

FICHE – ORGANIC FARMING CASE

“OK-NET ECOFEED: 100% USE OF ORGANIC AND REGIONAL FEED FOR PIG AND POULTRY FARMERS”

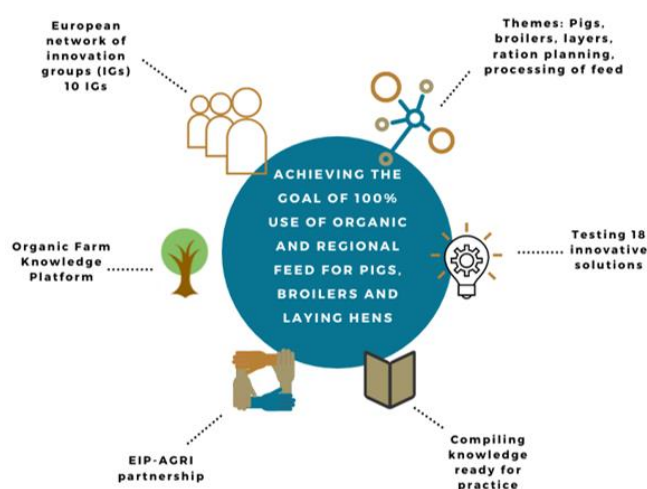
Data extracted in February 2022

Note to the reader: This set of *fiches – organic farming case* is offering additional information to the meta analysis literature review summarised in *general fiche* and set of fiches on the environmental aspects of ORGANIC FARMING SYSTEMS. Each individual case describes an initiative in different parts of organic food systems within the European Union, delivering more detailed information on possible ways to help develop organic systems.

1. DESCRIPTION OF THE ORGANIC SYSTEM

Geographical location	EU
Geographical level	Farm, regional
Description	The overall aim of OK-Net EcoFeed is to help farmers, breeders and the organic feed processing industry in achieving the goal of 100% use of organic and regional feed for monogastrics. All the project’s work aimed at tackling the EU’s organic feed objectives for the coming years, including reducing the cost of feed production, improving sustainability and animal welfare, and satisfying consumer expectation for traceability of production.
Key descriptors	<ul style="list-style-type: none"> • Interactive multi-actor approach in Innovation Groups • Promotion of on-farm feed autonomy • Collection and development of new knowledge tools adapted to the needs of farmers and business actors
Production system	<ul style="list-style-type: none"> • Organic pigs, broilers, laying hens, and parents of broilers and laying hens
Actors involved	<ul style="list-style-type: none"> • 19 partners covering 11 European countries <ul style="list-style-type: none"> ◦ Feed processors and mills, farmers and farmer’s organisations, research institutes, universities, and advisory agencies • Members of innovation groups: primarily organic farmers and farmer advisors based in various parts of Europe. Also processors, breeders, researchers, value chain groups, or farmer associations.
Project type	Funding from the EU’s Horizon 2020 research and innovation programme
Project status/ date of report	2021

2. VISUALS ASSOCIATED TO THE ORGANIC INITIATIVE



3. ACTIVITIES AND ACHIEVMENTS OF THE ORGANIC INITIATIVE

Rationale / Motivation for the project	
<p>A key objective of organic farming is the closing of nutrient cycles, but it is difficult to achieve. To a large extent, feed and livestock production, in particular of pigs and poultry, are concentrated in different regions, and animal feed (especially proteins) has to be imported from regions far away. In addition, organic farmers have difficulties in sourcing protein feed of organic quality. The lack of organic and regional feed threatens both the sustainability of organic agriculture as well as consumers' confidence.</p>	
Actions	
<p>Setting-up a network for the exchange and co-creation of knowledge</p>	<ul style="list-style-type: none"> • Innovation Groups (IGs): 16 groups of 6-31 members including a facilitator who is also a consortium partner, in 8 different countries. Participants were recruited through the OK-Net EcoFeed project or existing pig/poultry groups. • Series of IG meetings to collect data, followed by a <i>Science Bazaar</i> meeting including IG members and interested stakeholders. Its aims were to report the first IG meeting's outcomes, to present relevant scientific info and to discuss potential innovative solutions and associated challenges or bottlenecks
<p>Mapping existing scientific and practioner knowledge</p>	<ul style="list-style-type: none"> • Collection of knowledge from many existing sources including scientific research, grey literature, farmer groups and advisory services in Europe. The material for mapping is delivered by the facilitators of the IGs. • Organisation of the collected material in an Access Database • Synthesis of the knowledge to help IGs members choose feed materials, feeding strategies, breeds and possibly small-scale on-farm equipment for feed processing. Also identification of knowledge gaps.
<p>Testing of selected practices or approaches</p>	<ul style="list-style-type: none"> • Three-step process: 1) planning: During the <i>Science Bazaar</i> based on the knowledge synthesis, IGs identified problems to solve and developed innovative practices or approaches to be tested. IGs then drew up an experimental design for each practice/approach to be tested. Practices were classified in three themes: pigs, poultry, and processing + handling of harvested feed. 2) testing: 18 practical tests took place from June 2019 and October 2021. Testing focused on the applicability, user-friendliness, potentials and limits. 3) result analysis and reporting: after completing the trials, IGs analysed the data, and summarized the results of each tested activity into easy-to-use dissemination materials including practice abstracts and short videos. Documents were drafted by IG and then reviewed by consortium partners.
<p>Evaluation of existing tools and development of new tools</p>	<ul style="list-style-type: none"> • Production of 16 adapted/translated tools <ul style="list-style-type: none"> ○ Collection of 78 existing tools from project partners ○ Identification of the most interesting tools by IG facilitators ○ Allocation of budgets by the partner contortium. ○ All the translated tools available on https://organic-farmknowledge.org/ • Development of a new Ration planning tool, which enable farmers to calculate their own feed rations for pigs/broilers/laying hens, independently from the feeding industry and adapted to organic farming conditions.

Lessons

- When feeding pigs and poultry 100% organic and regionally produced feed, getting enough protein and specific amino acids is a challenge. There are two ways to go and they can be combined:
 - Utilizing by-products and explore new protein sources.
 - Feeding the animals less intensively. For this feeding strategy slow-growing breeds fit better.
- The possibilities for combinations of regionally grown feed, low-yielding breeds with different feeding strategies are many, and they fit well with the organic principle.
- However, there is a need:
 - to know more about alternative breeds' nutritional requirements. Precise nutrient recommendations for organically produced pigs and poultry do not exist
 - to study the **nutritional value of new protein** and test more protein sources as feed for pigs and poultry,
 - to develop small-scale on-farm equipment to refine locally produced raw materials
 - to research multiple combinations of breeds and different feed compositions.

4. SOURCES, PROJECT WEBSITE OR DATA COLLECTION ON THE CASE STUDY

EIP webpage

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/organic-knowledge-network-monogastric-animal-feed-o>

OK-Net EcoFeed project's website

<https://ok-net-ecofeed.eu/>

The organic farm knowledge platform

<https://organic-farmknowledge.org/>