to reduce the risks of circular bioeconomy businesses

2. Creating the conditions for attracting bioindustries and enhancing the competitiveness of existing ones.

3. Increasing the role of the RDTI ecosystem in addressing barriers faced by companies

4. Increasing public and private demand and services linked to the circular bioeconomy

5. Promoting policies and instruments to support the bioeconomy

6. Building alliances with European key actors

Main lines of activity

BIOHUB CAT Tech
Open access preindustrial plant for validation of biotechnologies and bioproducts

BIOHUB CAT Industrial Park
Promotion of specialised industrial areas for the development of bioindustries

BIOHUB CAT Business services
Portfolio of specific services for companies and business models

BIOHUB CAT Accelerator Lab
Spaces and programs to support bioeconomy entrepreneurship and businesses

BIOHUB CAT Feedstock Push
Observatory : platform for locating and characterising local renewable biological resources

BIOHUB CAT Arena
Modelling of territorial investment planning and enhancement of existing capacities

BIOHUB CAT Sustainability constrains
Definition and application of impact assessment parameters for decision making

BIOHUB CAT Skills
Identification of professional profiles and promotion of the training offer

BIOHUB CAT RDI Nodes
Enhancing the capacity and orientation of the RDTI ecosystem to support bioeconomy businesses

BIOHUB CAT Market Pull
Replacement of fossil consumables by bioproducts in the different sectors of activity

BIOHUB CAT EU links
Missions and exchanges of experiences with leading European regions in the development of the bioeconomy

BIOHUB CAT Policy Instruments
Development of public policies and instruments to support the bioeconomy

BIOHUB CAT Awareness: awareness, communication and dissemination

CIDAFcat: one-stop shop to support companies to improve agrifood and forestry business and production processes through digitalization.

Specific Objective	Lines of activity	Examples
O1 **Reducing digital gaps**	Success cases showcase	Shared newsletter with the associated partners
	Training	Agriculture 4.0 course (FEMAC)
	Digital diagnose and planning	Digital roadmap service (Eurecat)
	Partner search	Catalogue of forest sector digital tools (WoodMarkets-CTFC)
O2 **Boosting data use and experimenting**	Data	Catalan Forest Observatory (CTFC)
	Experimentation infrastructure	**agrifoodTEF.eu**
	Digital solutions	Promotion of associated partners services
O3 **Boosting new business models**	Innovation ecosystems	X-Agritech network (IRTA)
	Funding	APTEnisa Investors Network
	Business development suport services	Market studies, strategic planning, PoC
O4 **Boosting demand of digital services**	Challenges, needs and opportunities	Collaboration network, innovation camps
	Digitization services promotion	Service access incentives
O5 **CIDAFcat promotion and positioning**	CIDAFcat promotion	Participation in events. workshops and conferences
	CIDAFcat positioning	Participation in EU projects and high-level discussion forums

Place-based and challenge-led shared agendas (ecosystem-based missions)

Through **participative governance models** and with a systemic and transformative innovation approach, they promote collective action to address complex challenges and green and just transitions

1. **APPROACH**: Stakeholders develop a shared systemic understanding of the challenge or problem they want to address (taking into account global trends, rules and routines of dominant systems, emerging alternatives, affected groups and environmental impacts) and where they want to go (shared vision of the future)

2. **ACTION**: Actors, committed to green and just transitions, collaborate in experimental spaces to explore, develop and test possible pathways and alternatives

3. **FORMATIVE EVALUATION, LEARNINGS AND ADOPTION OF ALTERNATIVES**: generation of new knowledge and evidence that facilitate the adoption of alternatives and the acceleration of green and just transitions

40

Terres de Lleida, Pirineu i Aran Shared Agenda

- Shared understanding about the opportunities related to the bioeconomy for generating economic and social opportunities and value within the territory, engaging local stakeholders into transformative action
- As a result, reorientation of priorities towards building the necessary infrastructures for the economic transformation, emerging alternatives, rethinking incentives and policies, valorisation of endogen resources through new value chains and business models and creation of new capacities and skills

Video of the Shared Agenda explained by its main actors
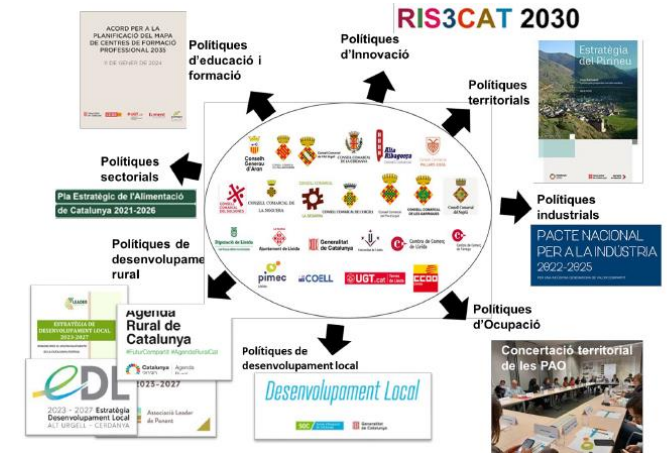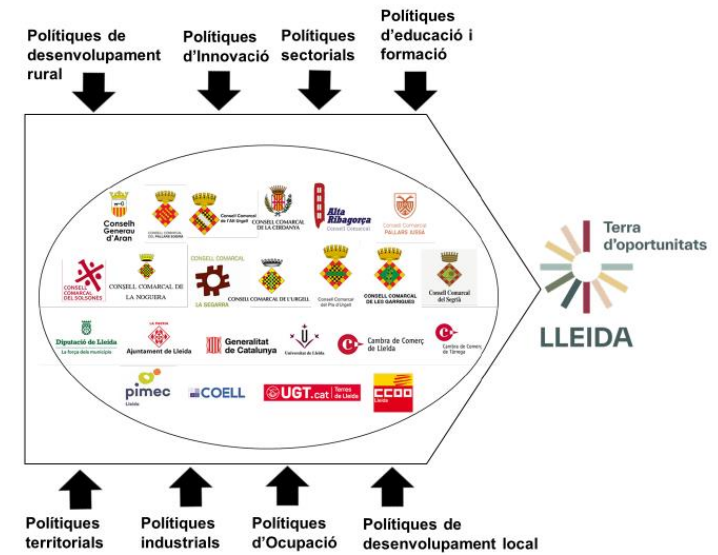
Department of Agriculture, Livestock, Fisheries and Food

www.gencat.cat

NEW DEPARTURES:
INTO RURAL ENTERPRISE LANDSCAPE IN IRELAND

Professor Bill O'Gorman

Centre for Enterprise Development and Regional Economy (CEDRE)

South East Technological University (SETU)

15th October 2024

DEMOGRAPHICS:

- CATCHMENT AREA POPULATION 90,000

- SPANNING 3 LOCAL AUTHORITIES

- DUNGARVAN POPULATION = 10.400

- 2 MAJOR INDUSTRY AREAS WITHIN 50 KM (WATERFORD AND CLONMEL)

- 1 MAJOR INDUSTRY AREA WITHIN 80 KM (CORK)

- 4 UNIVERSITIES WITHIN 80 KM (SETU, UCC, MTU AND TUS)

- MAINLY RURAL AND COASTAL

- MAJOR BRAIN-DRAIN

- GOOD ROADS BUT POOR PUBLIC TRANSPORT

- GOOD DIGITAL INFRASTRUCTURE
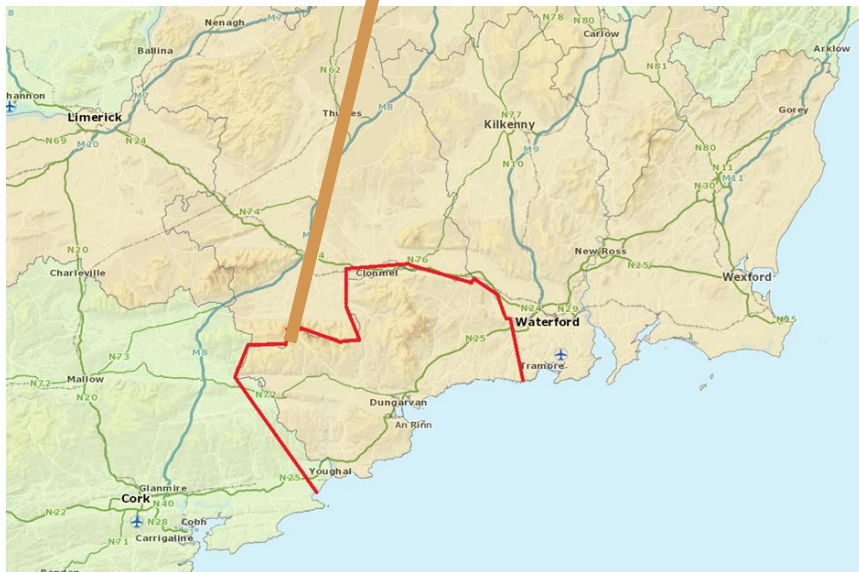
NEW DEPARTURES: INTO RURAL ENTERPRISE LANDSCAPE IN IRELAND

- **Dungarvan Enterprise Centre's (DEC)** strategic plan = support technology and innovation capability and knowledge growth into Dungarvan and West Waterford region;

- **Facilitating partnerships** between local entrepreneurs, enterprises (both SMEs and multinationals), rural communities, HEI, research centres, and enterprise support agencies.

- **Transferring and applying technology** developed in HEI research centres to **enhance farm efficiencies** in production and energy use, food production and embed the circular economy in the region.

- Dungarvan and West Waterford a "**test-region**", and "**cooperative living laboratory**" for applying AgriTech and related research innovation and technology.

STRATEGIC PLAN BASED ON:

7 agri-tech support centres/agencies; 3 companies; 1 government department; and 1 farm representative body were asked:

1. Approximately how many enterprises is your organisation working with in the Agriculture sector?

2. In your opinion, what are the challenges to the growth of this sector?

3. How is your organisation addressing these challenges?

4. What type of supports does your organisation provide to new startups in this sector?

5. Would your organisation be interested in working with DEC to develop Dungarvan and West Waterford as a "test-region", a "cooperative living laboratory" for applying AgriTech and related research innovation and technology into the region?

STRATEGIC PLAN BASED ON:

Responses:

Creating a "test-region", a "cooperative living laboratory" **would be beneficial**

- to support the transfer and increase of technology uptake;

- for researchers, entrepreneurs, emerging, existing enterprises, and farm communities;

- to provide a framework, network, steps, and information to increase technology transfer and the uptake of technology that will educate farmers and farm communities;

- to building resilience and efficiency into the agri-system.

PARALYSIS OF SUPPORT

CHALLENGES:

1. Understanding Agri-community barriers to using advanced technologies

2. Articulate the barriers knowledge generators face in diffusing their knowledge and expertise into farm communities

3. Mitigate the barriers faced by companies introducing farm communities to digital solutions

4. Identify and benefit from international good practices

5. Design and implement an **integrated collaborative engagement** model

Thank You

william.ogorman@setu.ie

And

bill@wogorman.onmicrosoft.com

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Implementation of European strategy in a regional context

Brittany Region, France

Synergy Days, Barcelona, 15th October 2024

Thomas LAINE
Project Manager – Europe

BRETAGNE DÉVELOPPEMENT INNOVATION

Regional Economic Development and Innovation Agency of Brittany

Région BRETAGNE
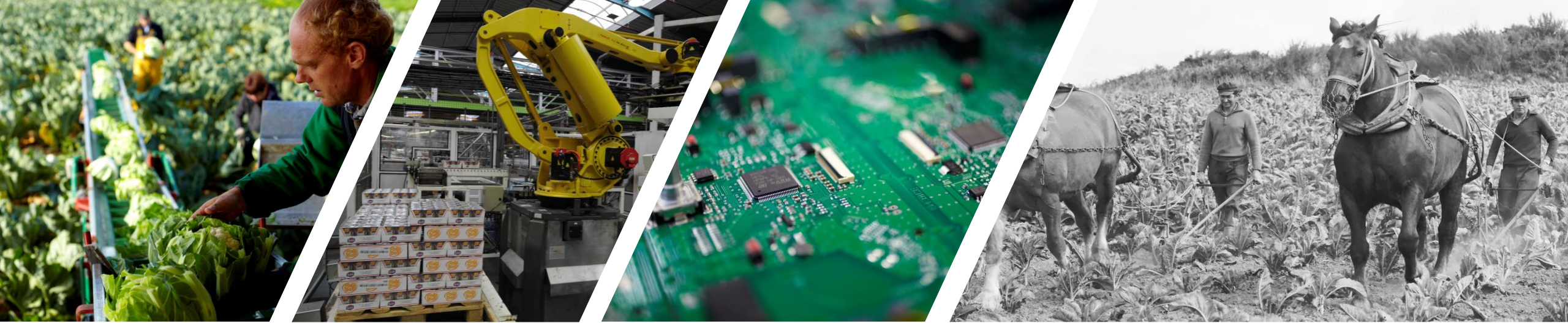
Regional Context and History

- A strong agricultural heritage
- A Digital Pioneer Land
- Effects of Modernization
- Recent Decentralization

© Emmanuel Pain

Challenges & Constraints

- Multi-level Governance
- Planification / Decentralization
- International competition and climate change
- Timeframes

- Private sector influence and Large-scale cooperatives
- Technology Adoption and Social Issues
- Generational gaps
- Skills and labor scarcity

© Emmanuel Pain

Solutions

- Role of S3, Observatory and Mapping
- Enhance cross-fertilization for innovation
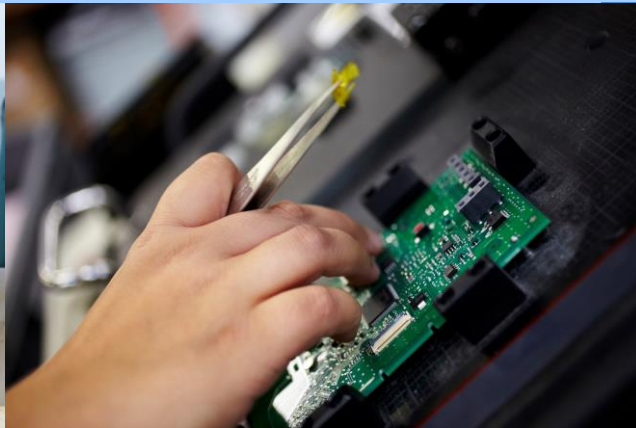
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Solutions

- A dense ecosystem

- A subsidiarity principle & systemic approach

© Emmanuel Pain

Solutions

- Create new imaginaries
- Enhance collaborative innovation

Solutions

- Create new imaginaries
- Enhance collaborative innovation

CHICK&CARE
AUTOMATIC DETECTION AND MONITORING OF ANIMALS

A camera scans the farm building (using a cable attached to the building), detects any sick or dead animals via thermal imaging and sensors and sends a notification to the farmer indicating the exact location of the animal. Our AI recognition technology was initially trained on chicks, but could subsequently be transposed to other types of livestock.
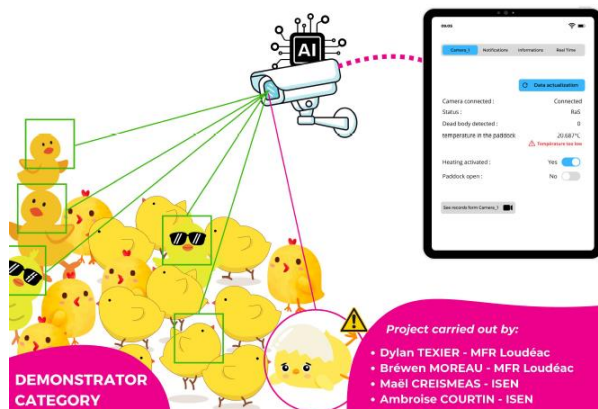
WHY?
- Save time
- Respond faster to incidents
- Less stress for the farmer

KEY FEATURES
- ✓ Ambient temperature sensor
- ✓ RGB and thermal images taken at regular intervals
- ✓ AI image analysis
- ✓ Notifications and alerts

KEY AI FIGURES:
- 563 training images
- 13,012 chicks analysed
- Designed to ignore human figures

DEMONSTRATOR CATEGORY

Project carried out by:
- Dylan TEXIER - MFR Loudéac
- Bréwen MOREAU - MFR Loudéac
- Maël CREISMEAS - ISEN
- Ambroise COURTIN - ISEN

COWS'LIGHTS
INFORMATION AT THE SPEED OF LIGHT

To access management data about their operations and livestock, farmers usually rely on specialised computer software. Our solution delivers crucial farm management information at a glance, minimising the need for farmers to constantly check their computers. Thanks to our light-up unit that plugs in to the cow's identification collar, farmers can quickly identify and address any issues.

KEY FEATURES
- The unit features a flashing LED.
- An API is queried to detect anomalies.
- Farmers can view the anomalies on their computer or telephone.

THE 5 FEATURES OF THE LED
- Late for milking
- Lameness
- Heat detection
- Cow should be dried off
- Cow is not ruminating

Plug-in unit with LED

TECHNICAL SPECIFICATIONS
- ✓ A Raspberry PI board integrated into the collar
- ✓ LoRaWAN transmission protocol
- ✓ Java code (version 21) for data interpretation

IDEATION CATEGORY

Project carried out by:
- Clément LE TESTE - Kerlebost
- Valentin BUAN - Kerlebost
- Glenn LE GUYADER - Kerlebost
- Camille ROUTIER - Kerlebost
- Timothée GAROT - EPSI Rennes

FARM'ACIE
MANAGE DRUGS AND PRESCRIPTIONS EFFORTLESSLY

Introducing Farm'Acie, the mobile app designed to help you manage livestock medication. With Farm'Acie, you can effortlessly track treatments and monitor drug stocks. It's your digital health record for every animal on your farm.

WHY?
Managing medications can be challenging, with concerns like expiry dates and specific treatments for different animals.

Monitoring herd health is essential, yet time-consuming.

WHO CAN BENEFIT?
- Farmers having difficulties keeping track of their stock of drugs.
- Farmers looking to simplify the health management of their herd.

APP FEATURES
- ✓ Drug stock tracking
- ✓ Expiry date tracking
- ✓ Herd health monitoring
- ✓ Easily add animals to the app
- ✓ Easily add drugs
- ✓ Easily edit information (drugs and animals)
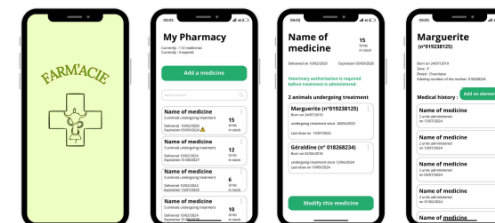
DEMONSTRATOR CATEGORY

Project carried out by:
- Camille PROFICHET - CFA Caulnes
- Maxime COGNARD - CFA Caulnes
- Thibaud LAMON - EPSI
- Arwen DURAND - CFA Caulnes
- Jean-Baptiste LUCAS - EPSI

© Emmanuel Pain

Thank you !

Thomas LAINE
Project Manager – Europe

t.laine@bdi.fr

International Day of Rural Women

Empowering women in rural communities

Moderated by Lorena van de Kolk, *Schuttelaar & Partners*

Irene López de Vallejo

Head of EU Affairs, CTIC Centro Tecnológico

Sally Shortall

South East Technological University (Ireland)/ Newcastle University (UK)

Sara Cosgrove

Behavioural Coach

SMEs that have engaged in EDIH services

The CUBE

Ireland

Asefor

Spain

Dungarvan Enterprise Centre

Ireland

European Digital Innovation Hubs: Building digital capacity in your region

Agenda

- SMEs that have engaged with EDIH Services
- The CUBE (Ireland) - Caroline Hofman
- Asefor (Spain) - Manuel Beiro
- Dungarvan Enterprise Centre (Ireland) – Stephen Barnes

- Panel, hosted by EDIH ENTIRE, Hazel Peavoy
- Location Innovation Hub, Joonas Jokela
- DigiAgriFood, Maria Michalopoulou
- BOOST, Marieke Smidt

ABOUT US...

- The CUBE is funded by Enterprise Ireland under the Regional Enterprise Development Fund (REDF), with support from Laois County Council.

- Located in Laois, but we have a regional and national remit.

- Portlaoise has been designated Ireland's first Low Carbon Town, leading the way in sustainability and drawing in businesses sharing a vision of a greener future. The CUBE plays a key role in achieving this.

- Officially opened in March 2023.

- 10,000 Square Foot Building, spanning over 3 floors.

- Full occupancy on top two floors; EU Just Transition Team, training and meeting room on ground floor.

- Part of the Siro and Vodafone GigaBit Hub Initiative. The CUBE is the eighteenth GigaBitHub to be announced under SIRO and Vodafone's GigaBitHub initiative.

The CUBE
LOW CARBON CENTRE OF EXCELLENCE

WHY WE CHOSE TO ENGAGE WITH EDIH ENTIRE...

- As a relatively new project, we needed guidance on the digitalization and sustainability needs of businesses in the Midlands region.

- What are the challenges and opportunities for businesses and digitalisation in the region?

- What supports do businesses need for their digital transformation?

- The Midlands region is home to a number of clusters, including Advanced Manufacturing, Engineering, ICT, Life Sciences, and Food and Drink – What are potential synergies in tandem with these clusters?
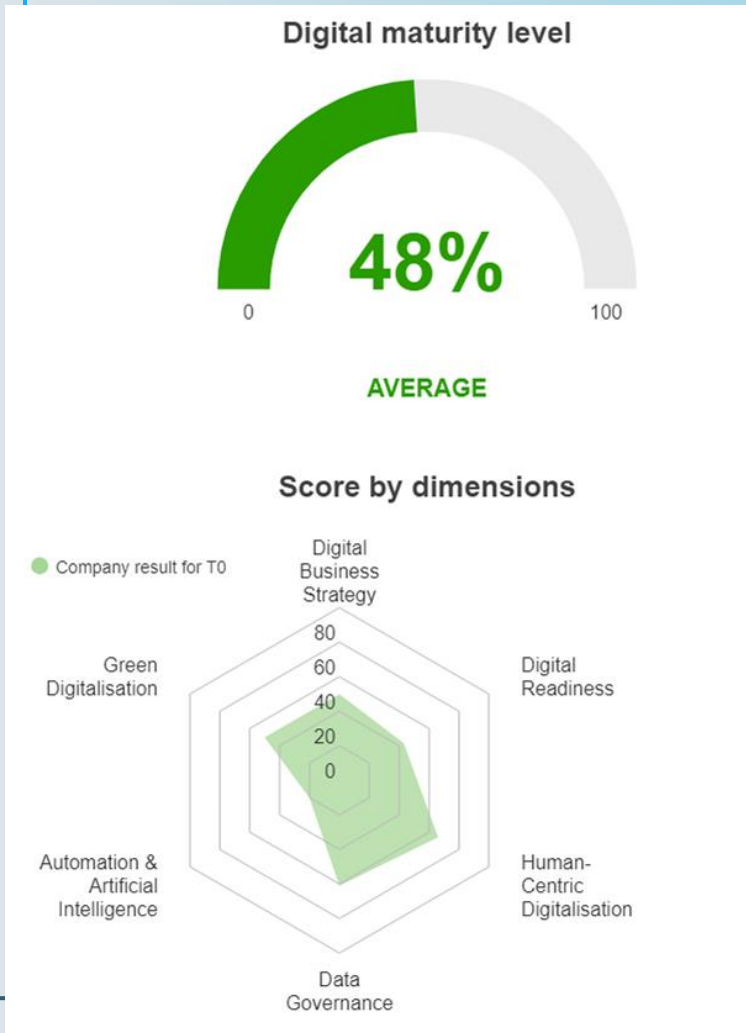
WHAT SERVICES DID WE USE?

Target audience and sectoral segmentation
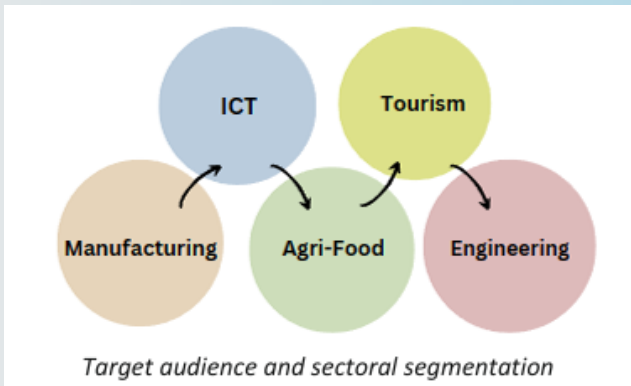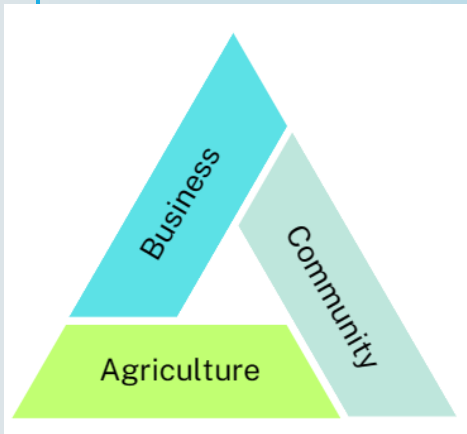
- Time period for the project - 3 months (80 hours).
- Stage 1 Discovery and Assessment – Visit to ARC Labs in SETU, Waterford.
- Stage 2 is currently under completion.
- Digital Maturity Assessment.
- Report outlining current state of digital play in our locality AND our region – Preliminary findings provided.
- Identification of potential funding streams in stage 2 - Unique overview of the national landscape, EU Horizon, and network contacts generated during the assessment.
- Final report pending, which will benefit the future development and direction of The CUBE and unlock the digital potential for The CUBE and the Midlands region.

The CUBE
LOW CARBON CENTRE OF EXCELLENCE

OUR CHALLENGES...

Digital maturity level

48%

0   100

AVERAGE

Score by dimensions

The CUBE as a project is in its infancy and we are eager to identify opportunities to support businesses in the region and to also provide The CUBE with a financial benefit and income source in the longer term.

- What training can we provide in The CUBE?
- What additional services can The CUBE provide?
- What is already available locally, regionally, and internationally?
- What gaps can we fill in terms of supports and future projects?

HOW EDIH ENTIRE HAS HELPED THE CUBE...

- Digital Maturity Assessment – Our current position and areas we can improve upon in the short to long term.

- Detailed information about funding and opportunities for The CUBE, and identification of similar projects internationally – Case studies and research into European Innovation Centres and Low Carbon centres with a similar ethos.

- Facilitation of a focus group to identify existing opportunities and solutions to current challenges.

- Identifying how we can support businesses in the Midlands region, and how we can be uniquely positioned to offer services and supports centred around digitalisation and sustainability.


The **CUBE**
LOW CARBON CENTRE OF EXCELLENCE

THANK YOU!

www.cubecentre.ie

E-mail: caroline@cubecentre.ie

Tel: +353 (0)85 2566522

ASEFOR

Asefor and DIH DATAlife

ASEFOR is a consultancy specialized in forest engineering and sustainable certification. It is part of the Alvariza Certification Group, helping landowners and communities manage their forests responsibly under FSC and PEFC standards. Our goal is to promote sustainability and the conservation of forest ecosystems in Galicia, Spain.

Asefor and DATAlife began working in 2021 as the EDIH supported us in the regional open call CONECTA HUB. The objective of the proposed project covered several of the challenges pursued in the digital and forestry fields.

Cadeas de valor

- Agro-Mar Alimentación
- Biotecnoloxía
- Forestal – Madeira
- Saúde – Coidados

- Intelixencia Artificial (IA)
- Analítica de datos (Big Data)
- Internet das Cousas (IoT)
- Computación de altas prestacións
- Ciberseguridade
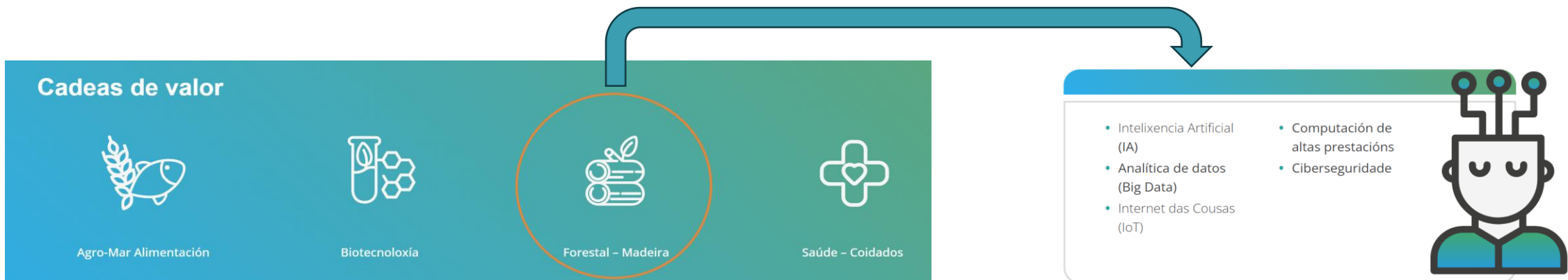
How did EDIH DATAlife help?

We first receive the "**Access to funds**" service for the the Conecta Hubs call, which sought to finance collaborative projects aligned with the areas of the strategic Galician Digital Innovation Hubs. The Bikenta Mplus project consisted in the development of a SaaS platform that records information on forests managed in sustainable manner and supports the certification process

Following the completion of the project the hub has helped with **mentoring for digital business models** and internationalization efforts

DATAlife is now helping us define a "**Test before Invest**" service to introduce AI algorithms in our platform
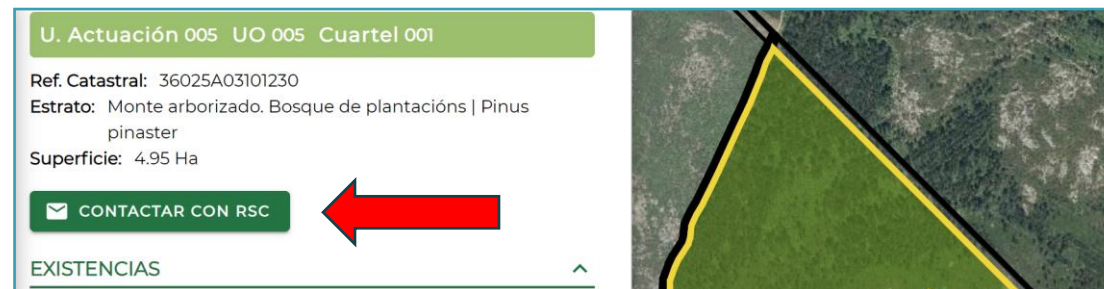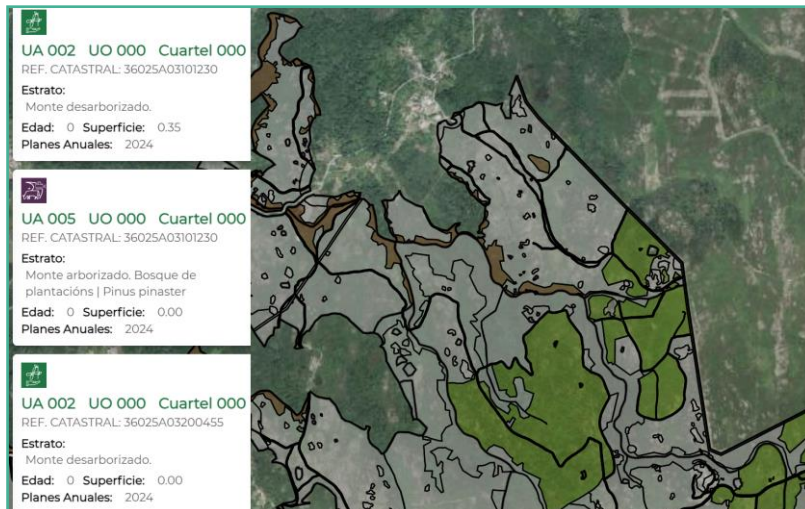
IMPACT

The greatest impact has been the introduction of digitalisation in the forestry sector, in its management plans and in the transfer of knowledge to other users and beneficiaries.

We have **30** companies using the tool and more than **300** certified community properties that access the platform.

The Bikenta MPlus tool is a digital framework where services can be uploaded and relevant information can be offered to a large number of different users (owners, managers, companies and administrations), in order to manage forests more efficiently and protect their biodiversity, always within the scope of sustainable forest management.

We need to continue filling the tool with content and continue digitizing. One example is the creation of a market for green bonds and CSR shares for companies, together with the communication of the impact to stakeholders, through the management control established in Bikenta, which is already underway.

THANK YOU!

www.gestionforestal.es
www.bikenta.com

Dungarvan Enterprise Centre (DEC)

Who is DEC?

- Dungarvan Enterprise Centre is a community enterprise centre set up in the south east of Ireland.

- Catchment area spanning a region encompassing 88,535 people

- DEC provides a supportive business environment for startups, SMEs and entrepreneurs – across pharma, education, recruitment & technology.

- Aim is to become a centre for innovation & digital excellence.

How DEC engaged with EDIH?

Met ENTIRE consortium member – Walton Institute – links were set up through SETU.

- Initial meeting – learned about EDIH, Completed DMA, explored services of interest.

- Close engagement during process – progress meetings.

- Focus group establishment – to discuss findings and ensure that initiatives align with recommended outcomes.

Service delivered by ENTIRE EDIH

Tier 1 Service: Discovery & Assessment Workshop
- Discussed our use case & aspirations
- Explored service options, decided on pathway through EDIH

Deliverable
Results for our current level of Digital Maturity – recommendations for improvement.
Report – outlining suggestion for next service and findings from meeting.

Tier 2 Service: Current State of Digital Play in your Locality
- Regional assessment – population, resources, industries
- International examples of Innovation Centres in similar areas
- Findings explored and given local emphasis from Focus Groups.

Deliverable
Report detailing population breakdown, industry opportunities, European counterparts. Findings from focus group consultations.

DUNGARVAN ENTERPRISE CENTRE

ENTIRE

Impact to Date

- DEC was provided with information and links that have strengthened capability to offer a dedicated digital facility for emerging and existing entrepreneurs in locality.

- Has advanced DEC's digital transformation in offerings and services it provides to its community.

- Identification of industry sectors that can be engaged by DEC.

- Set up European network links.

Next Steps

- To consolidate the research with continued focus group investigations – expand to include other areas

- Strengthen links with Universities and Research Institutes in the area – not only for DEC but to consolidate technological offerings for clients.

European Digital Innovation Hubs: Building digital capacity in your region

Moderated by EDIH ENTIRE, *Ireland*

Location Innovation Hub

Finland

DigiAgriFood

Greece

BOOST

The Netherlands

Let's work towards zero food waste

How is the fight against food loss and waste tackled through regional government initiatives?

15.10.2024

Generalitat de Catalunya

When you need to prevent food waste in a region of 8 million citizens...

Catalonia's Strategy to prevent food waste

Generate knowledge, raise awareness, promote best practices, regulation and co-governance

1

KNOWLEDGE

2

Raise Awareness

"Aprofitem els Aliments" Awareness Campaign

Recover the value of food!

3

Promote best practices

Food waste prevention guides

Implementation of a food loss and waste prevention and reduction plan in agri-food companies: principles and guidelines

FOOD WASTE PREVENTION

FOOD WASTE PREVENTION GUIDE FOR SCHOOL CANTEENS

FOOD WASTE PREVENTION PLAN (FWPP) AND DESIGN OF FOOD WASTE REDUCTION EDUCATIONAL PROGRAMMES

FOOD WASTE PREVENTION

FOOD WASTE PREVENTION GUIDE FOR HOSPITALS AND CARE HOMES FOR THE ELDERLY

FOOD WASTE PREVENTION PLAN (FWPP) AND FOOD WASTE REDUCTION PROGRAM DESIGN (FWRP)

FOOD WASTE PREVENTION

FOOD WASTE PREVENTION GUIDE FOR **THE COMMERCIAL CATERING SECTOR AND CENTRAL KITCHENS**

FOOD WASTE PREVENTION PLAN (FWPP)

4

Regulation

PARLAMENT DE CATALUNYA

Law 3/2020, of 11 March, on Food Loss and Wastage Prevention
202-00001/12
Adoption
Plenary Assembly of Parliament
Session 50, 04.03.2020, DSPC-P 89
Publication: BOPC 444; DOGC 8084, 13.03.2020

Preamble

Food wastage is a problem that has gained considerable importance over the last few years in both the political and social spheres. There has been a growth in social awareness regarding the need to fight against food loss and wastage generated along the food chain. The prevailing food production, transformation, distribution and consumption models are incapable of solving the world population's food security and sovereignty problems. Nearly nine hundred million people survive on a poor and insufficient diet, while a third of the first world's population suffers from obesity caused by excessive or inadequate food intake. The Food and Agriculture Organization (FAO) of the United Nations estimates that a third of all the food produced in the world is lost or wasted.

5

Co-governance

Generalitat de Catalunya

Department of Agriculture, Farming, Fisheries and Food

General Subdirection on Agri-Food Transfer and Innovation

gencat.cat

aprofitemelsaliments@gencat.cat

Boosting the potentialities of the agrifood sector by generating synergies with tourism

Synergy Days

BY SMARTAGRIHUBS | BARCELONA

Boosting the potentialities of the agrifood sector by generating synergies with tourism

Moderated by Dolores Ordoñez, *AnySolution*

Dana Bonaldi

Coordinator of EU project activities, Digital Innovation Observatories, Politecnico di Milano

Nina Cvar

Associate Researcher and Assistant Professor, University of Ljubljana

Alfonso Bonet Pastor

Coordinator of European projects, Fundación Dieta Mediterránea

Survey sample by Country

1.241 Italians	**1.432** Germans	Reached **1.247** Swiss	**1.791** U.S. citizens

Dropped out of the sample because they have not taken a vacation in the past 6 months

234	**421**	**240**	**791**

18,9%   29,4%   19,2%   44,2%

1.007 Italians	**1.011** Germans	**1.007** Swiss	**1.000** U.S. citizens
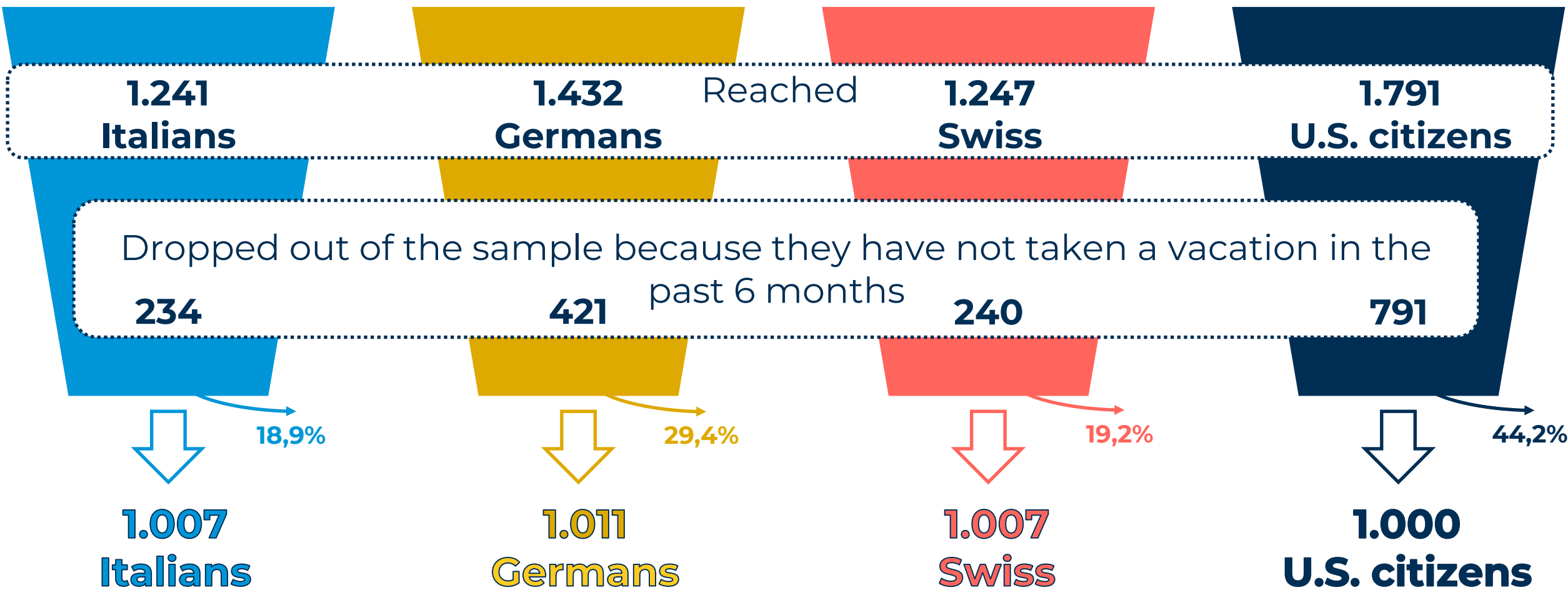
Survey commissioned by Ente Turismo Langhe Monferrato Roero, for the part related to food and wine

For a not insignificant niche of travelers, food and wine is the <u>main</u> motivation for choosing a destination

Percentage of tourists who chose their travel destination having "having food and wine experiences" as their main motivation

2%

Italians

3%

Germans

4%

Swiss

3%
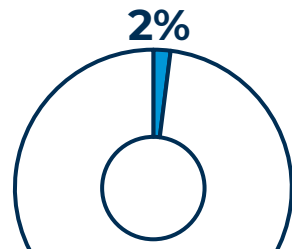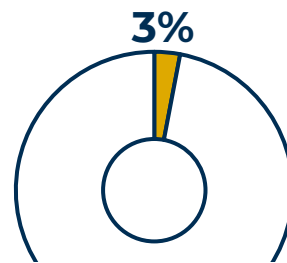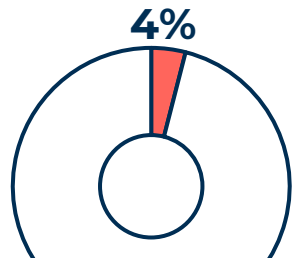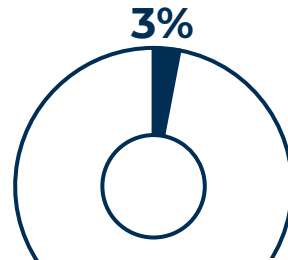
U.S. citizens

Sample: 1007 (Italy); 1011 (Germany); 1007 (Swiss); 1000 (U.S.)

But there are many more tourists for whom food and wine greatly affects the choice

Incidence of food and wine on destination choice

10% Italians

6% Germans

9% Swiss

14% U.S. citizens

- Very
- Quite
- Little
- No at all

Sample: 1007 (Italy); 1011 (Germany); 1007 (Swiss); 1000 (U.S.)

POLITECNICO MILANO 1863 SCHOOL OF MANAGEMENT

osservatori.net digital innovation
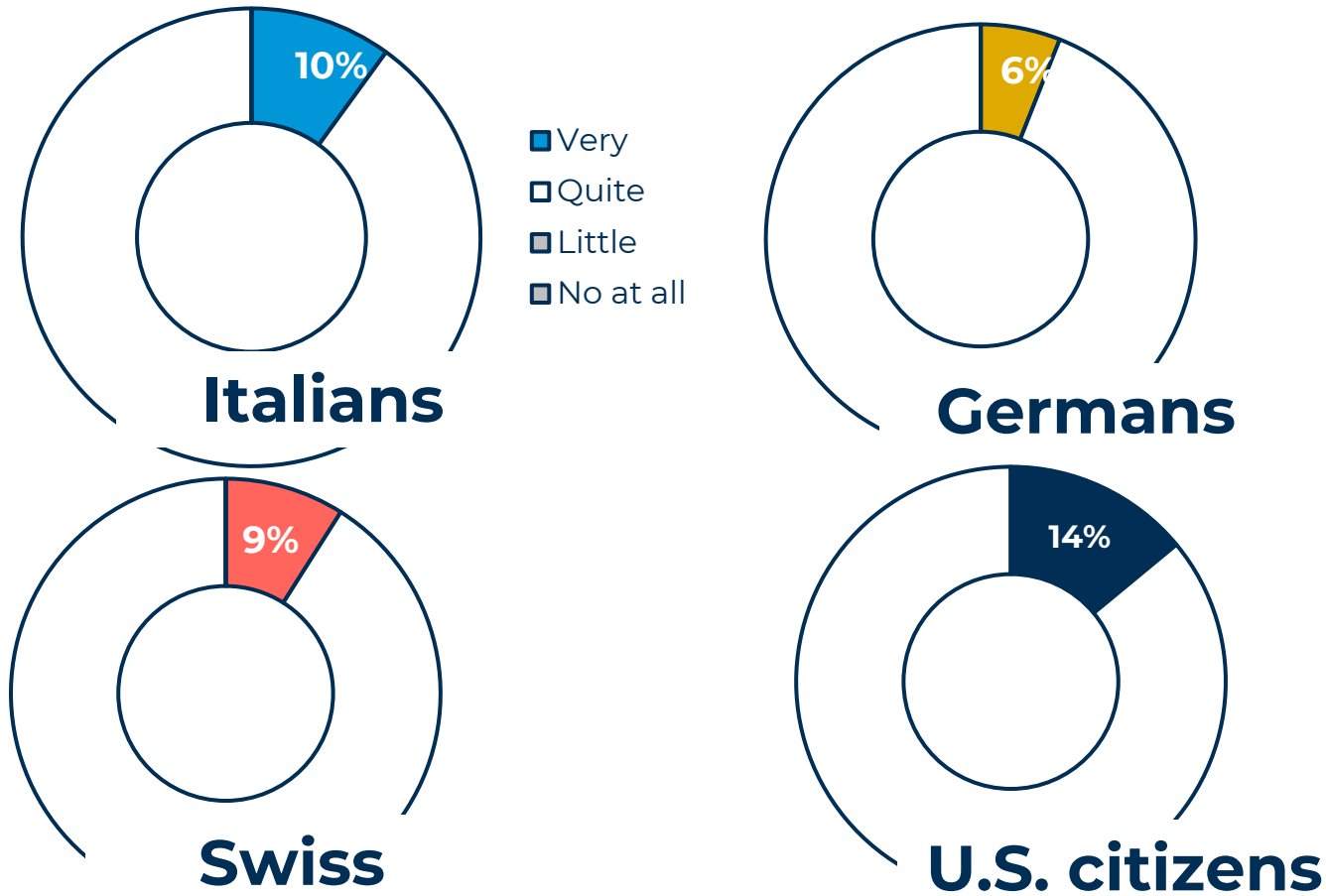
And the great majority of tourists do food and wine activities

Engaged in at least one food and wine activity during the last vacation

76%	24%
68%	32%
70%	30%
80%	20%
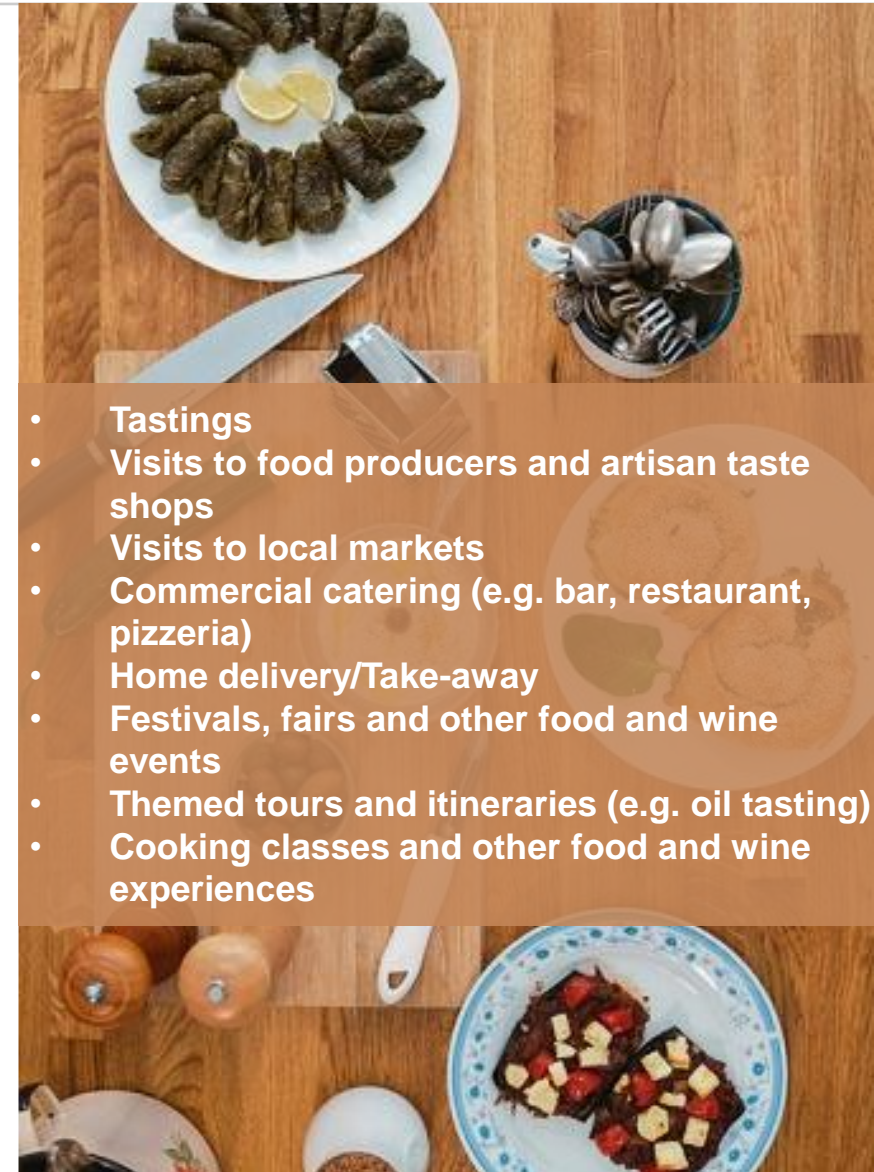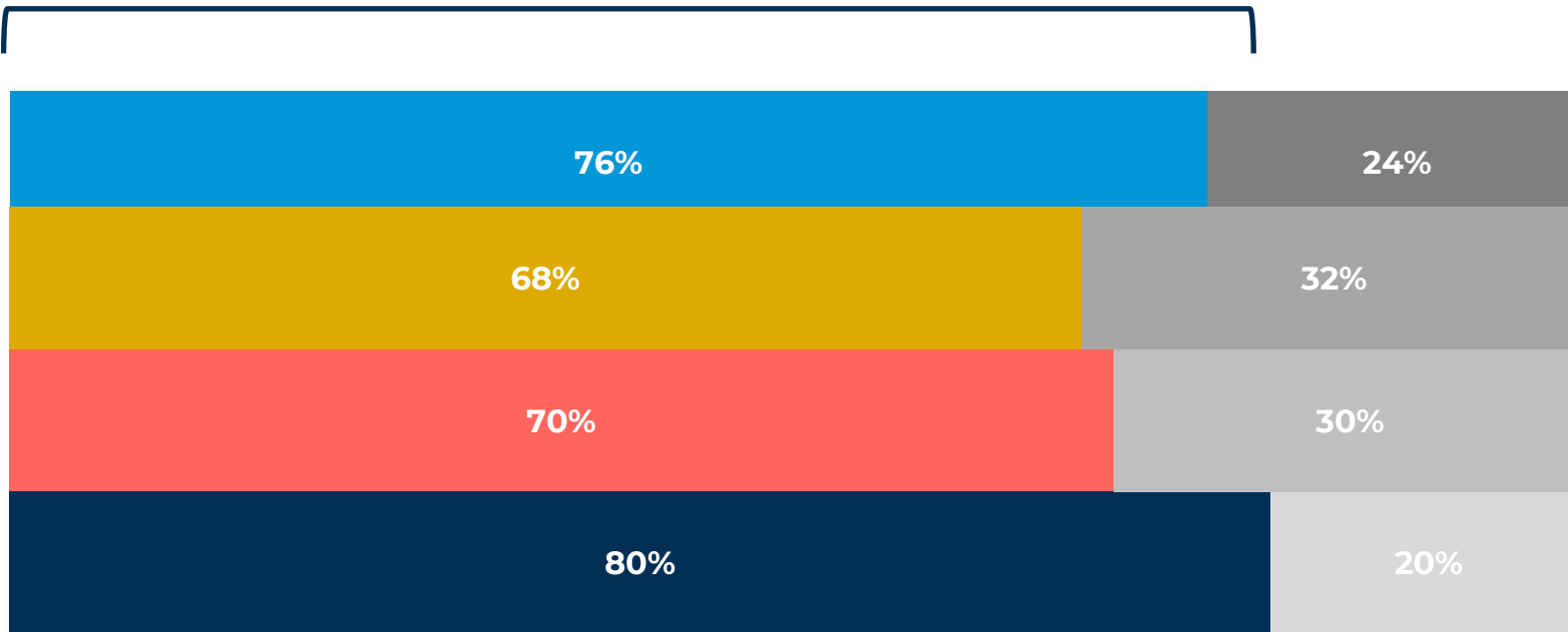
- Tastings
- Visits to food producers and artisan taste shops
- Visits to local markets
- Commercial catering (e.g. bar, restaurant, pizzeria)
- Home delivery/Take-away
- Festivals, fairs and other food and wine events
- Themed tours and itineraries (e.g. oil tasting)
- Cooking classes and other food and wine experiences

Sample: 1007 (Italy); 1011 (Germany); 1007 (Swiss); 1000 (U.S.)

Boosting the Potentialities of the Agrifood Sector by Generating Synergies with Tourism

Synergy Days: Barcelona
14-15.10.2024

Nina Cvar

Assistant professor and Research Associate
Laboratory for Telecommunications & Laboratory for Multimedia, Faculty of Electrical Engineering

University of Ljubljana

Background
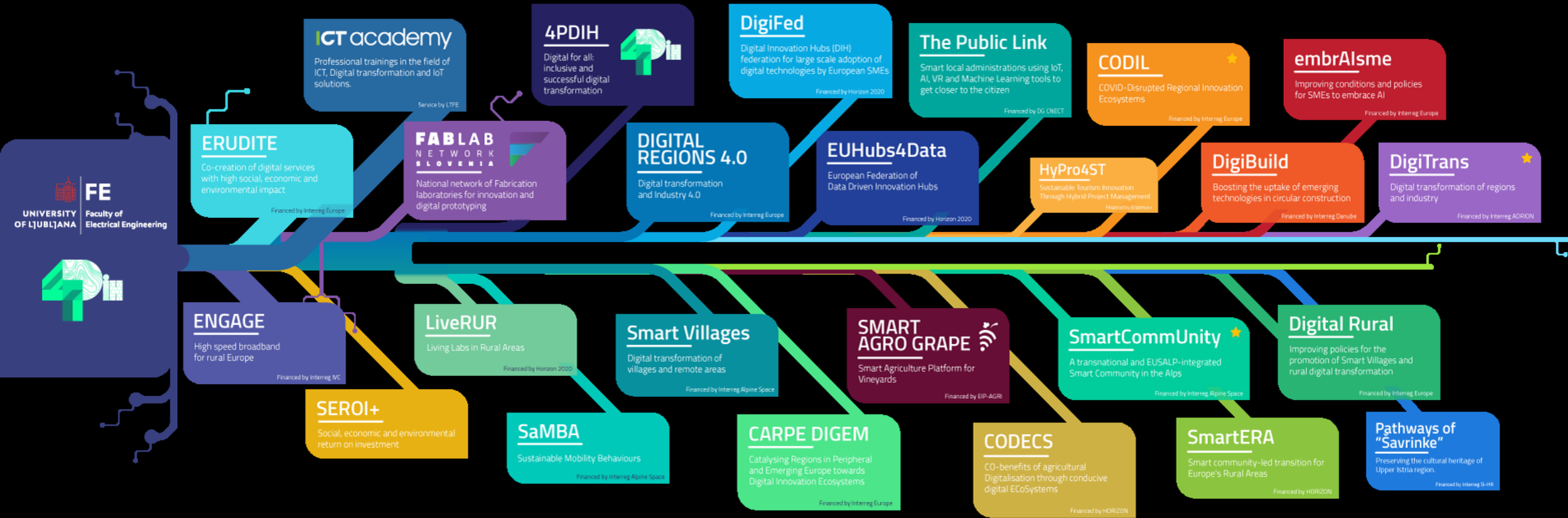
Why Rural Areas?

- According to EUROSTAT, in 2021-2023 about **29.1%** of the EU-28 population lived in rural areas across Europe with almost 9 out of 10 predominantly rural regions in the EU (355 out of 406 regions for which data are available) reported **negative crude rates** of natural population change during the period 2015–2020 (EUROSTAT 2018; 2023)

- Populations living in rural areas (compared with urban areas) are **facing the risk of poverty or social exclusion**. However, it is suggested that digital technologies can help rural areas to overcome these challenges. But distribution of digital technologies **has never been equal** as it is **connected to a pattern of inequality** (Rosa et al., 2013)

- Furthermore, these territories **are indispensable** in terms of **local food production**, **sustainability of natural resources**, and protection of cultural and natural heritage. Thus, acceleration of **inclusive digital transformation**, **based on a holistic, whole-of-society approach is advised** (UNDP, 2022).

Inclusive Digital Transformation

- IDT is about harvesting economic and social benefits, which result from **unlocking opportunities**, supporting economic growth, reducing poverty, improving public service delivery, and accelerating social inclusion in rural areas. Contributions resulting from digital technologies do not only **entail benefits**, as they can **bring possible challenges** too, for **instance privacy**, **data security**, **data management**, **lack of connectivity**, **new forms of social divide**, the so-called **digital divide.**

Development of a **community tailored approach**, understanding how manage digital transformation at the local level - according to data, more than 137 million people are living in rural communities, representing **80% of Europe's territory.**

How?

5 pertinent challenges

- appropriate infrastructure
- available digital services
- digital literacy and skills
- methodology (how to work with the communities and what is needed)
- sustainability

How We Work?

Methodology

- by **developing multidisciplinary methods** for working with **rural communities**:
- **community engagement via bottom-up, non-hierarchic approach**
- **mitigating risks**: by introducing a concept of **"local heroes"** as energetic local influencers, artistic souls, visionary leaders or resourceful problem solvers: https://blog.ltfe.org/local-heroes-lokalne-face/
- by **encouraging** understanding that **digitalization** is more than technology - it is about **complex social** and **cultural element** and **cultural elements**, resulting in a method of **co-creation of digital culture in practice**, 1. provision of infrastructure, equipment; 2. empowerment via technology use, awareness of the possibilities that technology brings and ICT support; 3. holistic development in searching new ways of support at the national / international levels

Co-Creation of Solutions

External Disruption → Existing Digital Ecosystem → Community and its Needs

Covered by policy initiatives/strategies (smart villages, rural hubs, integrated digital ecosystems, sustainability goals

Sales of Winemakers dropped more than 70% during Covid-19 (Štajerska region) → e-platform: Meet the Local Producer (the platform supports local food supply chains, fosters economic and social sustainability, underlining the importance of local producers)

Smaller towns having difficulties in adopting a joint tourism-marketing strategy; engagement with the cultural/natural heritage interactively + Connecting local agricultural stakeholders; an example of cross-border cooperation → mobile application kulTura

Initiative from the young winemakers of the wine-growing region of Slovenian Istria → Wine Tasting Events in Rural (Wine) Hubs

Related Projects & Solutions

In the past:

- Meet the Local Producer" platform (Interreg, Alpine Space, Horizon)
- Mobile application "KulTura" (Interreg)
- Virtual Wine Tasting (Interreg)
- Rural Digital Innovation Hubs as a Paradigm for Sustainable Business Models in Europe's Rural Areas (Interreg)
- → Cvar N, Stojanova S, Trilar J, Kos A, Stojmenova Duh E. (2024). *Transformative smart rural tourism in adversity of the COVID- 19 pandemic and beyond*. Journal of Infrastructure, Policy and Development. 8(6): 4065. https://doi.org/10.24294/jipd.v8i6.4065
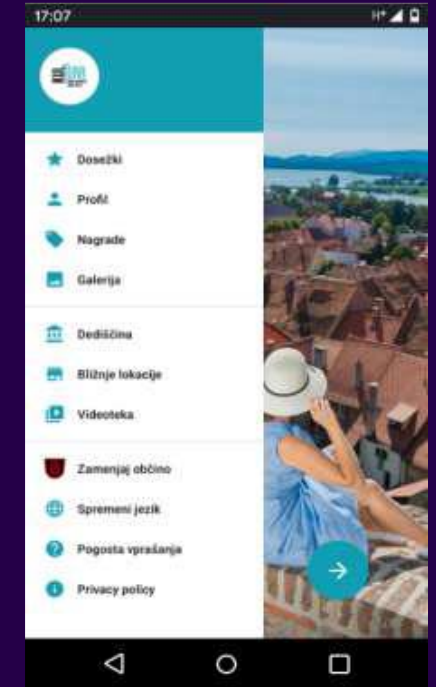
Related Projects

In development:

- HyPro4ST: developing new jobs in sustainable tourism and training professionals in hybrid project management (ERASMUS+)
- **CODECS**: improving motivation and capacity of European farmers to adopt and understand the digitalisation as a path to sustainable change (Horizon)
- **SMART ERA**: development of co-creation techniques and intensive engagement with local communities to develop innovative sustainable digital solutions for rural areas, with several pilots focusing on tourism too (Horizon)
- **SMARTCOMMUNITY**: supporting Alpine rural areas to fully embrace the benefits of digitalization and smart transition in order to create a functional, transnational community in the Alps, with some of the pilots working on tourism
- **Šavrinke: Revitalising the cross-border cultural heritage of Šavrinj through a sustainable tourism offer: revitalise the cross-border cultural heritage through a sustainable tourism offer**

Agrifood Sector & (Smart) Rural Tourism

- both sectors are essential for the **sustainable community development**
- both sectors can benefit **from digitalization**, however digitalization of rural communities has its specifics which can be addressed by the concept of "smart" (smart as building **new forms of cooperation and alliances between farmers and other rural actors**)
- synergies between the agrifood sector and smart rural tourism have potential to lead to **enhanced economic opportunities, preserve local food traditions, and promote more sustainable food systems (agritourism, ecotourism,**
- **diversification** of income sources for rural communities and enhancing the appeal of rural areas as tourist destinations by **offering authentic, place-based experiences**

DIGITAL STORYTELLING

it helps in sharing a place's goals, norms and values, thus motivates tourists and locals to visit it and then helps in memory maintenance, triggering feelings such as confidence and sense of belonging

Examples

12th Olive oil and Chard Feast

Local traditional event

📅 Date
27.4.2024 - 28.4.2024 ()

📍 Location
Padna (countryside of Piran)

⭐ Type
culinary event

- Enhancing Visitor Experience Through Agrifood Tourism: 1. Gramona Olive Tours 2. Olive oil and chard festival in Padna (smart village & startup village, testing pilot for the Smart Era project * 3. Šmarje Divina Wine hub; 3. Svečina apple and fruit trail; 4. Doppler Wine House * (wine tasting, living lab and pilot area for the Codecs project etc.);
  Leber-Vračko (wine tasting etc., natural straws, milk, precision farming);
workshops

- Farm-to-Table Dining: "Karst eights", which some farms open invite you with excellent wines and typical Karst dishes (also other regions!)

Infinite Grow?

The potential of the agrifood sector to create synergies with tourism is substantial, but it is not infinite, e.g. some of the issues:

1. commodification of culture and nature: Instead of preserving traditions and local practices for their intrinsic value, they are repackaged to meet market demand and appeal to tourists.
2. Uneven Economic Benefits: The benefits of tourism can be unevenly distributed within communities. Often, those with capital or access to resources (such as larger farms or better connections to tourism markets) benefit more than smaller, local producers.
3. Ecological Strain: The increased focus on tourism can put additional strain on local resources, such as water, land and waste, especially if tourism growth is not managed sustainably. Also other challenges, such us mobility, can arise.
4. Dependence on External Markets: The agrifood-tourism synergy often makes rural economies dependent on external demand and global markets. As a result, rural communities may become vulnerable to fluctuations in tourism trends, economic downturns, or changes in consumer preferences.
5. Pressure for Standardization: To attract a larger share of tourists, rural destinations may feel pressured to standardize their offerings—be it through accommodations, services, or even the types of food experiences provided.

ALTERNATIVES?

Community-based tourism (local ownership and control) + solidarity economies, and commons-based approaches (advocating localized food systems and tourism that prioritize communal well-being over profit; emphasizing the importance of keeping the economic benefits within local regions)

Thank you!

nina.cvar@fe.uni-lj.si

- Main objective Mediterranean Diet Promotion, Protection, and Dissemination. (Products, Lifestyle, and Tradition)

- Sustainable Tourism is enriched by structuring the territories around a prestigious brand based on agrifood local products, and gastronomy like the Mediterranean Diet

- Agrifood production gains recognition under the Mediterranean Diet label

- Sustainable Tourism may encourage the agrifood system: Truffle Culture, Wineries, Food Varieties recovery

MedDiet Go

- Main objectives help the development of the rural economies, focusing on the younger population and marginalized collectives, support the digitalization and modernization of the rural areas and its tourism, and enlarge the community created around the Mediterranean Diet Cluster

- The project will develop digital tools (Platform), living labs & one-stopshop to help entrepreneurs with their ventures

- Benefits of sustainable tourism on the rural areas will boost the agriculture sector, and the rural economies

Synergy Days
BY SMARTAGRIHUBS | BARCELONA

- Main objective: create a unified training on Mediterranean Diet, Gastronomy and entrepreneurship

- Curriculum jointly created between 6 entities from 5 mediterranean countries, uploaded as an online course, and tested as a 2 weeks in person course for selected students

- Young culinary, hospitality and tourism students and entrepreneurs will gain knowledge of the local products and traditions, boosting the regional production of agrifood products

- The future professionals of the gastronomy sectors will know and value the benefits of the Mediterranean Diet

15:00 - 16:15   Project workshops IV - running in parallel

A1 **32** Autonomous robots, tomorrow's crop care friend

S11 **37** Driving food safety innovation – World café workshop

A2 **33** Start-ups and scale-ups support in food processing

S12 **38** Mapping data requirements for strategic policy shaping

S9 **34** Building digital bridges: Insights from COMMECT Living Labs

S6 **39** Watson project solutions: Fraud detection and prevention in the fish value chain

A4 **35** Is it possible to use generic AI and large language models in agriculture and rural development?

Auditorium

40 Trends in data economy: what is the value of data

S5 **36** Mindset is key to enabling healthy EDI practices

S10 **41** Digital Transformation of Cloud Seeding-Enhanced Agricultural Resilience

A rooms: above the Auditorium, same building   **S rooms: follow the signs outside and take the stairs**

11:00 - 12:30 Project workshops III - running in parallel

Auditorium — **21** OpenAgri and Farmtopia Open Calls presentation

A4 — **22** Beyond the buzz: Practical applications of generative AI in behavior science

S5 — **23** The future of knowledge and innovation platforms

A2 — **24** How AI can improve earth monitoring for agriculture

S12 — **25** Role-playing knowledge flows in the agri-sector: Navigating barriers and challenges

S11 — **26** Policy for food system transparency: priorities and pathways

S10 — **27** How fair is your smart solution

A1 — **28** Assessing Ethical, Legal and Social Aspects (ELSA) of digital technologies

S6 — **29** Advancing equality for rural and farm women in Europe

S9 — **30** European innovation ecosystems: Building stronger rural Communities in a changing Europe

A3 — **31** New EU partnership "Agriculture of data": Introduction, Stakeholder Engagement and Knowledge Hub

A rooms: above the Auditorium, same building

S rooms: follow the signs outside and take the stairs