Good Practice Example No. 8 - Hungary

ÖMKi: Driving agricultural innovation through farmer–researcher collaboration

Industry:	Organic agriculture
Location:	Bács-Kiskun and Csongrád-Csanád counties, Hungary
Established in:	2011
Legal form:	Nonprofit Research Institute
Business model:	B2B (business to business)
Core activity:	On-farm agricultural research

The Research Institute of Organic Agriculture (ÖMKi) is one of Hungary's leading organizations dedicated to sustainable agricultural innovation and knowledge transfer. Established in 2011, the institute was created to bridge the gap between scientific research and practical farming by developing solutions that can be directly applied under real agricultural conditions. Rather than conducting research exclusively in laboratories, ÖMKi works closely with farmers across the country through a network of demonstration and experimental farms. This collaborative approach enables the testing and adaptation of innovative farming practices while supporting the transition towards more sustainable and resilient agricultural systems.

From research to real-world farming solutions

A distinctive feature of the ÖMKi model is its on-farm research methodology. Farmers and researchers jointly identify challenges, design experiments, and evaluate the results under actual production conditions. This approach ensures that innovations are practical, economically viable, and adapted to local environmental conditions. The research covers a wide range of topics, including soil fertility management, crop diversification, disease prevention, organic plant protection, climate adaptation, and biodiversity enhancement. By involving producers directly in the innovation process, ÖMKi creates solutions that are more likely to be adopted and successfully implemented on farms.

Strengthening sustainable and climate-smart agriculture

The institute places particular emphasis on improving the sustainability and resilience of agricultural production. Many of its projects focus on enhancing soil health, reducing dependency on external inputs, improving water retention capacity, and increasing ecosystem services provided by agricultural landscapes. Through field trials and long-

term monitoring, ÖMKi helps farmers understand how sustainable practices can improve both environmental performance and economic viability. This work is particularly relevant in the context of climate change, where farmers increasingly need production systems capable of adapting to extreme weather conditions and resource constraints.

Knowledge transfer and farmer education

Beyond research activities, ÖMKi serves as an important platform for agricultural education and professional development. The institute regularly organizes field days, demonstration events, workshops, conferences, and training programmes that allow farmers to learn directly from researchers and from each other. Educational materials, practical guides, and research results are made publicly available, ensuring that knowledge generated through projects can benefit a wider farming community. This continuous exchange of knowledge strengthens the capacity of producers to make informed decisions and adopt innovative solutions.

Building networks for agricultural innovation

The success of the ÖMKi model is based on cooperation among multiple stakeholders, including farmers, universities, research institutions, advisors, and professional organizations. By facilitating dialogue and collaboration between these groups, the institute contributes to the development of a stronger agricultural innovation ecosystem. Farmers are no longer viewed solely as recipients of research results but as active partners in the innovation process. This participatory model encourages experimentation, accelerates knowledge dissemination, and supports the development of practical solutions to emerging agricultural challenges.

Creating a sustainable future for agriculture

The ÖMKi experience demonstrates that successful agricultural innovation depends not only on technological advances but also on effective cooperation and knowledge sharing. By combining scientific expertise with practical farming experience, the institute has created a model that supports both environmental sustainability and economic resilience. For students and future agricultural professionals, ÖMKi provides an excellent example of how research, education, and entrepreneurship can work together to drive innovation in agriculture. The model highlights the growing importance of collaborative learning and evidence-based decision-making in building the sustainable farming systems of the future.

Source: https://biokutatas.hu/en/