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Digital Transformation of Learning

Impact on organic agriculture

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FiBL Europe
15 September 2020

Digital Transformation of Learning– impact on organic agriculture

1. Current Trends
2. Design and deployment of digital learning tools
3. Digital learning after COVID-19

Digital Transformation of Learning

1. Current Trends

Innovative ways of learnig

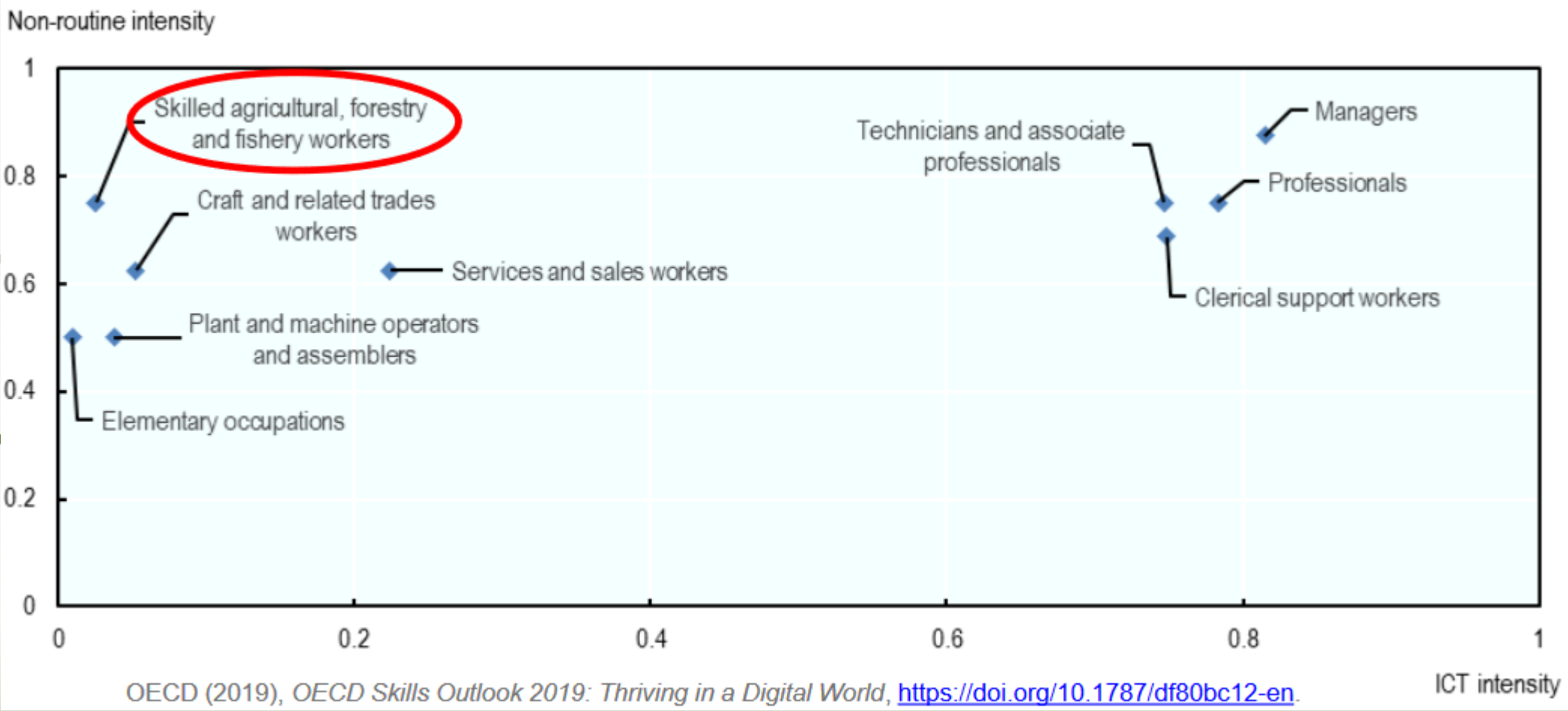
Innovative ways of learnig

Digital Transformation of Learning– Current Trends

Digital opportunities for farmers

- Digital technologies for Farmers:
  - Mobile devices for acess to management and advisory services
  - Integrated digital farm (e.g. in-field sensors, farm machinery, IoT)
  - Access to knowledge sharing platforms, including vocational training
- Interaction with governments and businesses in value chains:
  - Digital services (e.g. payment services)
  - Access to information (e.g. product prices and standards)

Digital Skills for farmers



Digital skills for farmers

Farmers need cross-cutting skills to benefit from digital technologies:

- Cognitive and analytical skills
- Basic ICT skills
- Awareness and trust on digital tools for support decision-making
- Navigating internet safely
- Softs skill

Challenge for agricultural education and VET

1. Develop soft skills as well as technical farming skills
2. Provide opportunites for lifelong learning
3. Adress barries for participation
4. Ensure that agricultural education is aligned with the needs of the sector
5. Integrate digital tools in agricultural education and VET
6. Address the skills divide

Common Agricultural Policy–
Cross cutting objective

2018/0216 - Article (5)

"cross-cutting objective of modernising the sector by fostering and sharing of knowledge, innovation and digitalisation in agriculture and rural areas, and encouraging their uptake."

Common Agricultural Policy– Cross cutting objective

An overview of European AKIS (2014) - source PRO-AKIS report

source PRO-AKIS report

Common Agricultural Policy– Cross cutting objective

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What about organic?

Digital transformation of organic training

Organic farming training bottlenecks:

- Knowledge intensive system that need to be adapted to local agro-climatic conditions
- Access to knowledge is difficult due to farmers dispersion
- Lack of specific extension and advisiory services for organic farming
- Low uptake of oragnic farming training in public agricutlrual education systems
- Reluctance to some innovations developed in academic or research contexts
- Regulatory requirements and control systems add an extra layer of complexity for managing an organic farm

Digital transformation of organic training

Key recomendations for Organic farming training:

1. Further engagement of public bodies in organic training
2. Crop-specific programs in organic agriculture
3. Learning from existing best practices
4. Fully exploit the potential of ICT for training

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Do you agree with these recomendations?

Organic Farm knowledge

Organic Farm Knowledge

SEARCH TOOLBOX | NEWS & EVENTS | THEMES & DISCUSSION | ABOUT

CONTACT/SITE INFO

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Exchange knowledge, enhance organic farming

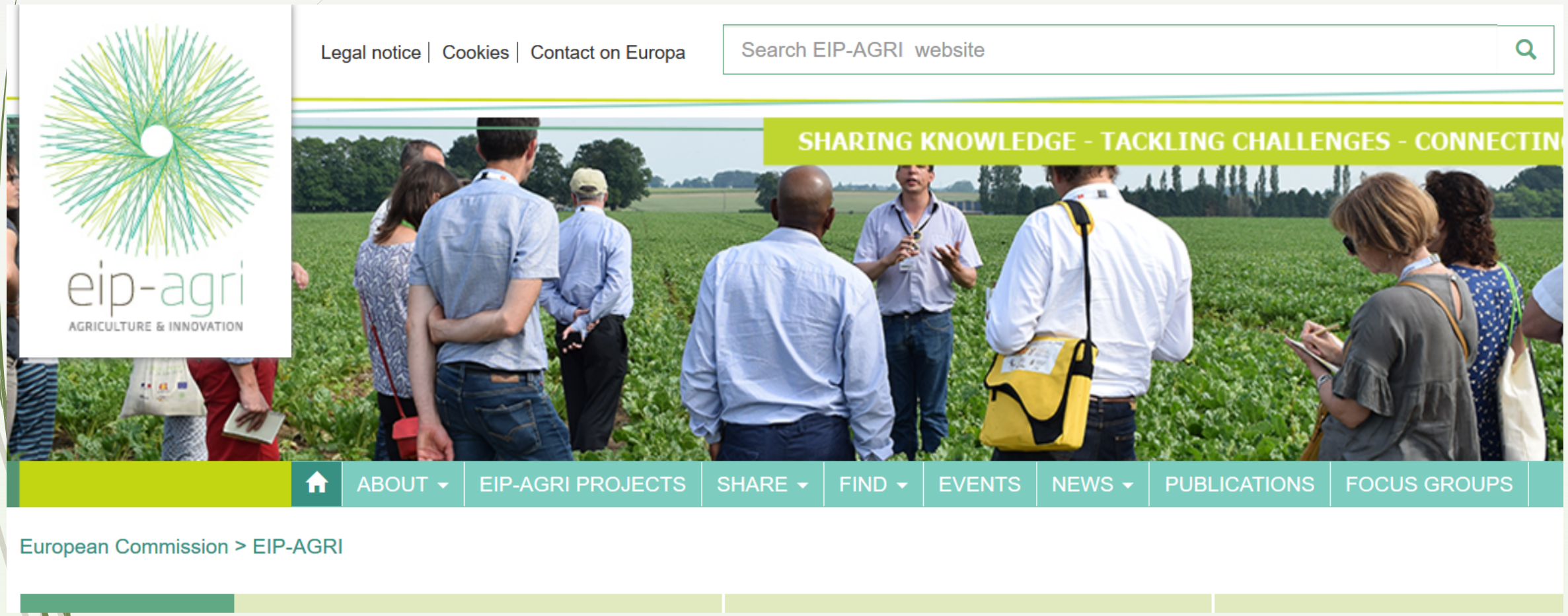
Digital Transformation of Learning– impact on organic agriculture

2. Design and deployment of digital learning tools

Digital Transformation of Learning– impact on organic agriculture

2. Design and deployment of digital learning tools

European Innovation Partnership – EIP-AGRI



https://ec.europa.eu/eip/agriculture/en

EIP-AGRI – Operational Groups

Projects - Operational groups

Fulltext search | **Geographical location** | **Keywords**

Contains any of these words | Choose some options | Choose some options | Search | Reset

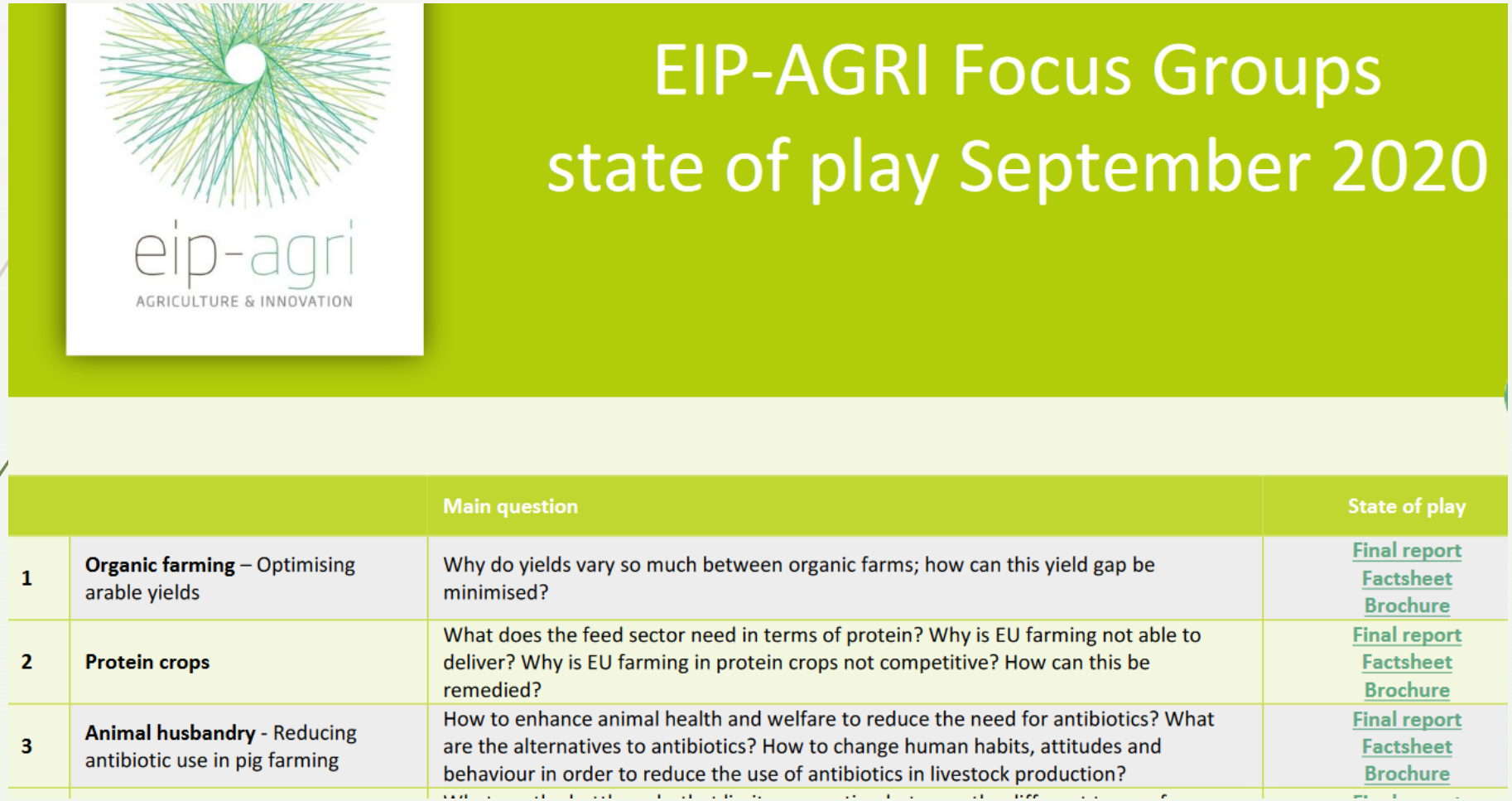
Brexit content disclaimer

Projects found: 1539

Published on	Title	Geographical location
08/09/2020	GO SUBER: Global modernization of the cork harvesting sector: mechanization, improvement of work environment, optimization of organization and commerc	Spain
08/09/2020	Operational Group of innovations to enhance environmental and economic sustainability of wheat production in Spain.	Spain
07/09/2020	Climate Change, what future for douglas-fir in Burgundy?	France
07/09/2020	The Operational Group aim at helping Center Val de Loire winegrowers to integrate global warming issues in their decisions	France

https://ec.europa.eu/eip/agriculture/en

EIP-AGRI – Focus Groups



		Main question	State of play
1	**Organic farming** – Optimising arable yields	Why do yields vary so much between organic farms; how can this yield gap be minimised?	Final report Factsheet Brochure
2	**Protein crops**	What does the feed sector need in terms of protein? Why is EU farming not able to deliver? Why is EU farming in protein crops not competitive? How can this be remedied?	Final report Factsheet Brochure
3	**Animal husbandry** - Reducing antibiotic use in pig farming	How to enhance animal health and welfare to reduce the need for antibiotics? What are the alternatives to antibiotics? How to change human habits, attitudes and behaviour in order to reduce the use of antibiotics in livestock production?	Final report Factsheet Brochure

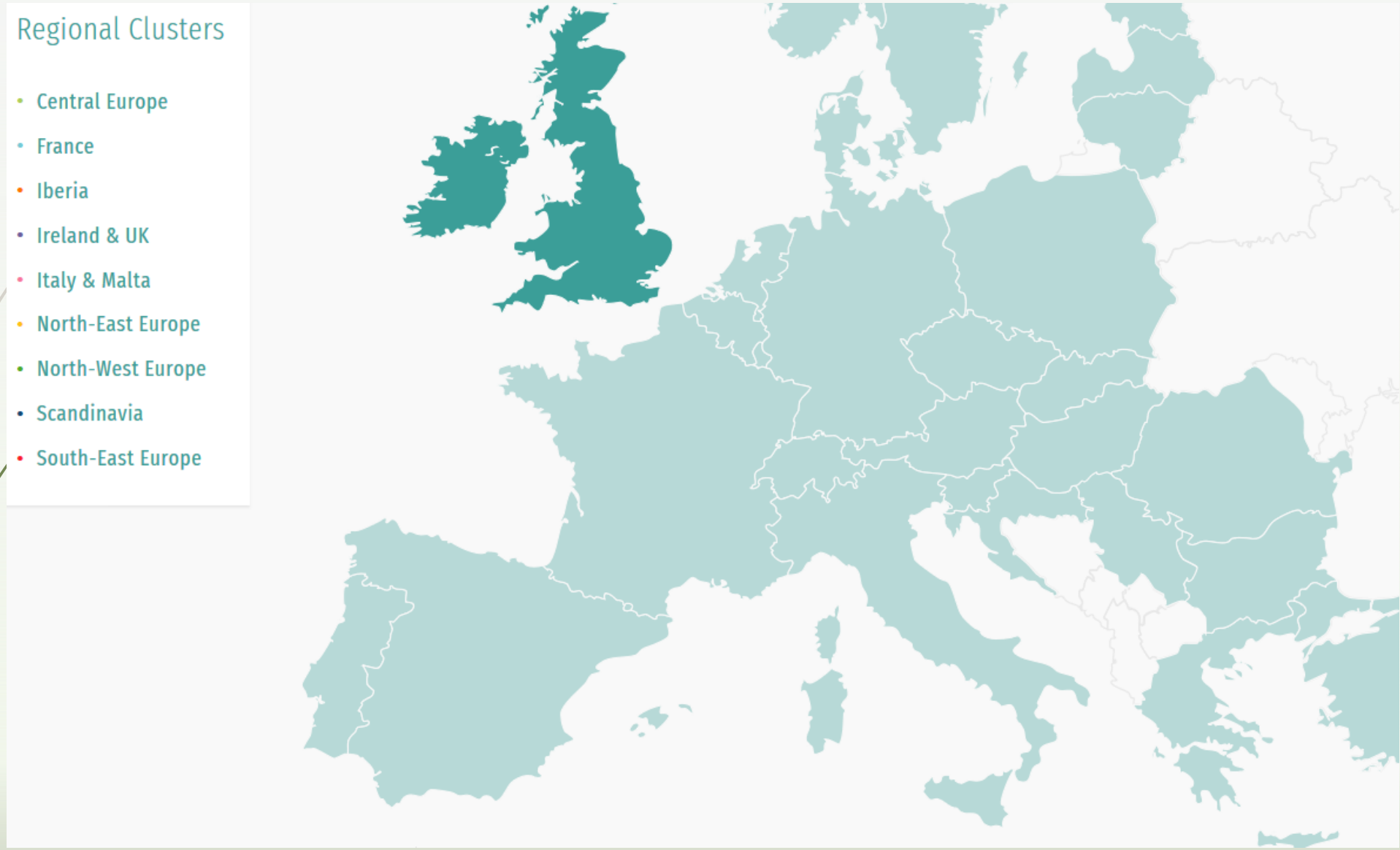
https://ec.europa.eu/eip/agriculture/en

SmartAgriHubs – Digital Innovation in EU

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

https://www.smartagrihubs.eu/

SmartAgriHubs – Regional Clusters



EURAKNOS

EURAKNOS

Connecting Thematic Networks as Knowledge Reservoirs towards a European Agricultural Knowledge Innovation Open Source System

https://www.euraknos.eu/

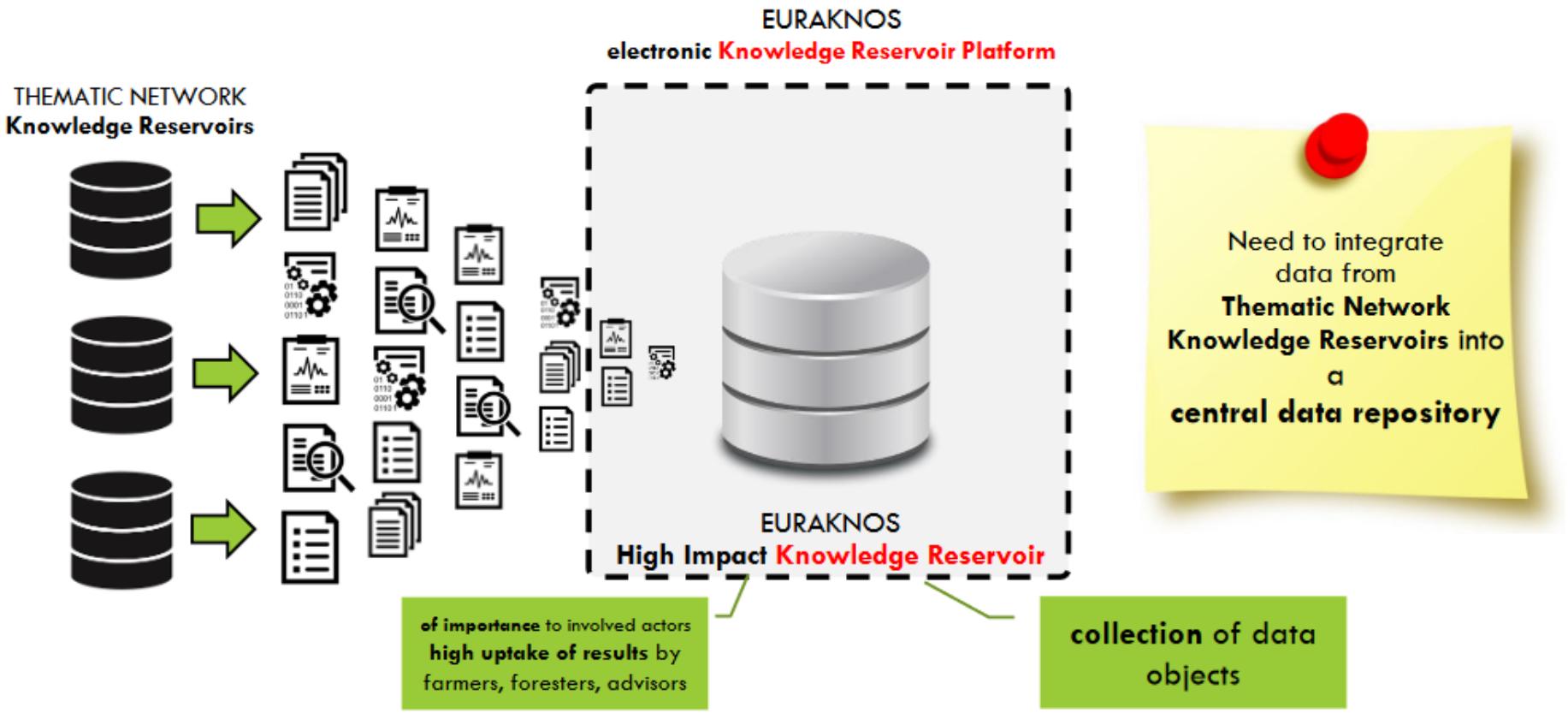
EUREKA

EUREKA

European Knowledge Repository for best Agricultural Practices

https://h2020eureka.eu/

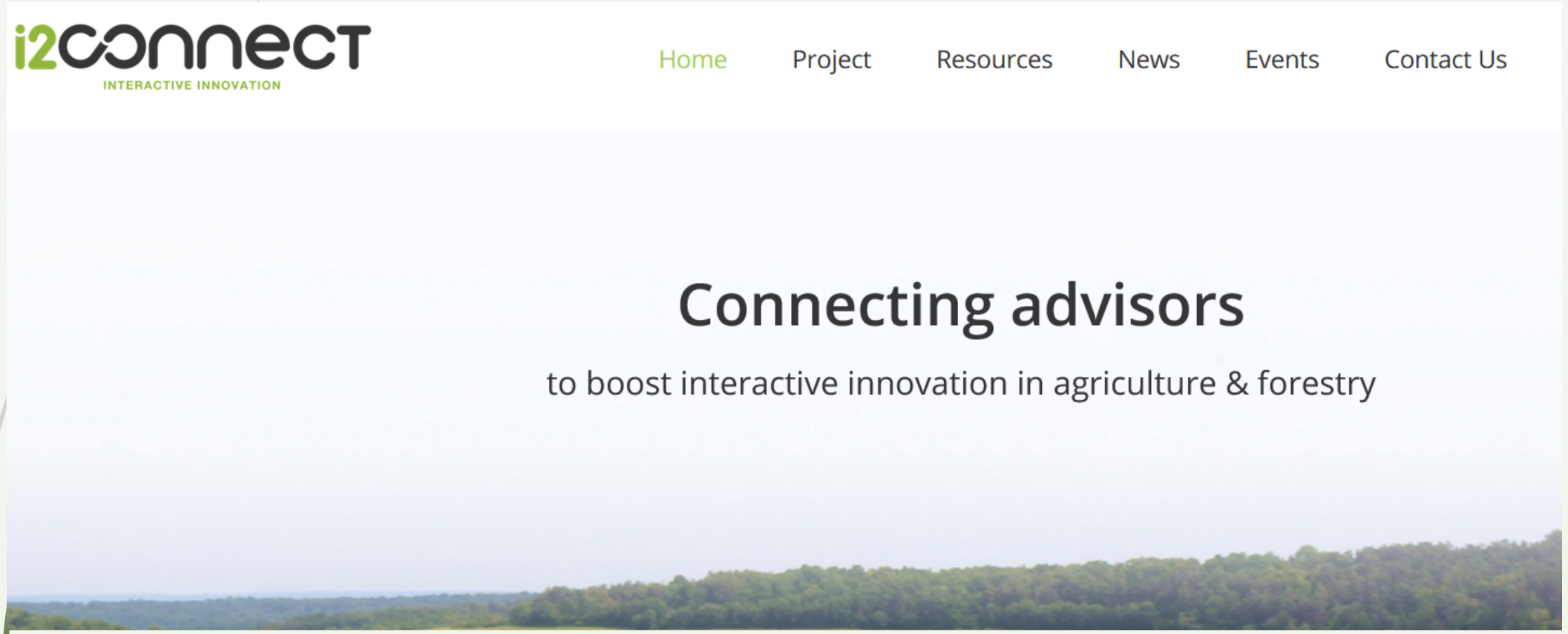
EUREKA&EURAKNOS



FAIRshare

https://www.h2020fairshare.eu/

i2CONNECT



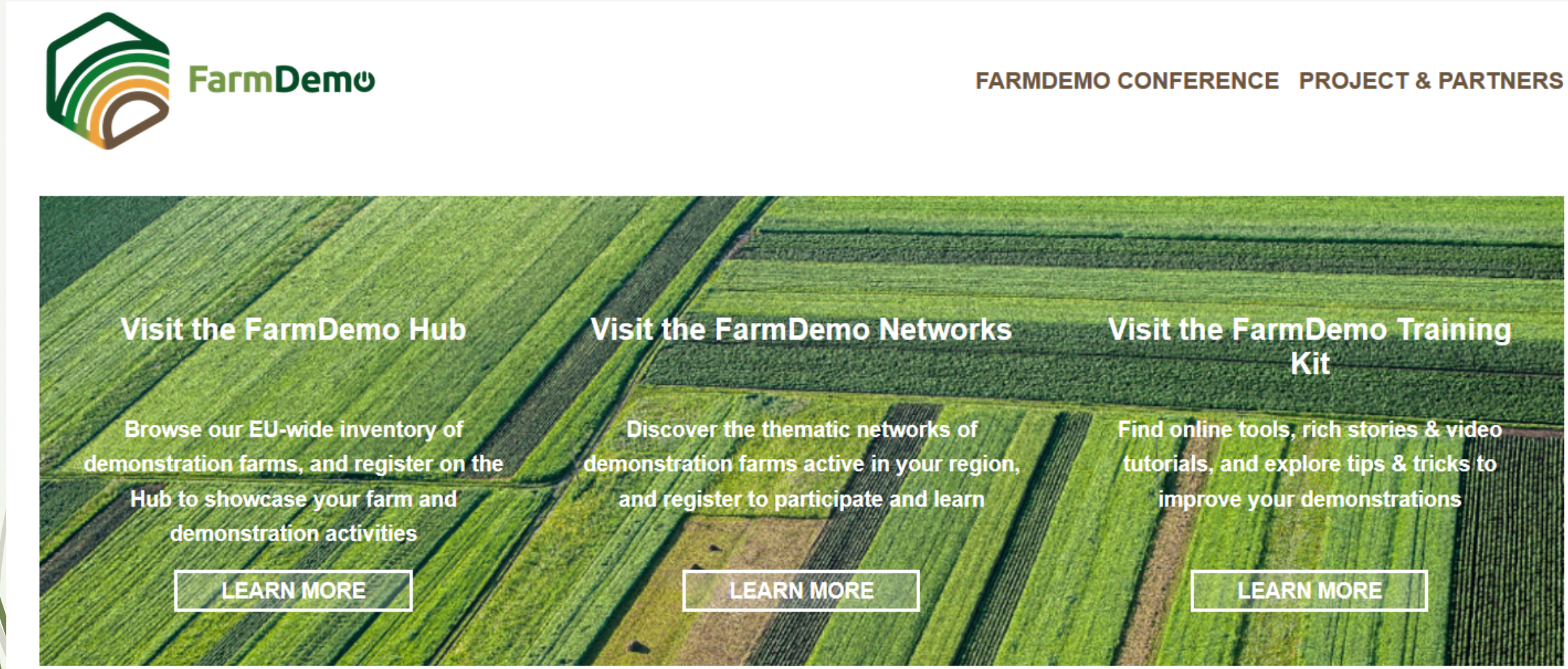
https://i2connect-h2020.eu/

PLAID

PLAID
PEER-TO-PEER LEARNING:
ACCESSING INNOVATION
THROUGH DEMONSTRATION

https://plaid-h2020.hutton.ac.uk/

FarmDemo



https://farmdemo.eu/

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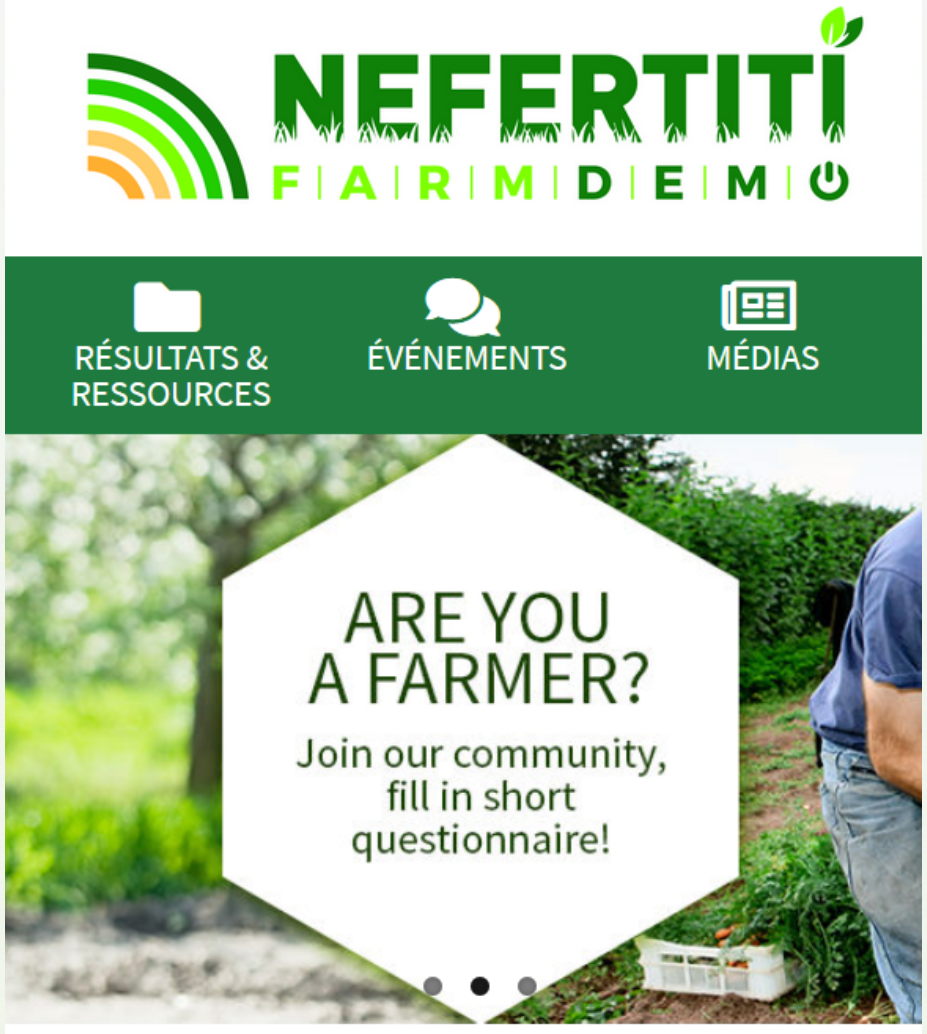


https://nefertiti-h2020.eu/?page_id=4834&lang=fr

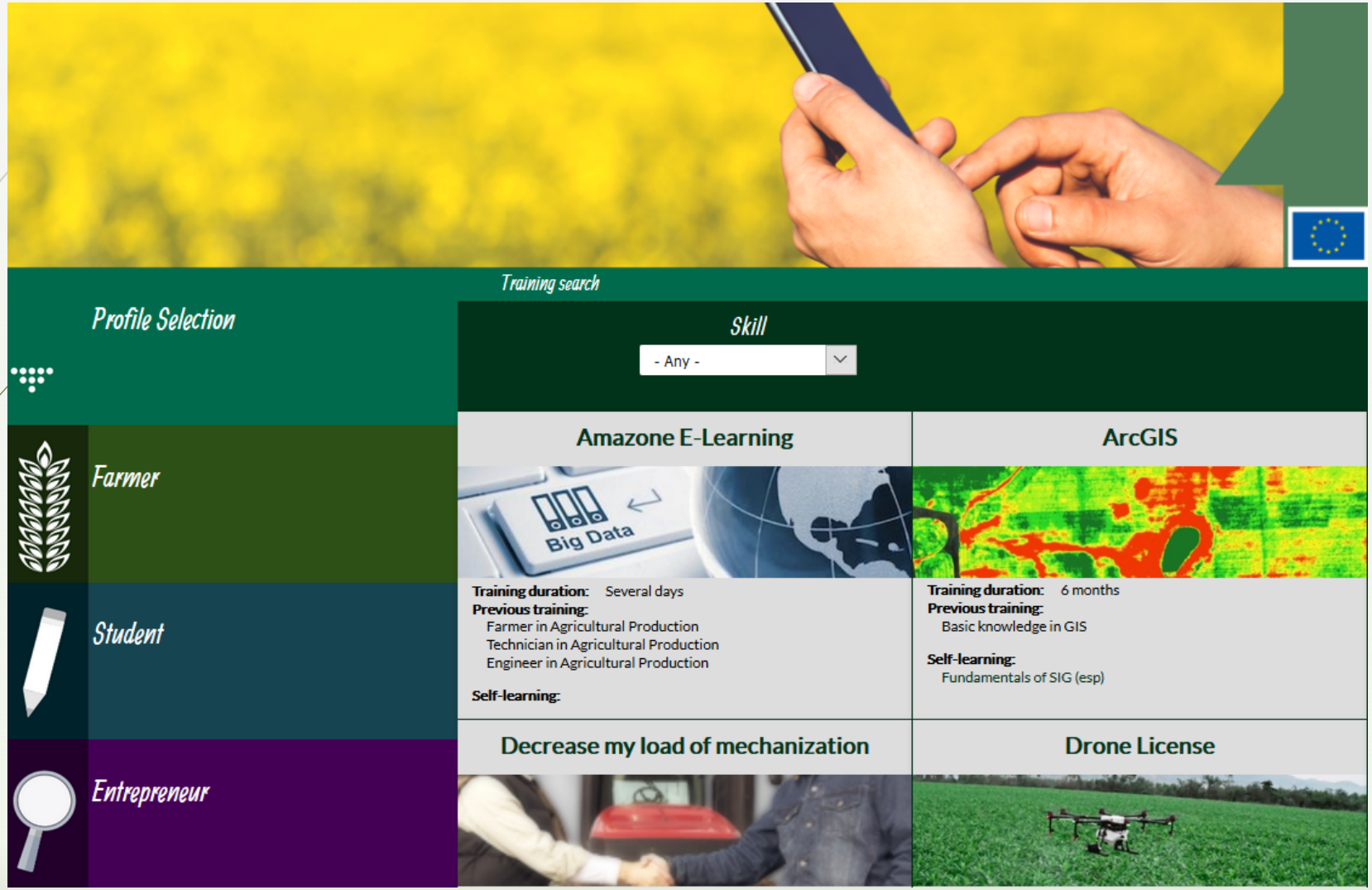
EIT Food – Educating for technology Take-off

https://www.eitfood.eu/Education/projects/educating-for-technology-take-off

WiseFarmer – Connecting farm generations in the digital age

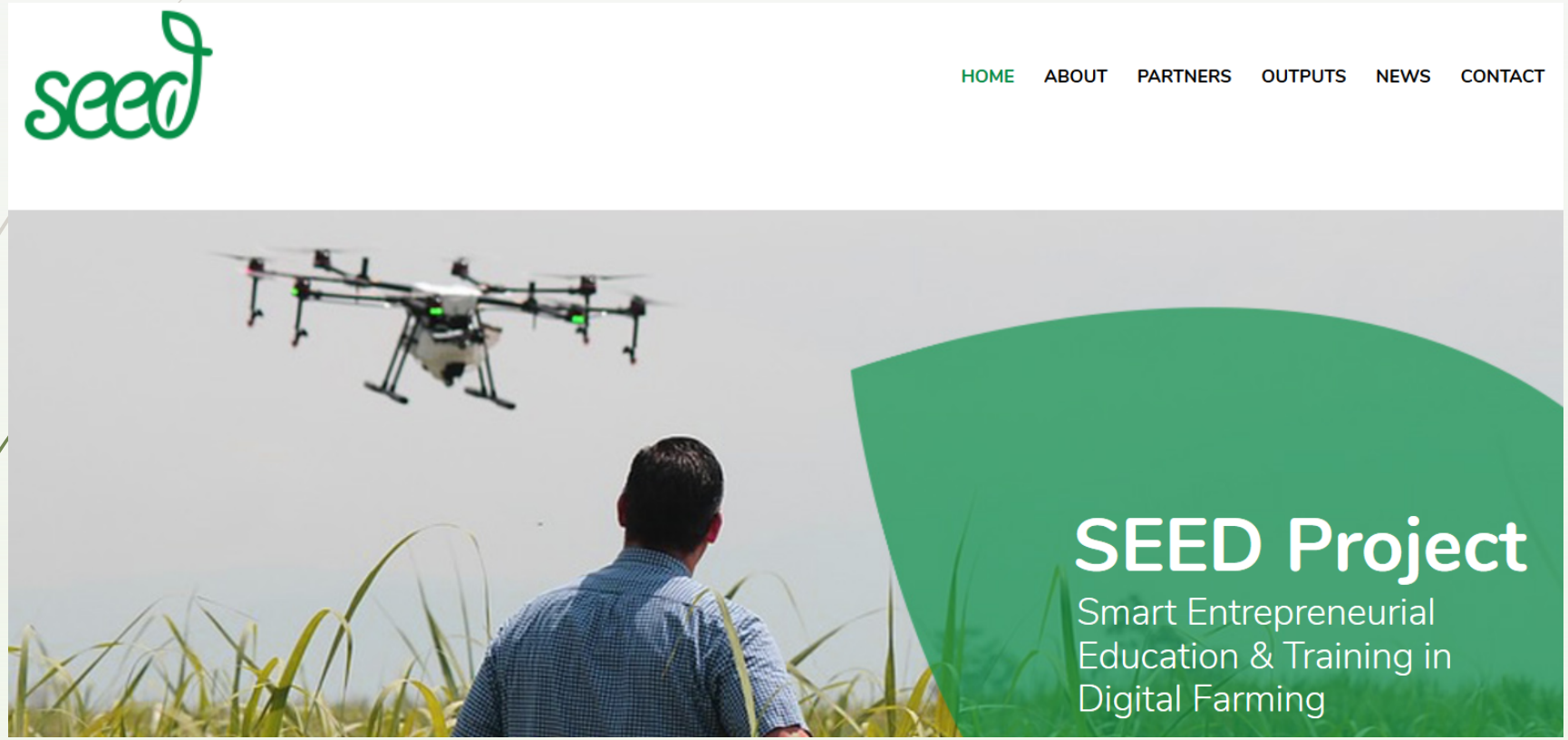
https://www.wisefarmer.eu/home-wisefarmer

Sfate – Smart Farm Training for Employment



https://www.edu.xunta.gal/centros/sfateproject/

Seed – Smart Entrepreneurial Education & Training in Digital Farming

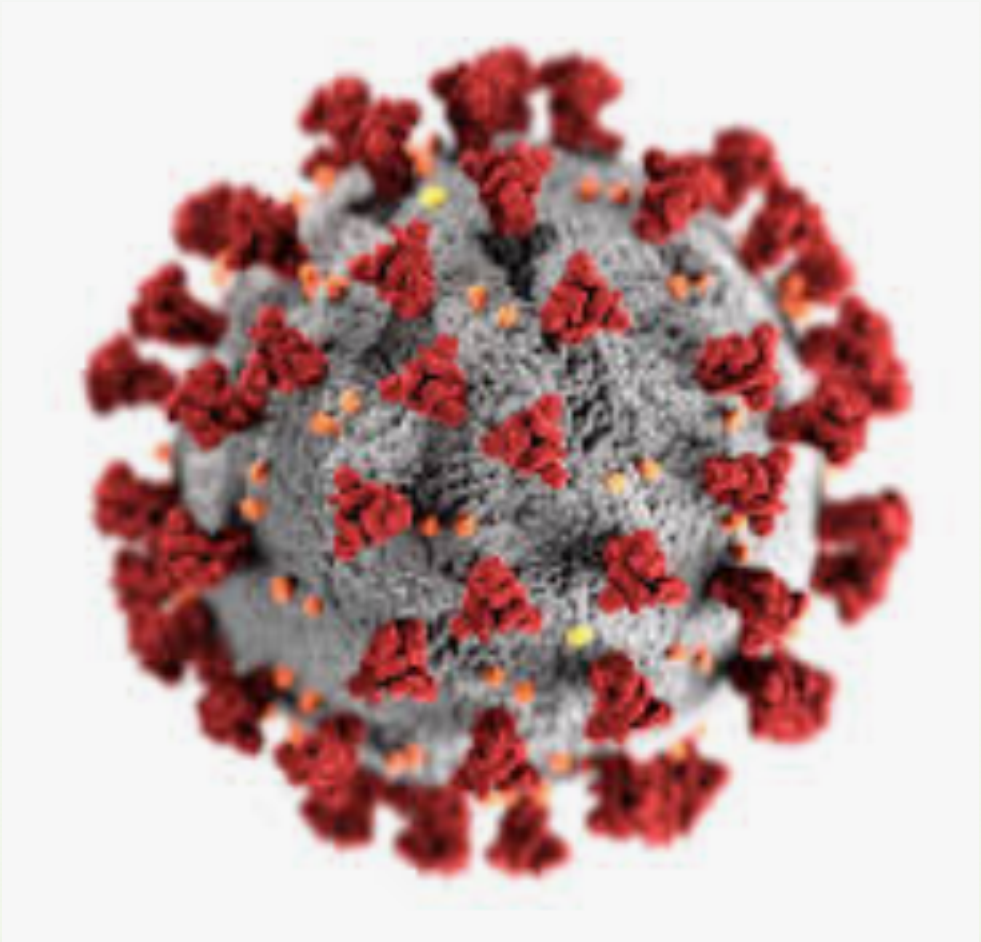


https://www.digitalseed.eu/

Digital Transformation of Learning– impact on organic agriculture

Do you know more projects in the field?

3. Digital leaning after COVID-19



COVID-19 and Agricultural training

- Disruption of eduactional activity (universities, schools...)
- Changes in the workplace
- Physical meetings not allowed (project meetings, networking meetings...)
- Cancellation of professional and demonstration fairs
- Impact on-farm visits (control bodies, advisors, services providers...)
- Changes in distribution channels (farmers market, supply chain changes...)
- Limitation on availability of public and essential services

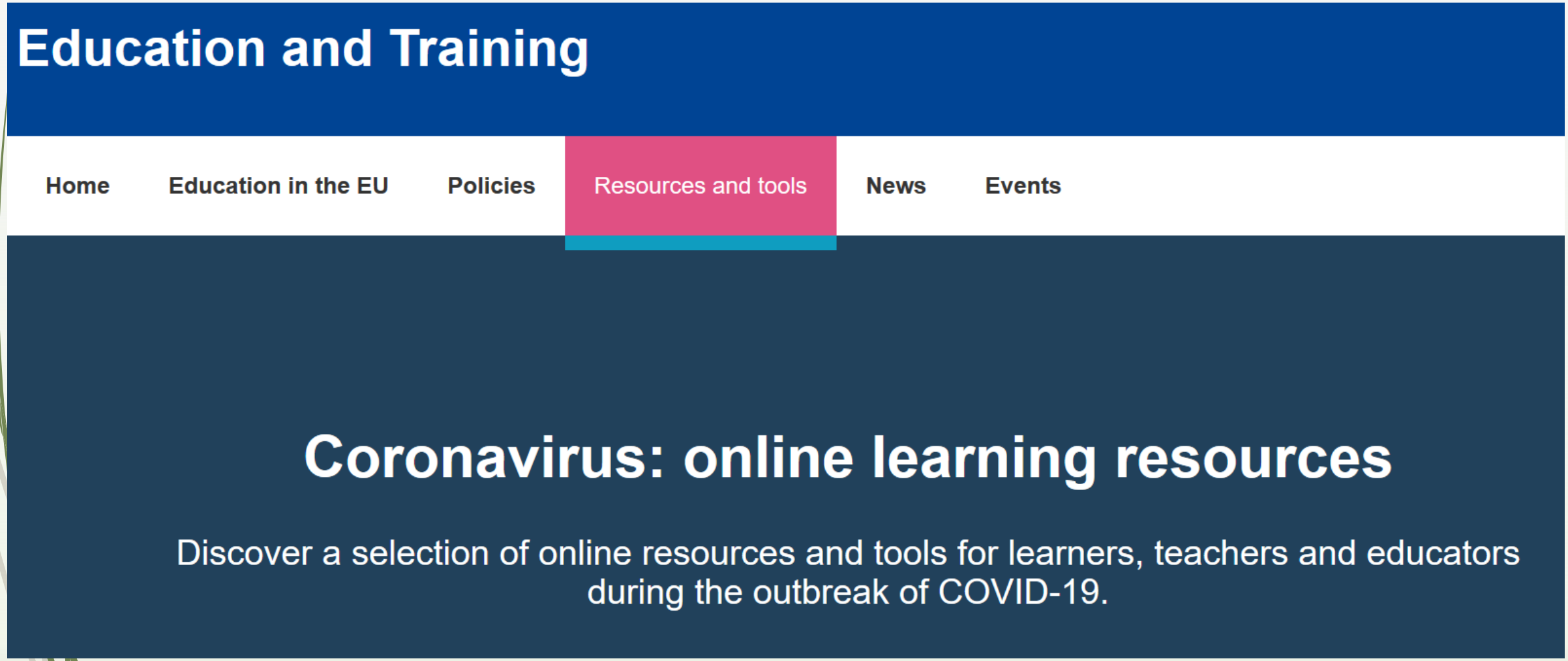
However farmers need to serve a maintained or even increased demand for agricultural and food products

COVID-19 and Agricultural training

Crisis vs Opportunity

- Blooming of online training offer
- Tele-working implementation
- Spearing transport costs of meetings
- Increase participation on events of new users
- Time-saving controls and service provission
- Smart value-chain management & new distribution channels
- Boost to on-line administration

Digital Learning After COVID-19

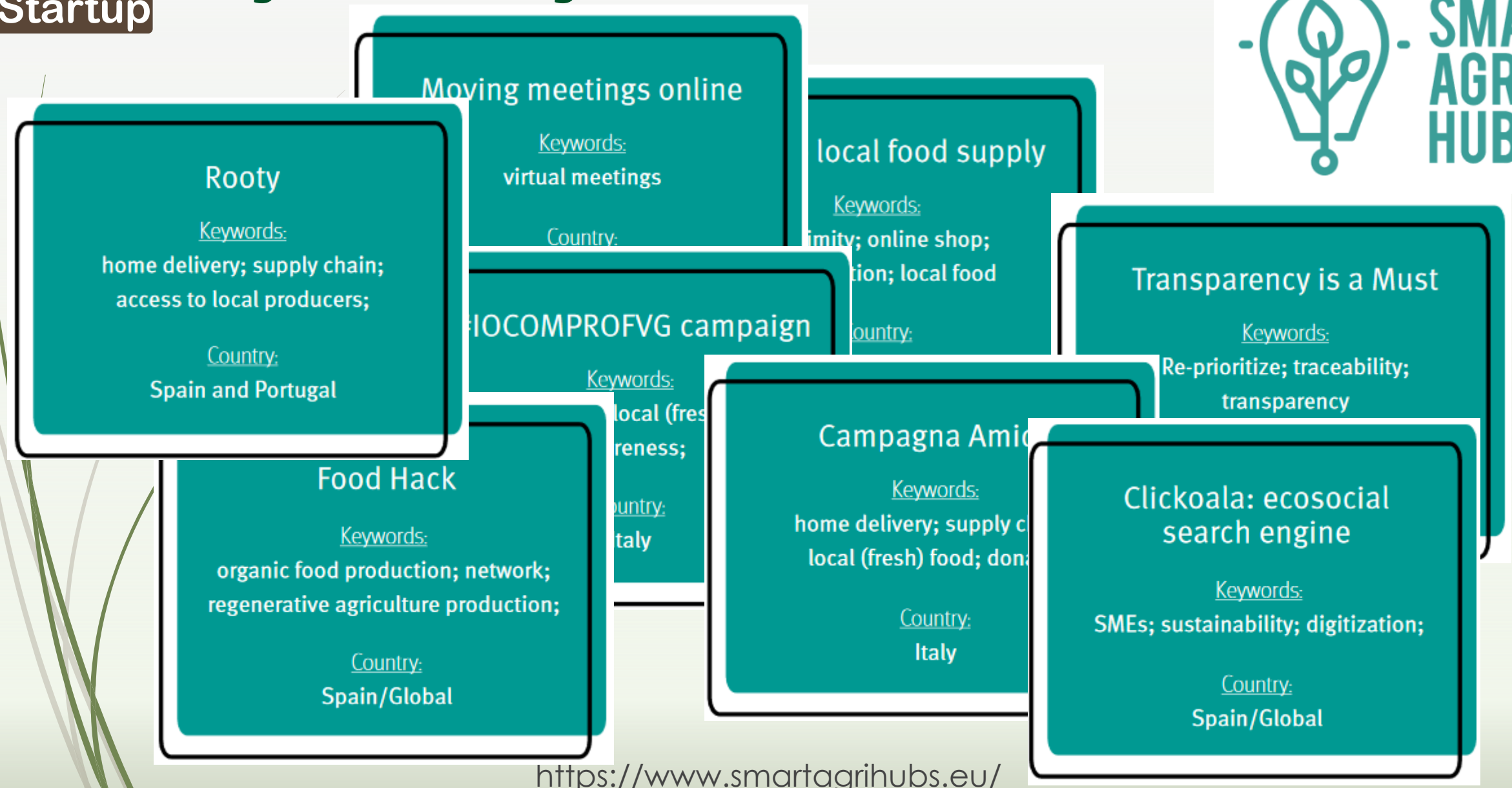


https://ec.europa.eu/education/resources-and-tools/coronavirus-online-learning-resources_en

Digital Learning After COVID-19

https://www.smartagrihubs.eu/

Digital Learning After COVID-19



https://www.smartagrihubs.eu/

Take home messages

- Digital technologies have a strong potential for agricultural training
- Digital Transformation of Training is already deployed in Europe
- The new focus on the AKIS will provide opportunities for the use of these technologies as the main driver of knowledge sharing
- The organic sector is well positioned for the Transition
- Learning, exchange and sharing from best experiences is key to avoid "reinventing the wheel"
- COVID-19 pandemic has moved the digital transition to a digital revolution.

n° 2019-1-IT01-KA202-007492; CUP G35G19000120006

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Thanks for your attention!

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