

FROM CONVENTIONAL TO AGROECOLOGICAL FARMING

In order to reach the European Green Deal goals there is a need to work and transform agriculture and bring it to more sustainable, climate-neutral and biodiversity-friendly practices, which would have a positive effect on the environment and allow producing agricultural output safer for consumers. There is a variety of farming practices utilised to grow crops or maintain livestock, and there are numerous farming systems that aim to focus on various aspects or approaches to ecological farming.

One of key researches aiming to synthesize and grasp the idea of ecological farming and systematize existing ecological farming practices is a Horizon 2020 project entitled “Low-Input Farming and Territories – Integrating knowledge for improving ecosystem-based farming” (LIFT) [1], which aimed to identify and understand how socio-economic and policy drivers impact on the development of ecological approaches to farming and assess the performance and sustainability of such approaches, taking into account different farming systems at farm, farm-group and territorial scales.

There is a growing understanding that a positive environmental effect is achieved through a variety of farming practices, regardless of the specific farming system. Yet to adjust the policy measures and support the uptake of ecological approaches in particular farming system it is necessary to understand the typology of farms depending on the practices implemented within their production activities. Such understanding is necessary for stakeholders to have a clear view of possible options and potential effects, which is crucial for an increase in the uptake of such ecological approaches by European farms.

Thus, the fundamental basis of the research is the LIFT typology of farms depending on their uptake of ecological approaches (or implementation of ecological farming practices) [2]. The typology aims to provide a consolidated framework composed of farming systems and farming practices. Specific data and thresholds were attached to the farming practices, to feed the analysis and the modelling processes to characterise individual farms with reference to their uptake of ecological practices.

The defined typology is necessary in order to carry out future statistical analyses and investigation of drivers and obstacles in determining the adoption of ecological farming practices, or to study environmental performances opposite to other socio-economic aspects. It could also be the basis for implementation of policy measures and support for development of particular farming systems based on the intensity of implementation of ecological approaches. The key policy recommendations developed within the LIFT project have been described in detail in [3] also stress upon the importance of co-creation of knowledge. Involvement of stakeholders with various backgrounds and representing different groups allows to ensure a complex understanding of an issue based on transdisciplinary approach. Ecological farming in this sense is especially sensitive, as understanding of practices and approaches from the standpoint of different stakeholder groups varies.

Bibliography

1. *EU H2020 LIFT (Low-Input Farming and Territories - Integrating knowledge for improving ecosystem-based farming) project*, www.lift-h2020.eu.
2. Rega, C., Paracchini, M.L., McCracken, D., Saba, A., Zavalloni, M., Raggi, M., Viaggi, D., Britz, W., Frappier, L. (2018). *Review of the definitions of the existing ecological approaches*. EU H2020 LIFT (Low-Input Farming and Territories - Integrating knowledge for improving ecosystem-based farming), Deliverable 1.1, <https://doi.org/10.5281/zenodo.5075627>.
3. Latruffe, L., Legras, S., Barnes, A., Kantelhardt, J., Krupin, V., Paracchini, M.L., Rega, C., Schaller, L., Toma, L., Tzanopoulos, J., Vranken, L., Zawalińska, K., Bailey, A., Bakucs, Z., Bigot, G., Billaudet, L., Böhm, M., Bormpoudakis, D., Britz, W., Chitea, M., Davidova, S., Desjeux, Y., Duval, J., Duvaléix, S., Hansson, H., Heinrichs, J., Henderson, S., Hostiou, N., Jacquot, A.-L., Jeanneaux, P., Leduc, G., Manevska-Tasevska, G., Matthews, P., Niedermayr, A., Ryan, M., Thompson, B., Tzouramani, I., Van Ruymbeke, K., Védrine, L., Veslot, J., Viaggi, D. (2022). *How to improve the adoption, performance and sustainability of ecological farming*. EU research project LIFT (Low-Input Farming and Territories – Integrating knowledge for improving ecosystem-based farming), Deliverable 7.6, <https://doi.org/10.5281/zenodo.6462474>.

Acknowledgement: This work is a part of the LIFT (“Low-Input Farming and Territories – Integrating knowledge for improving ecosystem-based farming”) project that has received funding from the European Union’s Horizon 2020 research and innovation program under grant agreement no. 770747.