

SUMMARY REFLECTIONS

ORGANIC SECTOR AGRICULTURAL KNOWLEDGE AND INNOVATION SYSTEMS

Denmark's organic sector showcases a well-structured Agricultural Knowledge and Innovation Systems (AKIS) with strong collaboration, proactive farmer engagement and an outstanding collection of data and literature freely available for farmers. The most important actors involved are actors from the organic farmers associations, NGOs, the food department of the Ministry of Food, Agriculture and Fisheries and the Danish Agriculture and Food Council as well as the Aarhus university.

Regarding organic food processing and retail, several private and public actors are actively engaged in supporting the knowledge and innovation system for organic processing and retailing. The Association "Økologisk Landsforening" (Organic Denmark) was identified as playing an important role in supporting organic processors and retailers. They support processors and retailers interested in and dealing with organic products in terms of e.g., market research or consumer trends information. They furthermore and provide networking opportunities for organic processors and retailers interested in export in different kind of informative events and workshops, as e.g., at the Biofach or the organic food fair in Sweden. Government bodies facilitate market opportunities for processors and retailers in terms of out-of-home catering, public canteens, hospitals, kindergartens etc.

GENERAL INFORMATION

MAIN CULTIVATED CROPS



Cereals

1



Plants Harvested Green

2



Industrial Crops

3

CROPPING PATTERN (% OF UAA)



Arable Land

90.3%



Permanent Grassland

8.7%



Permanent Crops

1.1%



CONTRIBUTION OF AGRICULTURE TO ECONOMIC OUTPUT

1.98 % (2022)



CONTRIBUTION OF AGRICULTURE TO EMPLOYMENT

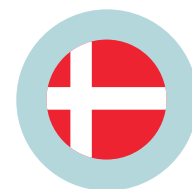
2.21 % (2022)



UTILIZED AGRICULTURAL AREA (UAA)

2,629,930 Hectares (2020)

61.24 % of Total Area (2020)



ORGANIC SECTOR OVERVIEW

The organic market in Denmark is the largest in the world, with organic food making up roughly 13% of the total retail food market in 2020. In this mainly consumer demand-driven market, the main products are dairy products, eggs, oatmeal, wheat flour and carrots. Imports play an important role to satisfy the growing demand for organic products in the country. Organic exports from Denmark accounted for approximately 15% of all Danish organic sales in 2021. The relevant product groups for exports have hardly changed over the years with dairy products and eggs standing out, followed by (pig) meat and vegetables. The organic area expanded between 2001 and 2021 by 80%. More than 95% of the Danish population knows and trusts the Danish organic label overseen by the state.



GROWTH OF ORGANIC AREA (2001-2021)
80%



AQUACULTURE PRODUCTION
22,187 Live Weight Tonnes



GROWTH OF ORGANIC RETAIL (2001-2021)
730%



NO. OF PRODUCERS
4,186



EXPORTS AND IMPORTS
453,1 / 698,2 (million €)



NO. OF PROCESSORS
1,162



DOMESTIC CONSUMPTION
365€/Person



NO. OF IMPORTERS
101

MAIN CROP TYPES

1
CEREALS

2
PULSES AND PROTEIN CROPS

3
OILSEEDS

SUPPORTING STRATEGIES, POLICIES & REGULATIONS

Denmark is one of the first countries to follow the organic standard with the introduction of an organic labelling system, organic rules and public inspections. This created a strong, trusted national logo, that supported the already existing consumer interest. The first Organic Action Plan (OAP) was launched in 1995. The importance of knowledge and innovation is mentioned in several country-level strategic policy papers, including the new Common Agricultural Policy Strategic Plan (CAP SP) where the main objective is digitalisation. The CAP SP aims to maintain the already existing AKIS and continue the tradition of participatory and top-down mix of approaches supporting operations of AKIS, while not separating AKIS for organic from the general AKIS structure.

KEY COMPONENTS & FUNCTIONS OF AKIS FOR ORGANIC

KNOWLEDGE CREATION, RESEARCH & INNOVATION

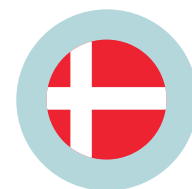
The research structure behind the organic sector is mostly practice-oriented, characterised by a good flow of knowledge and collaboration among AKIS actors in applied research projects. The main hubs for knowledge creation and innovation in organic farming in Denmark are ICOEL (Innovation Centre for Organic Farming), Organic Denmark (Økologisk Landsforening; farmer owned, mostly strategic and political), SEGES Innovation (R&D for conventional farming), and advisory service providers. The international Centre for Research in Organic Food Systems (ICROFS) at Aarhus University seeks to improve the knowledge exchange between research and extension. Freely accessible research and information on e.g., AKIS actors' website are important e-knowledge sources for the organic sector in Denmark.

ADVICE AND CONSULTANCY

Advisory service providers are a key link between farmers and other AKIS actors. All conventional advisory organisations offer services in organic farming as a separate but fully integrated part of their portfolio. Although consultants are available throughout the country, in some regions they do not prioritise issues of organic conversion in their services. Besides the technical aspects of organic farming, financial advisory, accounting, and legal advice for primary production are also covered. Larger service providers also give support in direct marketing, whereas others are specialised in supporting small farms. Different target groups of extension services, e.g., small-scale farmers or new generations of independent farmers without ties to farmer-owned companies are addressed through advice and support (e.g., market information, market development, marketing, labelling etc.). The main bottleneck of the organic advisory system is the lack of public funding behind.

EDUCATION AND TRAINING

Aarhus University offers a two-year MSc programme in organic agriculture and food systems. Efforts have been made to develop a curriculum that focuses on organic farming and to provide training programmes and courses on organic farming at the agricultural colleges (Landbrugsskolerne), requested by the organic farming associations, and supported by the Agriculture and Food Council (LF). ICOEL organises education programmes for farmers focusing on organic farming. Unlike public education in general, most training programmes in agriculture are not free of charge. Still, a considerable amount of information is freely available online.



CONCLUSIONS

There is no strategic document that specifically supports the development of AKIS for organic. Challenges remain in the areas of funding and knowledge exchange between research and extension. A targeted strategic approach, improved funding mechanisms, and enhanced integration could further strengthen Denmark's already effectively functioning organic knowledge and innovation system. The AKIS is characterized by a lack of independent advisory services addressing organic farmers needs, and, as for education and training, a lack of schools and teachers' interest and understanding of organic farming.

FIND OUT MORE HERE

[Deliverable D1.1 Assessment of Knowledge and Innovation Systems for Organic Agriculture, Aquaculture and Value Chain Actors](#)



AUTHORS

Gabriella Nagy (ÖMKi)
Attila Krall (ÖMKi)
Katalin Allacherné Szépkuthy (ÖMKi)
Anikó Zölei (ÖMKi)

CONTRIBUTORS

Frank Oudshoorn (ICOEL)

REVIEWERS

Ingrid Jahrl (FiBL)

EDITORS

Ambra De Simone (IFOAM OE)

PUBLISHER

[IFOAM Organics Europe](#)
Rue Marie Thérèse 11, 1000 Brussels (BE)

DESIGN

CONSULAI

The Fact Sheet is Based on [Deliverable D1.1: Assessment of the Knowledge and Innovation Systems for Organic Agriculture, Aquaculture and Value Chain Actors](#) and [Deliverable and D1.3: Synthesis of Key Drivers and Lock-ins for Organic Sector Development](#).

