



UNISECO



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# Tackling the shortage of skilled and informed labour to deliver transitions to agro-ecological farming systems in North-east Scotland, UK

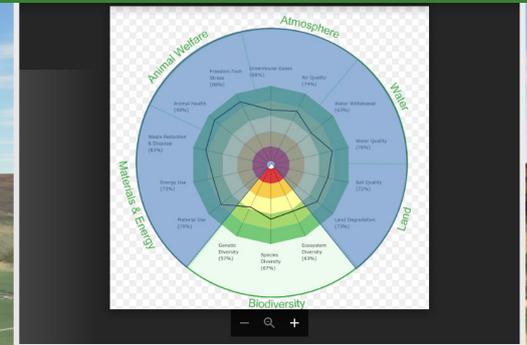


Image: C Wang, James Hutton Institute

Understanding and Improving the Sustainability of Agro-ecological Farming Systems in the EU

POLICY BRIEF

The emergence and application of new technologies is creating opportunities for accelerating pathways of transition. However, skilled labours could be a barrier to such transitions. Evidence suggests industry and farmers need work-based skills, apprenticeships, life-long learning and graduates, but face competition in the labour market.

## RESEARCH FINDINGS

Evidence in the UK showed competition for skilled labour from the oil and gas industries which offer higher salaries and career opportunities. However, increased capability to overcome barriers to transitions is being facilitated through collaboration between Scotland's Rural College and specialist providers such as LANTRA Scotland and Digital Skills Scotland, with financial and technical support by organisations such as The Royal Highland and Agricultural Society of Scotland. For the long-term, a strategic approach is required to providing training, education and life-long learning for it to be taken up by relevant authorities and be attractive to prospective students and pupils. Themes relating to agro-ecology need to fit with the strategic policy aims of the relevant level of governance and delivery, i.e. national level policy, courses and content for primary to tertiary education, and emerging citizen-focused life-long learning.

Learning content has to be:

- i) tailored for use, and accessible, by all types of actors;
- ii) relevant to all stages of agro-ecological transitions in farming systems;
- iii) appropriate to stage of life of individual actors;
- iv) contemporaneous with technical and social innovations.

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United Kingdom

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North-east Scotland, United Kingdom

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*Citizens of any age learning about landscapes under future land management practices, in virtual reality*

*Photographs: David Miller, James Hutton Institute*

## POLICY RECOMMENDATIONS

Over the longer term, transitions to sustainable farming systems will be aided by the inclusion of agro-ecology in the school curriculum. Learning outcomes should be designed to align with enhancing understanding of the relevance of agro-ecology to societal challenges of tackling climate change, reversing biodiversity loss, food security and rural development.

For example, relevant areas of the Scottish Curriculum for Excellence are:

- i) People, place and environment; Fourth level social sciences; Benchmark - Evaluates the role of agriculture in food production and draws at least three reasoned conclusions about the environmental impacts and therefore the sustainability of these methods.
- ii) Biodiversity and interdependence; Third level Sciences; Outcome – “I can explain the use of different types of chemicals in agriculture and their alternatives and can evaluate their potential impact on the world’s food production.”

Integrating agro-ecology into such existing areas of the curriculum would contribute to maintaining their relevance to learning principles and practices which are relevant, and being used, to tackle challenges for society.

## FURTHER INFORMATION

European Commission, 2020. [European Skills Agenda for Sustainable Competitiveness, Social Fairness and Resilience](#). pp. 23.

[Education Scotland, 2017. Benchmarks, Sciences](#). pp46.

[Education Scotland, 2017. Benchmarks, Social Sciences](#). pp24.

Further information is available on the United Kingdom Case Study page of the UNISECO project: <https://uniseco-project.eu/case-study/united-kingdom>

### ABOUT UNISECO:

UNISECO is a European research project aiming to develop innovative approaches to enhance the understanding of socio-economic and policy drivers and barriers for further development and implementation of agro-ecological practices in EU farming systems.

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<https://cordis.europa.eu/project/id/773901>

<https://zenodo.org/communities/uniseco-h2020/>

UNISECO in the EIP-Agri projects database:

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/understanding-and-improving-sustainability-agro>

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