

Digital Transformation of Learning

Impact on organic agriculture

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FiBL Europe
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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 learning





Innovative ways of learning





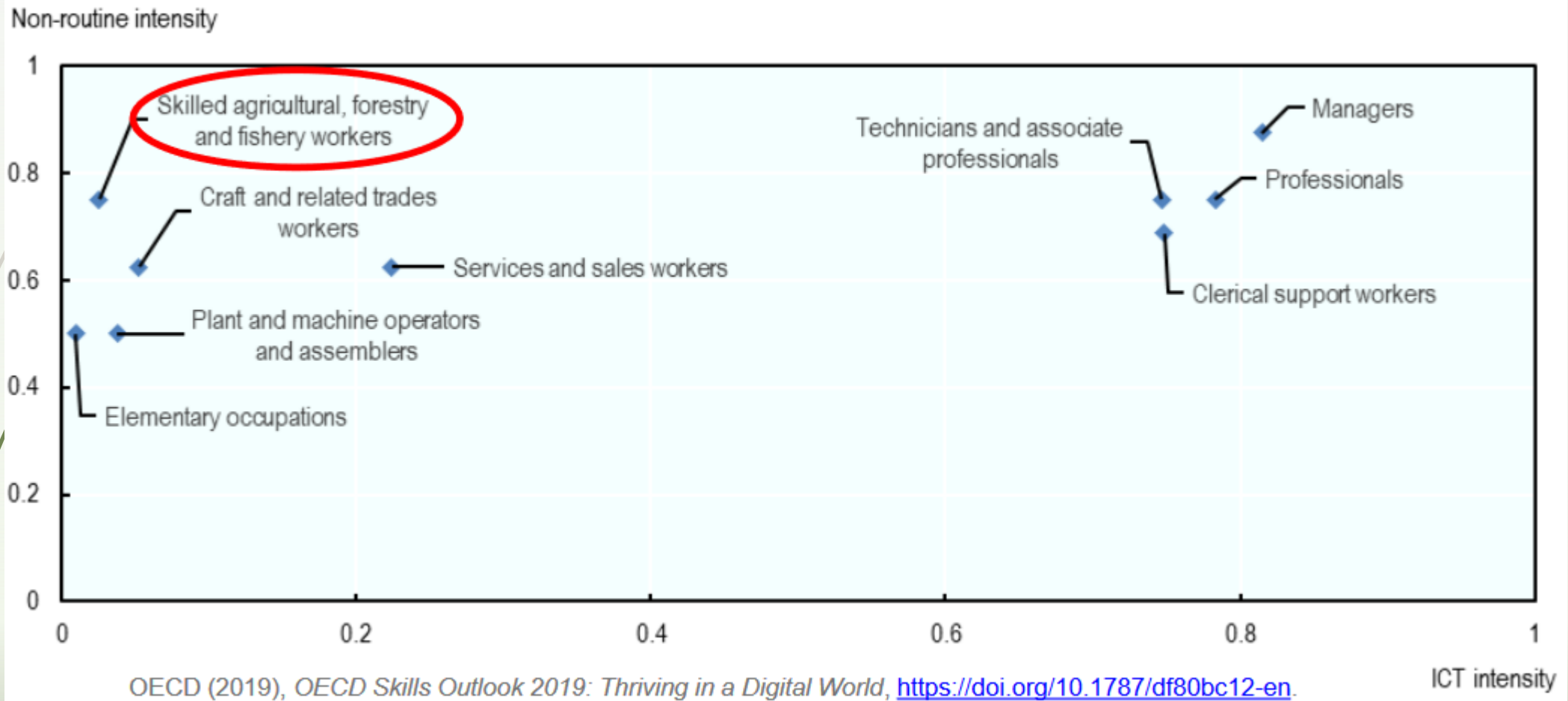
SKILLS FOR DIGITAL FARMING:

Needs, opportunities and challenges ahead

Digital opportunities for farmers

- Digital technologies for Farmers:
 - Mobile devices for access 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 opportunities for lifelong learning
3. Address barriers 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



Digital Transformation of Learning– impact on organic agriculture

What about organic?

Digital transformation of organic training

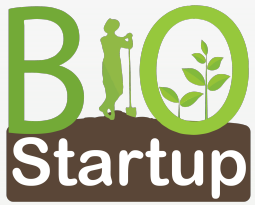
Organic farming training bottlenecks:

- 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 advisory services for organic farming
- Low uptake of organic farming training in public agricultural 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 recommendations 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 recommendations?



[SEARCH TOOLBOX](#)

[NEWS & EVENTS](#) ∨

[THEMES & DISCUSSION](#)

[ABOUT](#) ∨

[CONTACT/SITE INFO](#)

[Home](#)

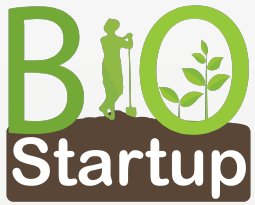
Exchange knowledge, enhance organic farming





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

The screenshot displays the EIP-AGRI website interface. At the top left, there are links for "Legal notice", "Cookies", and "Contact on Europa". A search bar on the top right contains the text "Search EIP-AGRI website" and a magnifying glass icon. The main header features a large image of a group of people in a field, with a green banner overlaid that reads "SHARING KNOWLEDGE - TACKLING CHALLENGES - CONNECTING". On the left side of the main image, there is a circular logo with radiating lines and the text "eip-agri AGRICULTURE & INNOVATION". Below the main image is a navigation menu with the following items: a home icon, "ABOUT", "EIP-AGRI PROJECTS", "SHARE", "FIND", "EVENTS", "NEWS", "PUBLICATIONS", and "FOCUS GROUPS". At the bottom left of the page, the breadcrumb "European Commission > EIP-AGRI" is visible.

Projects - Operational groups

Fulltext search

Contains any of these words

Geographical location

Keywords

 [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

EIP-AGRI – Focus Groups



EIP-AGRI Focus Groups state of play September 2020

		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



SmartAgriHubs – Digital Innovation in EU



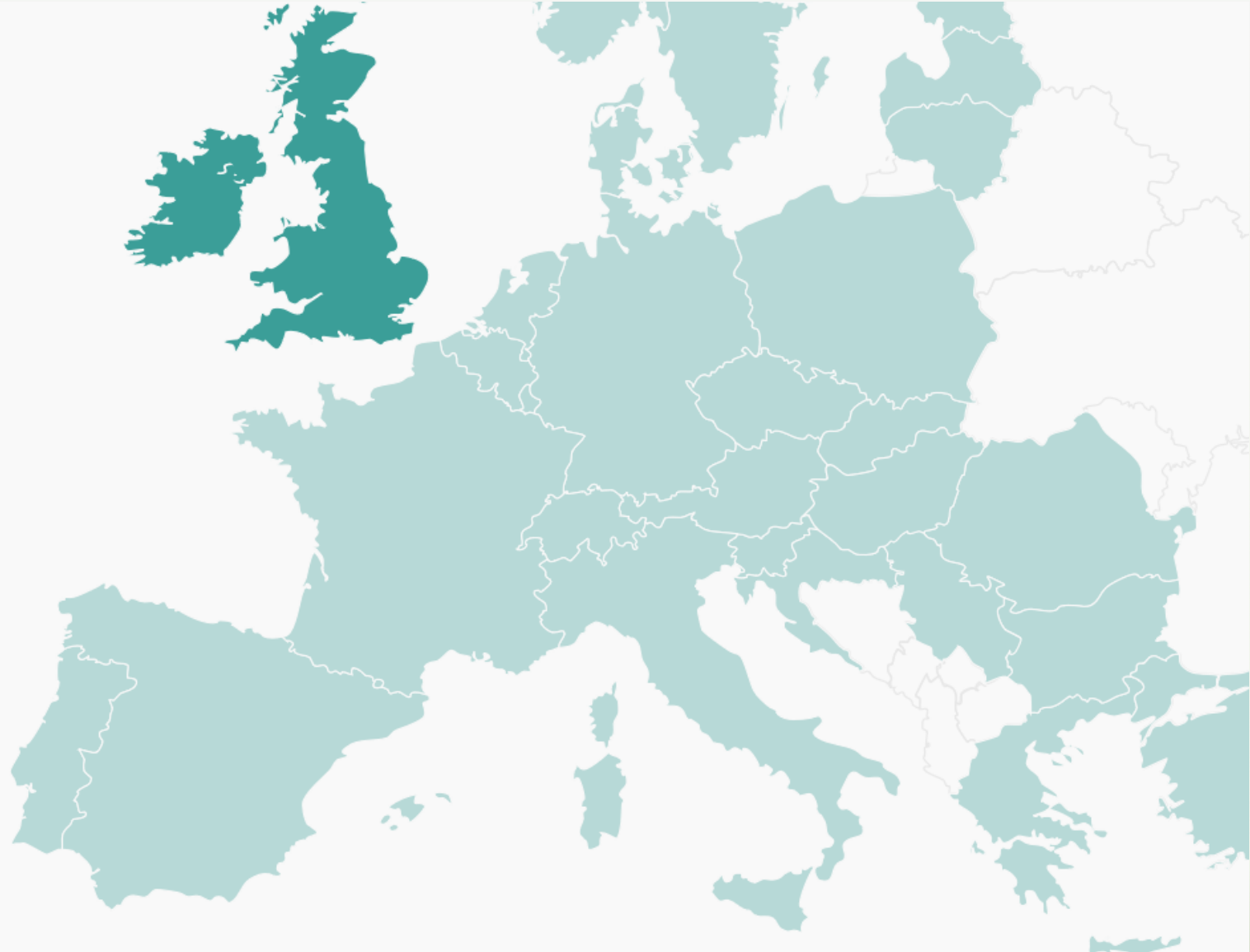
Unleashing the innovation potential for the digital transformation of the European Agrifood Sector

<https://www.smartagrihubs.eu/>

SmartAgriHubs – Regional Clusters

Regional Clusters

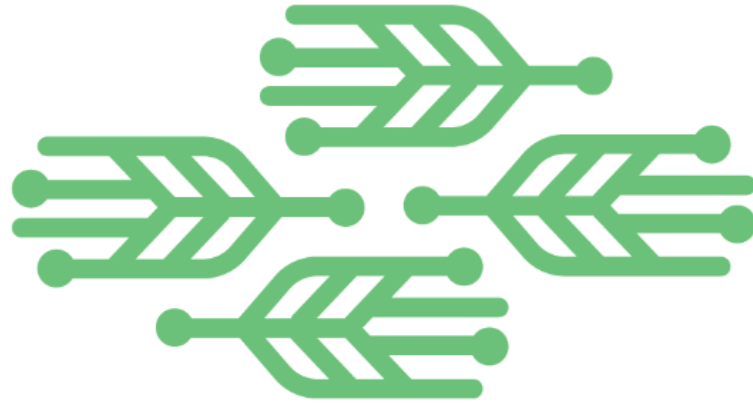
- Central Europe
- France
- Iberia
- Ireland & UK
- Italy & Malta
- North-East Europe
- North-West Europe
- Scandinavia
- South-East Europe





EURAKNOS

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

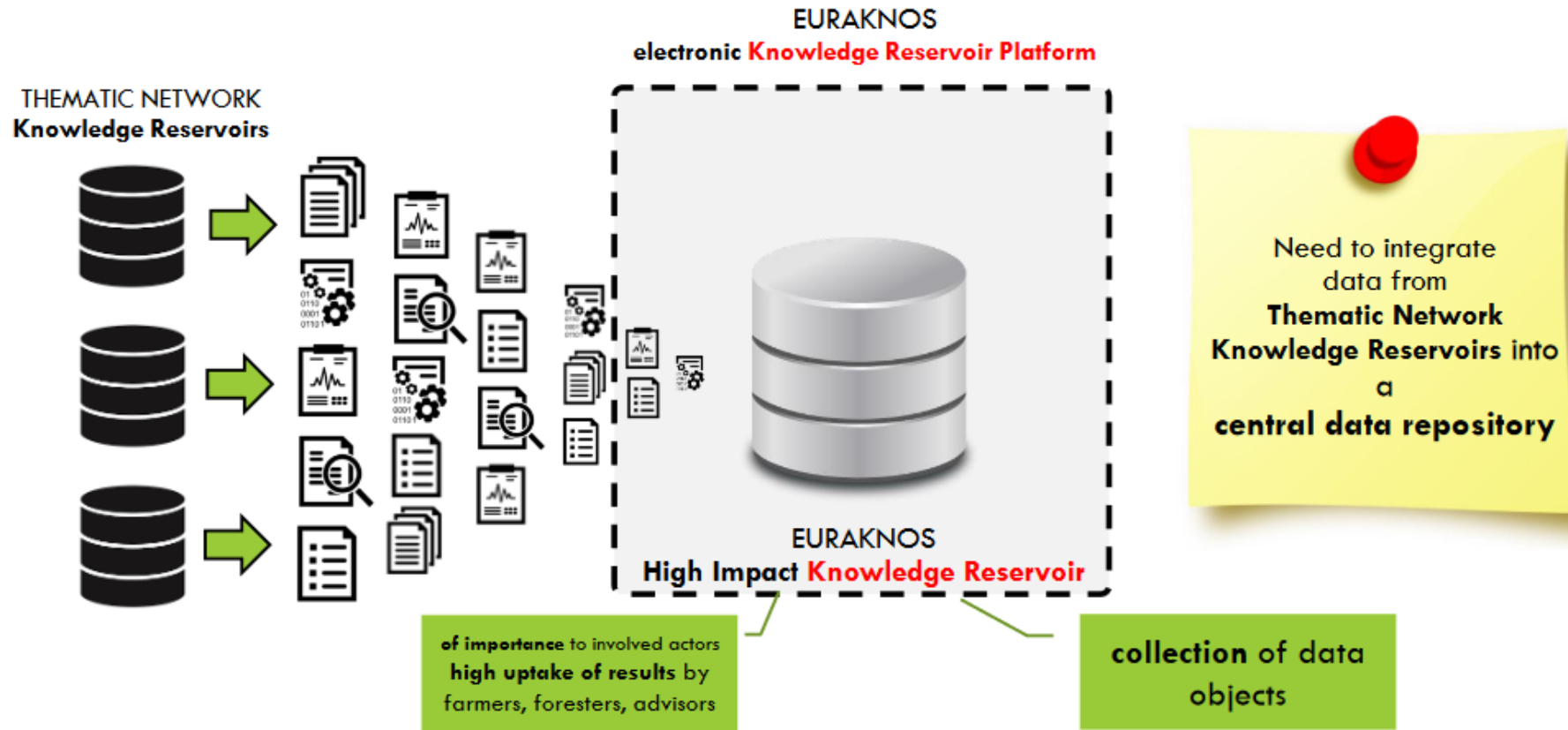


EUREKA

European Knowledge Repository for best Agricultural Practices

<https://h2020eureka.eu/>

EUREKA&EURAKNOS





FAIRshare



FAIRshare

DIGITAL TOOLS FOR FARM ADVISORS

<https://www.h2020fairshare.eu/>



i2CONNECT



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Connecting advisors

to boost interactive innovation in agriculture & forestry

<https://i2connect-h2020.eu/>



PLAID



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

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



Visit the FarmDemo Hub

Browse our EU-wide inventory of demonstration farms, and register on the Hub to showcase your farm and demonstration activities

[LEARN MORE](#)

Visit the FarmDemo Networks

Discover the thematic networks of demonstration farms active in your region, and register to participate and learn

[LEARN MORE](#)

Visit the FarmDemo Training Kit

Find online tools, rich stories & video tutorials, and explore tips & tricks to improve your demonstrations

[LEARN MORE](#)

NEFERTITI
F | A | R | M | D | E | M | U

RÉSULTATS & RESSOURCES ÉVÉNEMENTS MÉDIAS

ARE YOU A FARMER?
Join our community,
fill in short
questionnaire!

EIT Food – Educating for technology Take-off





WiseFarmer – Connecting farm generations in the digital age



WiseFarmer



Co-funded by the
Erasmus+ Programme
of the European Union

NEWS&EVENTS

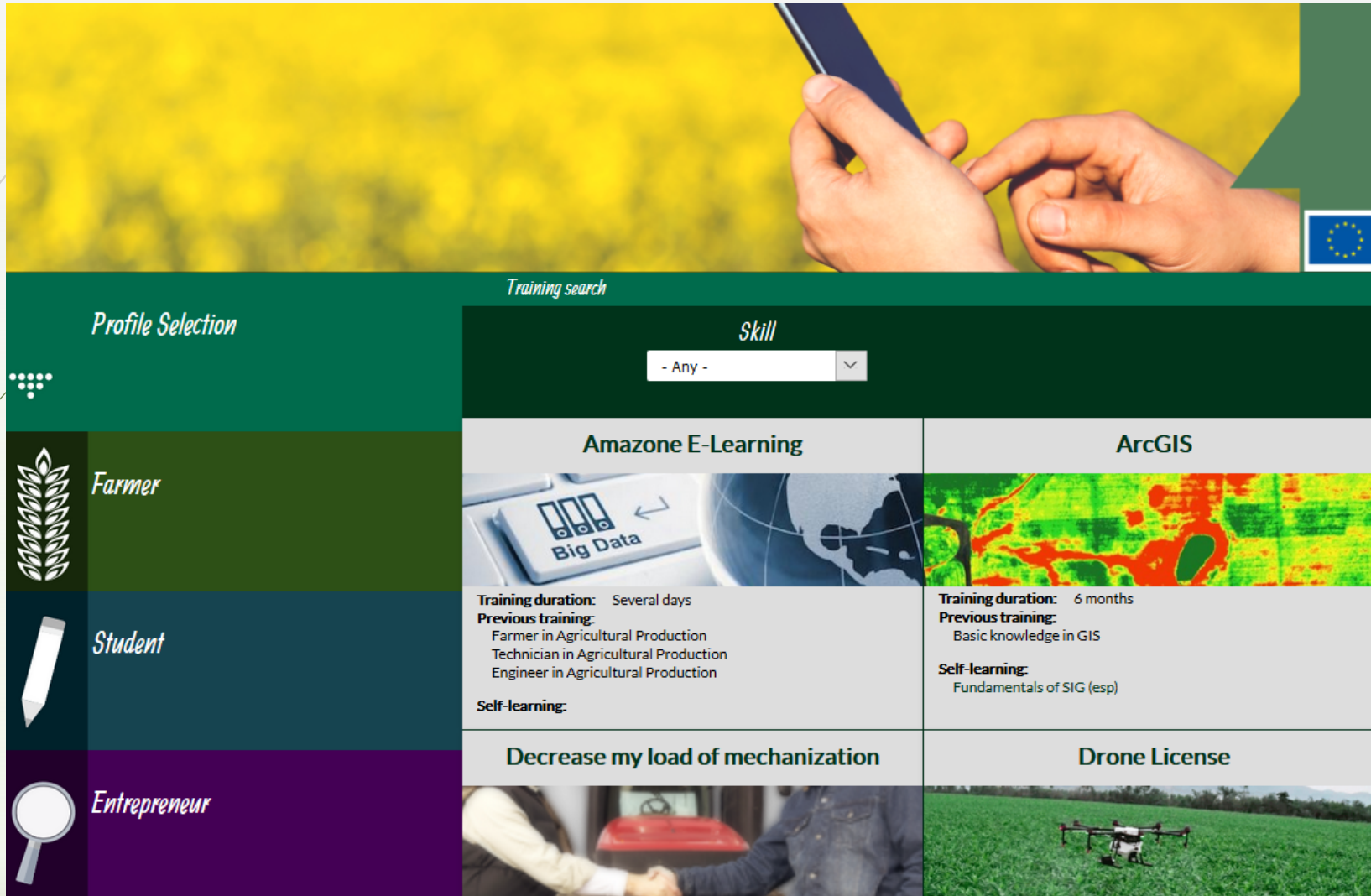


FEED YOUR KNOWLEDGE

WiseFarmer: Connecting farm generations in the digital age

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

Sfate – Smart Farm Training for Employment


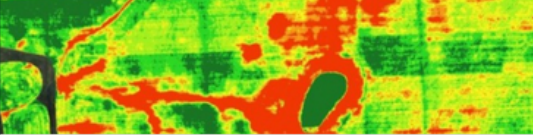




The screenshot shows a web interface for training search. At the top, there is a banner image of hands holding a smartphone in a field, with the European Union flag in the bottom right corner. Below the banner is a dark green header with the text "Training search".

On the left side, there is a "Profile Selection" section with a grid of icons and labels:

- Farmer**: Represented by a leaf icon.
- Student**: Represented by a pencil icon.
- Entrepreneur**: Represented by a magnifying glass icon.

The main content area is titled "Skill" and features a dropdown menu currently set to "- Any -". Below this, there is a grid of training options:

Amazon E-Learning	ArcGIS
 <p>Training duration: Several days Previous training: Farmer in Agricultural Production Technician in Agricultural Production Engineer in Agricultural Production Self-learning:</p>	 <p>Training duration: 6 months Previous training: Basic knowledge in GIS Self-learning: Fundamentals of SIG (esp)</p>
Decrease my load of mechanization	Drone License
	



Seed – Smart Entrepreneurial Education & Training in Digital Farming

The logo for the SEED project, written in a green, lowercase, cursive font.

[HOME](#) [ABOUT](#) [PARTNERS](#) [OUTPUTS](#) [NEWS](#) [CONTACT](#)



<https://www.digitalseed.eu/>

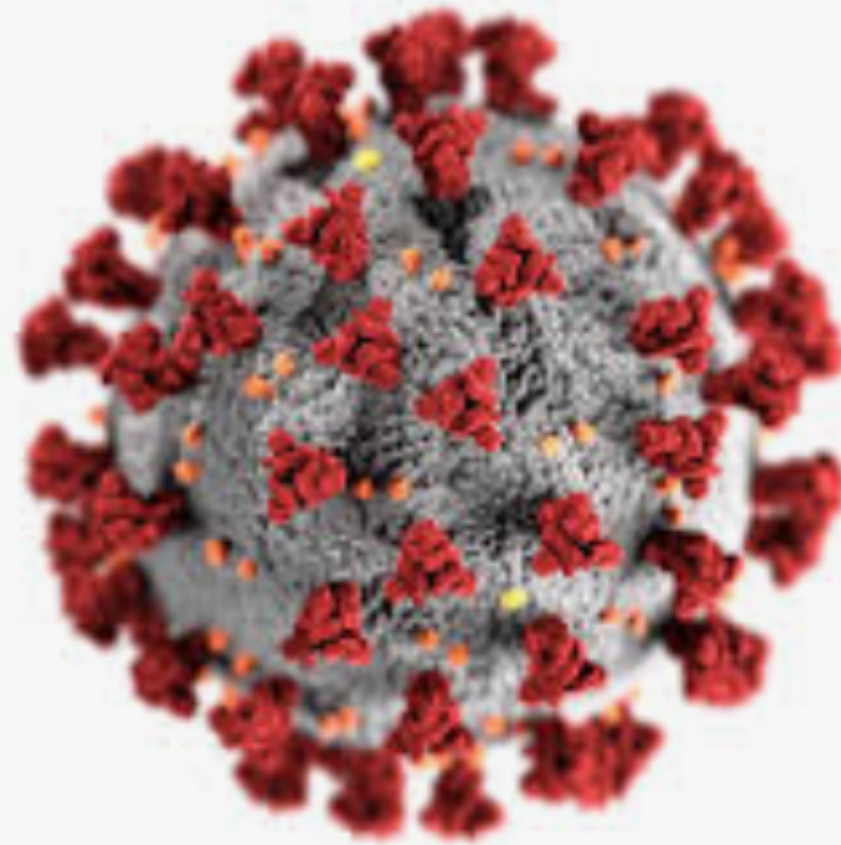


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Do you know more projects in the field?

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3. Digital learning after COVID-19



COVID-19 and Agricultural training

- Disruption of educational 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
- Spearheading transport costs of meetings
- Increase participation on events of new users
- Time-saving controls and service provision
- Smart value-chain management & new distribution channels
- Boost to on-line administration

Education and Training

Home

Education in the EU

Policies

Resources and tools

News

Events

Coronavirus: online learning resources

Discover a selection of online resources and tools for learners, teachers and educators during the outbreak of COVID-19.



ANALYSIS OF COVID-19: SOLUTIONS ON THE FORUM



Rooty

Keywords:

home delivery; supply chain;
access to local producers;

Country:

Spain and Portugal

Moving meetings online

Keywords:

virtual meetings

Country:

local food supply

Keywords:

proximity; online shop;
education; local food

Country:

BIOCOMPROFVG campaign

Keywords:

local (fresh)
freshness;

Country:

Italy

Campagna Amica

Keywords:

home delivery; supply chain
local (fresh) food; don't

Country:

Italy

Transparency is a Must

Keywords:

Re-prioritize; traceability;
transparency

Food Hack

Keywords:

organic food production; network;
regenerative agriculture production;

Country:

Spain/Global

Clickoala: ecosocial search engine

Keywords:

SMEs; sustainability; digitization;

Country:

Spain/Global

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.



Thanks for your attention!



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