

100% ORGANIC AND REGIONAL FEED FOR PIGS AND POULTRY

by **Ambra De Simone** and **Lauren Dietemann**

Over the past three years, colleagues from 11 European countries have taken part in the Horizon 2020 OK-Net EcoFeed project. The common aim was to help farmers achieve 100% use of organic and regional feed for pigs and poultry.



Bram Moeskops, OK-Net EcoFeed project coordinator, explains, "Increasing the availability of organic and regional feed will further improve the sustainability of organic agriculture. For the past three years, OK-Net EcoFeed has worked with farmers, breeders and the organic feed industry to make practical solutions available to improve the use of organic and regional feed."

OK-Net EcoFeed trials were run by farmers for farmers adapted to their regional potential and opportunities. Besides the variety of solutions and practices identified, OK-Net EcoFeed has created the ration planning tool, allowing farmers and advisors to compose rations for organic pig and poultry farming. The ration planning tool and user manual are available for direct, free download from the Organic Farm Knowledge platform.

The challenge of producing locally grown organic feed

A key objective of organic farming is that animals are fed with feed produced on the farm or neighbouring regions. However, this is still

a challenge for many farmers in Europe. Indeed, feed and livestock production, particularly pigs and poultry, are often concentrated in different regions meaning that imported animal feed must be transported long distances to reach the farm. As an example, in Mediterranean regions like Italy and Spain, growing forages in the summer can be a challenge due to the long dry periods, while in Nordic countries like Sweden, the opposite is true, with long cold winters being an obstacle. Also, organic farmers have difficulties sourcing high-quality organic protein feeds and are sometimes not available at all. Importing animal feed has economic disadvantages for farmers and can compromise the values of sustainability, animal welfare and decrease consumers' confidence.

Ration planning tool: The feed database that meets the needs of organic farmers!

What is known as "ration" for animals is what we call "food" for humans. Much like for humans, a nutritionally balanced ration is essential for healthy, strong organic animals. Without a proper diet, i.e.





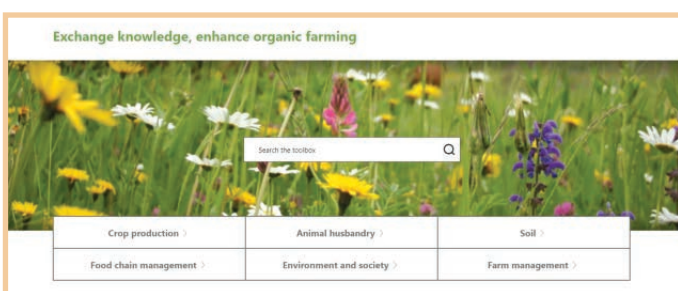
Organic feed. Photo by Thomas Alföldi Dreschen, FiBL

ration, animals cannot grow well nor maintain good health and production. Several feed production software packages already exist, but these are often too complicated to use and are paid applications. The reality is that formulating calculations in organic farming is still a challenge.

The ration planning tool, developed within the OK-Net EcoFeed project, is the only free software that implements the feed database to adequately meet the needs of organic animal producers. It enables users to calculate feed rations for organic pigs, broilers and laying hens that best fit their scenario. Calculations are independent from the feeding industry and are adapted to specific organic farming conditions. Users can build calculations based on two entries: 1. Production objectives, such as types of animals, age, slaughter weight, laying potential, etc., and 2. Usable organic feedstuffs. Furthermore, advanced users can incorporate their own materials and create new objectives in case a scenario does not exist.

Organic Farm Knowledge platform – the bridge between science and practice

The ultimate goal of the Organic Farm Knowledge platform (www.organic-farmknowledge.net) is to increase the sustainability, productivity and quality of organic farming across Europe by bridging the gap between science and practice. It disseminates existing



Organic Farm Knowledge Platform's homepage

practical knowledge and research innovations developed in European organic-focused projects to target groups: farmers and farm advisors. The platform facilitates user-friendly and barrier-free access to a wide range of practical tools and resources developed within the framework of these projects and promotes knowledge exchange among farmers, farm advisers, and scientists.

Topics covered on the platform have also expanded within the framework of the project to include all major themes related to organic farming, from horticulture, environmental protection to marketing and agricultural trade. Users can browse through the platform's themes or search the toolbox directly according to tool type, language, keywords and more.

Since 2015, the platform has made major strides thanks to the Horizon 2020 project OK-Net Arable and its follow-up project, OK-Net EcoFeed. The OK-Net projects provided tools related to arable farming and animal feed and nutrition, in addition to the ration planning tool.

The importance of regional organic feed for pigs and poultry

While feed is a necessity for animal farming, it can have a massive impact on the environment with adverse effects on air, soil, water quality, as well as biodiversity. Life cycle assessment (LCA) studies have shown that feed production may add up to 70% of the total carbon footprint of animal products. To ensure sustainable organic animal production in the future, feed must be produced holistically, considering the environment, animals and economy.

Local feed is one of the founding principles in the European organic regulation. For pigs and poultry, the updated European legislation requires that "by 2022 at least 30% of the feed shall come from the farm itself or, if this is not feasible or such feed is not available, shall be produced in cooperation with other organic or in-conversion production units and feed operators using feed and feed material from the same region" (Regulation EU, 2018/848). Achieving diets containing 100% organic feed for monogastrics is problematic, and current EU Regulations acknowledge this difficulty by allowing the use of 5% non-organic feed.

The OK-Net Ecofeed project supported on-farm feed autonomy and was committed to helping producers achieve 100% organic rations for monogastric animals. All the projects' work aimed at tackling the 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.

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