



# EU CAP Network Seminar 'Skills and lifelong learning for agricultural advisory and training service providers'

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# The state-of-play in skills and lifelong learning for agriculture advisory and training service providers

Aine Macken-Walsh  
EU CAP Network Support Facility for Innovation and Knowledge exchange | EIP-AGRI



## State of play: 'skills and lifelong learning'

- › Speeding up' the twin green and digital transition
- › Mutually reinforcing, for society and for agriculture



## The challenge:

- The skills (*what?*)
- The people (*who?*)
- Lifelong learning (*how?*)

## The response:

- Enhanced delivery mechanisms
- Increased attractiveness
- Embedding learning in enabling policy and practice



## Jobs of the future – technology related

- › 65% of children starting primary school will end up in **professions that do not currently exist**. The World Economic Forum (2016) (OECD, 2023. 14)
- › ‘75% of the workforce by 2020 – **tech-savvy, hyper-connected** millennials ’ (Block et al., 2023 – ‘Farmers of the Future’)
- › ‘One-third of all new jobs will be **technology** related by 2030’ (KPMG, 2019)
- › Is this a daunting prospect for today’s society?



## Most significant 'mismatch' and gaps: skills and agriculture

The largest skills gaps are: **social skills and teamwork, problem solving, quality control and equipment maintenance**'

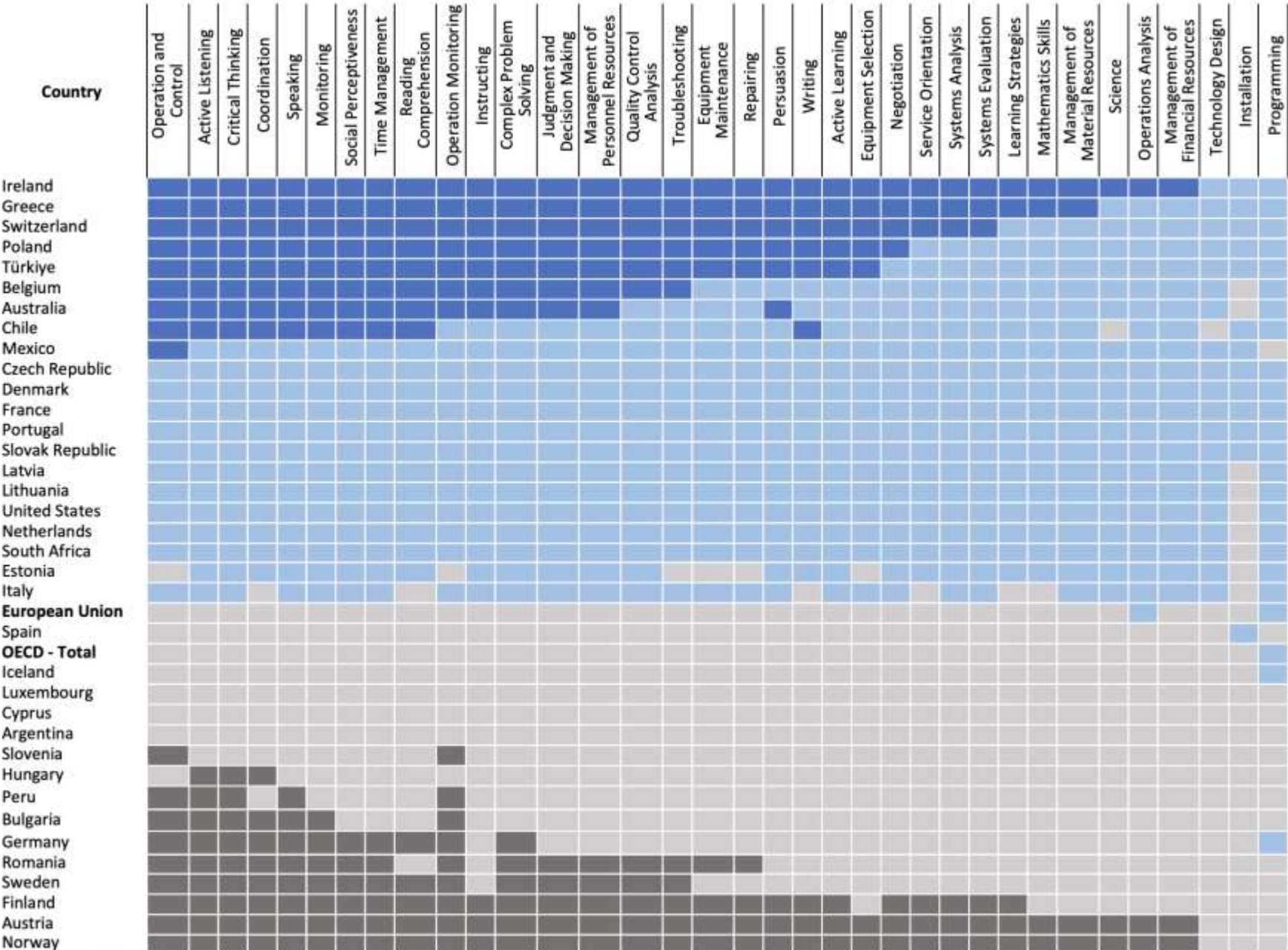
(OECD, 2023, 6)





Critical shortage Shortage Surplus Critical surplus

Skills needs in agriculture, forestry and fishing across some OECD and non-OECD countries (2015)



(OECD, 2023, 14)

## Examples of skills within categories

- › Operation and control
- › Active listening
- › Critical thinking
- › Coordination
- › Speaking
- › Monitoring
- › Social perceptiveness
- › Time management
- › Reading comprehension
- › Operation monitoring
- › Instructing
- › Complex problem solving
- › Judgement and decision-making
- › Management of personnel resources
- › Quality Control Analysis
- › Troubleshooting
- › Equipment maintenance
- › Repairing
- › Persuasion
- › Writing
- › Active learning
- › Equipment selection
- › Negotiation
- › Service orientation
- › Systems analysis
- › Systems evaluation
- › Learning strategies
- › Mathematics skills
- › Management of material resources
- › Science
- › Operations analysis
- › Management of financial resources
- › Technology design
- › Installation
- › Programming





## Technology oriented skills

### › **Operation and control**

- › Active listening
- › Critical thinking
- › Coordination
- › Speaking
- › Monitoring
- › Social perceptiveness
- › Time management
- › Reading comprehension
- › Operation monitoring
- › Instructing
- › Complex problem solving
- › Judgement and decision-making
- › Management of personnel resources
- › **Quality Control Analysis**
- › **Troubleshooting**
- › **Equipment maintenance**
- › **Repairing**

### › Persuasion

- › Writing
- › Active learning
- › Equipment selection
- › Negotiation
- › Service orientation
- › Systems analysis
- › Systems evaluation
- › Learning strategies
- › Mathematics skills
- › Management of material resources
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- › **Technology design**
- › **Installation**
- › **Programming**



## ‘Soft’, relational, social skills

- › Operation and control
- › **Active listening**
- › **Critical thinking**
- › Coordination
- › Speaking
- › Monitoring
- › **Social perceptiveness**
- › Time management
- › Reading comprehension
- › Operation monitoring
- › Instructing
- › **Complex problem solving**
- › **Judgement and decision-making**
- › Management of personnel resources
- › Quality Control Analysis
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## Interactive exercise

Of the following skills, which is in greater deficit?:

- › Active Listening or Technology?
- › Programming or Social Perceptiveness?
- › Negotiation or Technology Design?



## Implications for achieving the Twin Transition?

- › ‘Soft’ skills are important
- › For technology to achieve ‘greening’:
  - user learning*
  - user appreciation*
  - the user interface*



## Who?

- › Family owner-operators
- › Family members/workers
- › Hired workers
- › Seasonal workers
- › Hired workers from local regions
- › Casual employees
- › Unremunerated workers (family/local)
- › Migrant/'foreign' workers
- › Transient workers
- › Indigenous peoples
- › Women
- › Youth
- › Older farmers
- › New entrants
- › Professional farm personnel
- › Farm managers
- › Qualified farm personnel
- › Cooperative/organisation personnel
- › Contractors
- › Farm advisors



## ‘Inclusiveness’

- › ‘Equal access to training/learning’ goes hand in hand with
- › ‘Equal rights to the use of land’

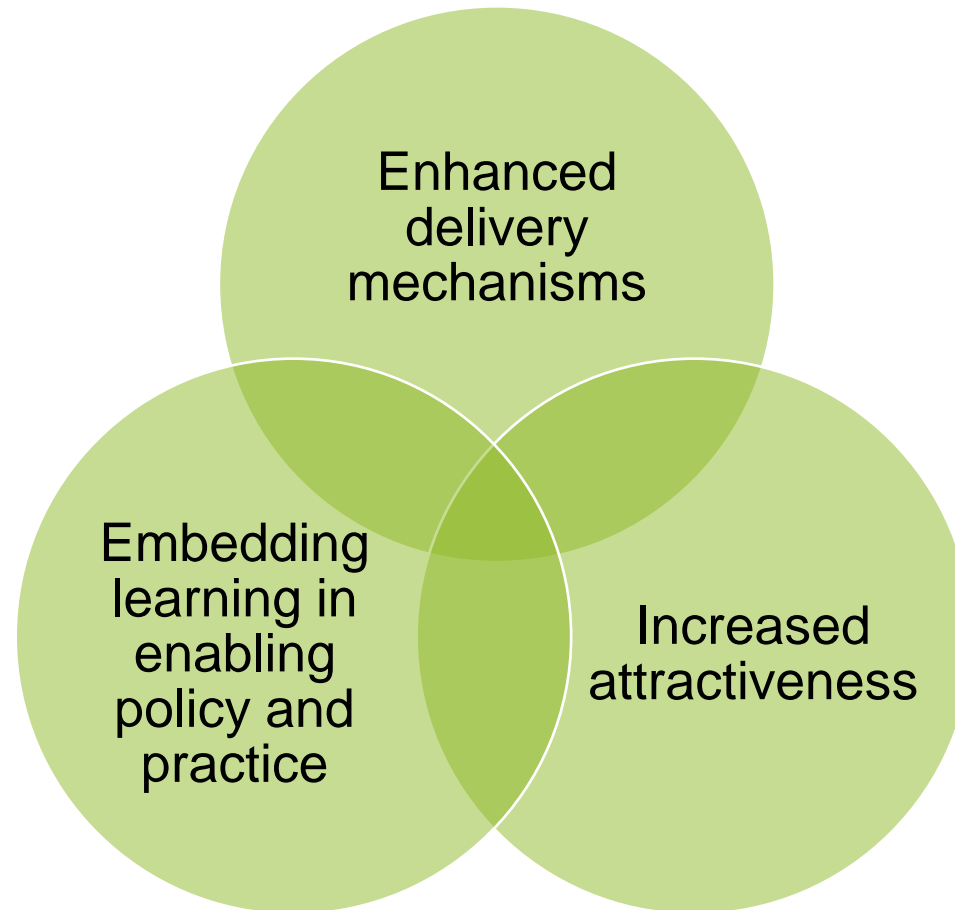
(OECD, 2023, 6)

‘Entering the occupational category of farmer’ –  
The powerful role of education in forging access  
(Deming et al., 2016)



## How?

- › Formal learning
- › Informal learning
- › Life-long learning



## Skills and Lifelong Learning?

- › ‘The agricultural labour force generally engages less in training than other sectors’ (OECD, 2023, 11)
- › Farmers have higher participation in *informal* learning, training & upskilling— farm extension, industry and farmers’ organisations: *a valuable opportunity*
- › Advisors and other AKIS actors: similar informal opportunities
- › Horizontal and vertical lifelong learning opportunities
- › Inclusive learning opportunities (gender and the MAA)
- › A combined ‘learning ecology’





## Advisors

- › Vital in AKIS
- › Roles in:
  - › Transferring knowledge and innovation
  - › Capturing farmers' needs
  - › Acting as innovation brokers
  - › Participating in and sharing knowledge from EIP-AGRI innovative projects
- › Learning occurs and can be optimised in these activities!
- › Lifelong learning of advisors: through, within and parallel to the lifelong learning of farmers/clients



# Attractiveness

**(95) Foot-in-the-Door**  
Start with a modest request then follow up later with a larger request, you increase your chances of succeeding with the larger request.

**(98) Behavioural Contract**  
Encourage actions with monetary incentives and tangible benefits.

**(93) Commitment Device**  
Enable users to commit to do or refrain from doing a certain behaviour by introducing friction, social accountability or the prospect of a financial loss.

**(101) Sunk Cost Fallacy**  
Encourage actions with monetary incentives and tangible benefits.

**(104) Emphasise Risks**  
Emphasise the risks and likelihood of negative outcomes associated with inaction or action.

**(109) Punishment**  
Add an undesirable stimulus or remove a pleasant stimulus to decrease a behavior.

**(121) Monetary Rewards**  
Encourage people to take action and achieve goals with monetary benefits (e.g., cash bonuses, prizes).

**(134) In-game Currency**  
Introduce a currency to facilitate microtransactions (in-game purchases) or incentivizing specific activities.

**(130) Self-rewards**  
Prompt people to reward themselves once they have successfully changed their behaviour.

**(134) Set and violate expectations**  
Encourage actions with monetary incentives and tangible benefits.

**(131) World-view disruptor**  
Present information or an outcome that doesn't fit into people's understanding of the world.

**(132) Delighter**  
Provide unexpected micro-moments of surprise (e.g. interaction or animation) to delight users with or without people's inputs.

**(125) Novelty**  
Attract people's attention with information and experiences that are new or perceived to be different, unusual or unfamiliar.

**(122) Blurred information**  
Obscure part of the information to create an information gap which can be revealed by taking the desired action.

**(128) Oracle effect**  
Provide a mechanism and knowledge to enable people to predict an outcome (e.g. actions, events or competitions).

**(82) Storytelling**  
Present information in a story form to provide context and connect events in a meaningful way.

**(84) Identifiable Victims effect**  
Focus on one person (the victim) and her/his background story, rather than vaguely defined groups.

**(81) Epic Meaning**  
Implicitly or explicitly connect mundane actions or individual achievements to a higher purpose or cause.

**(101) Sunk Cost Fallacy**  
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## makeittoolkit

# 15 Behavior Change Strategies



**Social Proof (71)**  
Reveal what other people think, do or say to influence people's behavior, especially in situations of uncertainty.

**Shared Goal (75)**  
Encourage people to jointly move towards a shared goal to foster a sense of belonging.

**Leaderboard (80)**  
Leverage people's need to win and advance their social standing.

**Self-set Goals (51)**  
Encourage actions with monetary incentives and tangible benefits.

**Creative Challenge (54)**  
Provide tools and environments to encourage out-of-the-box thinking.

**Placebo button (57)**  
Introduce a push-button or other control that has only apparent functionality and aims at providing an illusion of control over a system, situation or environment.

**Decoy effect (11)**  
Introduce a seemingly useless middle option - that nobody wants - to make an expensive one seem more attractive.

**Halo effect (12)**  
Leverage people's biased judgments of transferring their feelings about one attribute of something to other, unrelated, attributes.

**Gain-frame (15)**  
Frame a message to emphasise the benefits that can be acquired by following the suggested course of action.

**Environmental Overlay (141)**  
Transport people into a real (and realistic) place through visual overlays to create a sense of spatial presence.

**Narrative Overlay (143)**  
Immerse your audience into a fictional narrative to contextualise activities and connect in an emotionally engaging way.

**Protus Effect (145)**  
Enable people to create and customise a virtual identity as an imaginary self-representation (and eventually socialise through it), to influence their real world behaviours.

**Clear Goals (61)**  
Set specific and unambiguous goals (possibly in the short, ter, and longrun) to direct one's attention and effort towards the task at hand.

**Hint (62)**  
Provide clear and focused instructions and suggestions to set up people for success.

**Endowed Progress Effect (63)**  
Accelerate the behaviour to progress towards a goal or reward by emphasising (and eventually create anticipation) once one is getting closer to achieving it.

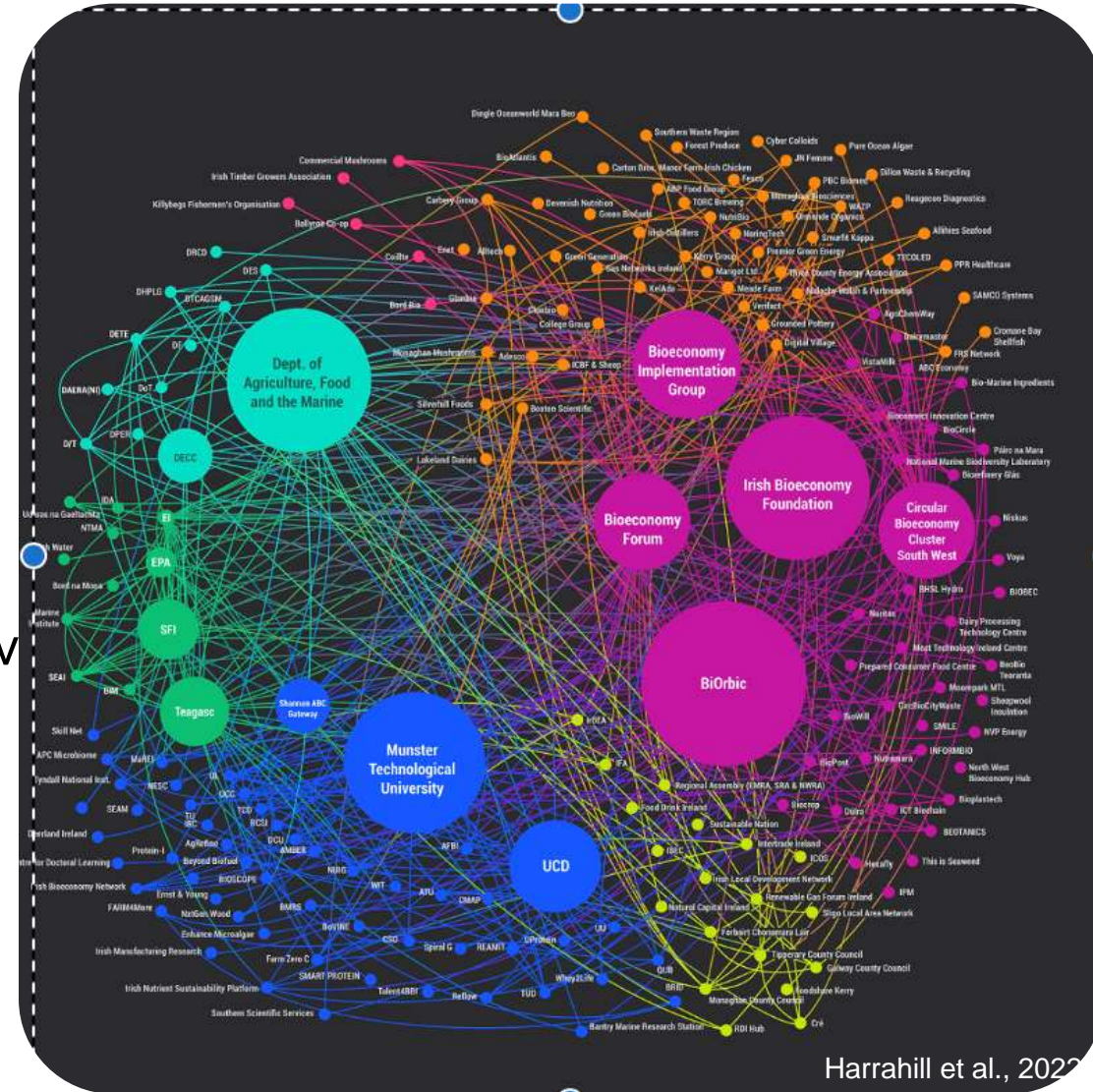
**Limited Supply (111)**  
Emphasize the amount of offering still in stock and its dependence on (unpredictable) demand from others.

**Exclusive Access (112)**  
Limit access to information, opportunities, or benefits to people who meet certain requirements - either temporarily or permanently.

**Generalised Scarcity Cues (117)**  
Expose people to informational scarcity cues (visual or otherwise) to unconsciously trigger competitive and self-oriented behaviours.

# Learning embedded in the AKIS:

- Farmers
- Advisors
- Innovation brokers
- Training providers
- Managing Authorities
- Farmer and forester organisations
- Vocational Education & Training (VET) representatives
- CAP SPs
- Operational Groups
- Horizon projects
- NSUs
- Researchers





## Our focus today:

- Interactive session 1: **Existing and new methods and training and provision of skills** (*inclusive, interactive, social, relational, team working*)
- Interactive session 2: **Enhancing the attractiveness of lifelong learning for advisors, trainers, farmers and foresters** (*inclusive, flexible, responsive, informal & informal learning*)
- Interactive session 3: **Opportunities, enablers and support: inspiring 'how to' examples from CAP and beyond** (*inclusive, peer-to-peer, interactive, systems-based, AKIS knowledge diversity and flow*)



# MakeIt Toolkit

› 15 behaviour change strategies



# EU CAP Network seminar

## ‘Skills and lifelong learning for agricultural advisory and training service providers’

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All information on the seminar is available on the event webpage:

<https://eu-cap-network.ec.europa.eu/events/eu-cap-network-seminar-skills-and-lifelong-learning-agricultural-advisory-and-training>

