



Strategy for organics



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1.0

Preface

Since the first Danish Organic Farming Act came into force in 1987, organic farming has developed significantly in Denmark. We were the first country in the world to pass this law, and in 1991 the EU followed suit with the first pan-European legislation on organic farming. The dedicated efforts of the Danish people have played a crucial role in our position as world leaders within organic consumption. We can rightfully take pride in the strong organic profile we have built. This is a foundation we should continue to build upon.

Organic farming is an important part of the green transition of agriculture. Increasing our organic area will promote farming using less pesticides and reduced emissions benefitting the climate, environment, drinking water and nature.

With the agreement on the green transition of Danish agriculture of 4 October 2021 (the Agricultural Agreement) reached between the former government (the Social Democratic Party), the Liberal Party of Denmark, the Danish People's Party, the Green Left, the Danish Social Liberal Party, the Red-Green Alliance, the Conservative People's Party, the New Right, the Liberal Alliance, the Christian Democrats, and later joined by the Moderates, a decision was made to draw up a strategy for organic farming

that would help double the organic area, as well as the demand for organic products, consumption and exports, respectively. This strategy is a step towards achieving these targets.

These are ambitious targets and they cannot be achieved by market forces alone, but require ongoing effective public-private collaboration, sustained political focus, as well as strong research and innovation efforts.

With this strategy, the government aims to help more Danes and citizens worldwide to add organic products to their shopping carts and choose more organic food when eating in canteens and restaurants, because organic food is produced with better biodiversity, better animal welfare and cleaner drinking water. There is a solid foundation to build on. The Danish organic brand is strong, credible and stable. So let's promote the red Ø-label in support of the green transition.

Jacob Jensen
Minister for Food,
Agriculture and Fisheries





2.0

Introduction

This strategy provides comprehensive outline of the initiatives that will help achieve Denmark's targets of doubling our organic area, and our consumption and export of organic products by 2030. The strategy also includes assessments of the barriers that stand in the way of us achieving our targets, and an outline of new research efforts and tools.

Organic farming has undergone rapid growth in recent years, with the organic area in Denmark more than doubling from 2007 to 2022. Similarly, the last two decades have seen a rapid growth in organic food sales, while organic exports have multiplied (see Appendix A). If we are to achieve our targets, it is essential that Denmark maintains its strong position in this field, and that we build on our progress so far.

The strategy is based on stakeholder involvement and professional contributions from industry associations and research institutions, among others. The International Center for Research in Organic Agriculture and Food Systems (ICROFS) has coordinated an analysis of the [nutrient supply for organic production](#), an analysis of the [organic market](#) as well as an analysis of organic farming's

[interaction with other initiatives](#), such as the Danish Action Plan for Plant-based Foods and Strategy for Green Proteins for Animals and Humans. Furthermore, the University of Copenhagen has conducted an analysis of the [estimated costs of doubling Denmark's organic area in 2030](#), if focus lies solely on area support.

The Danish government aims to achieve the climate reduction potentials outlined in the Agricultural Agreement, identifying a potential for further climate reductions of 0.5 million tonnes of CO₂e in 2030 through the doubling of organic area. This strategy describes the efforts to project the climate effect of converting to organic farming, with the aim of achieving the targets set, as well as an estimate of the costs associated with doubling the organic area.

The organic strategy interfaces with a number of other launched and upcoming initiatives to strengthen the green transition of agriculture, which also originate from the Agricultural Agreement: the Danish Action Plan for Plant-based Foods, Strategy for Green Proteins for animals and humans, and Strategy for Green Jobs in Agriculture and Related Industries.



3.0

Doubling the organic area

It is the government's ambition to strengthen organic farming as an important part of the green transition of agriculture. With this strategy, the government will support the following targets for the organic value chain from production to marketing:

- The organic area is to double in Denmark by 2030. The government's target is for the organic area to reach 21 percent of the total agricultural land in Denmark by 2030.
- Sales of organic products in Denmark are to double. The government's target is for organic consumption in retail and professional kitchens to amount to DKK 25.8 billion and DKK 4.6 billion respectively by 2030.
- The export efforts for organic food must support the further development of the sector, including the goal of doubling consumption by 2030. The government's target for organic exports is DKK 5.8 billion by 2030.

The doubling targets are relative to the baseline year 2018, as the Agricultural Agreement used that year as the basis for allocating funds for organic area subsidies. The government will continuously monitor developments.

Based on the doubling target for organic area to reach 21 percent of overall agricultural land by 2030, corresponding to approx. 510,000 ha, and considering the funds allocated in the Agricultural Agreement for organic areas, a shortfall of approx. 137,000 ha of organic area is estimated in 2030.

This government strategy describes the various initiatives planned to help double these targets, and the barriers that stand in our way.

In the Agricultural Agreement, doubling the organic area is described as having a technical reduction potential of 0.5 million tonnes of CO₂, based on an estimate of the effect of converting to organic farming.

As part of the Danish Energy Agency's Climate Outlook 2024, efforts are being made to improve the basis for calculating emissions from organic areas, as the data for the climate impact of organic conversion is inadequate. We will therefore get a more accurate estimate of the climate impact of converting to organic farming.



4.0

More organic area and increased organic production

There is great potential to increase the uptake of organic products and contribute to more sustainable food production. A continued focus on sustainable food production has been crucial to the success and continued development of organic products. However, in order to promote further transition to organic products and increase consumption, we face several challenges that need to be addressed.

More organic area

Doubling the organic area requires new areas to be converted to organic farming while keeping as many existing organic areas as possible. Incentives and support schemes should therefore be available to farmers to help the transition to organic farming, and make it a more attractive option.

Under the Common Agricultural Policy (CAP) of the EU, subsidies are available to farmers for the conversion to and maintenance of organic farming. These are accessed through organic area payments, which is a new one-year direct area support scheme available under the Danish strategic CAP plan for 2023-2027.

From 2024, the government has decided to increase the payment rate for organic areas under the Danish strategic CAP plan to a basic rate of DKK 1,200 per hectare. The reason for increasing the rate is the limited uptake of the scheme in 2023, which was likely due to economic factors and the derived effects of Russia's invasion of Ukraine.

The University of Copenhagen has estimated what it would take to double the organic area in 2030, if the area subsidy was the only used tool. Here, a support level of approx. 1,800 DKK per hectare is estimated. This estimate is based on a number of assumptions and uncertainties about, among other things, consumers' continued willingness to pay for organic products and how much effect a good farm manager has on a farm's earnings. Since the analysis solely focuses on doubling the area by means of the area subsidy, it does not take into account other initiatives that could increase the organic area.

Conversion and maintenance checks

The Fund for Organic Farming provides financial support to maintain and develop organic farming. Farmers considering converting to organics can receive a free conversion check, and existing organic farmers can receive a free advisory visit. These measures aim to help organic farmers optimise their farms and maintain organic farming instead of returning to conventional production.

Education and training

Reaching the political targets set for organic farming requires a sufficient supply of skilled agricultural graduates trained in organic agricultural production. So, in 2021, the professional committee for agricultural education, comprising labour market representatives, decided to add a new specialisation in organic farming to the agricultural education

programme. This new specialisation became available in August 2023.

Thanks to the labour market education system (AMU), companies already have good opportunities available to boost their employees' competencies in the field of organic farming. AMU offers publicly-funded courses that allow both unskilled and skilled workers to grow their skills in line with demand in the Danish labour market. In agriculture and horticulture, there are currently seven courses with a focus on organic farming, such as "Organic farming and sustainability" and "Organic agricultural production". There are also AMU courses for professional catering staff that include organic products, such as "Organic produce and sustainability in the restaurant" and "Strategy for introducing organic produce in food production".

In November 2023, the government decided to establish a knowledge centre for vocational and labour market education in the field of soil and agriculture. The knowledge centre is expected to be deployed in 2024 and will help to ensure that education programmes are equipped to address new requirements and expectations for Danish soil and agriculture as a result of the green transition, new technology and organic farming.

Access to organic nutrients and feed

An analysis from Aarhus and Copenhagen Universities and the Innovation Center for Organic Agriculture highlights that one of the key challenges to expanding the organic area is ensuring that individual areas are still able to provide sufficient nutrients when converted to organic fields. The analysis states that it will be possible - under certain assumptions, such as unchanged production of livestock manure - to provide enough nutrients to double the organic area by 2030. However, the geographical distribution of nutrients in relation to farm location is a challenge in Denmark.

The analysis also points out that the organic sector's own voluntary industry recommendations from 2022 promote the use of recycled biomass and biodigested conventional livestock manure, while significantly limiting the use of conventional, untreated livestock manure. According to the organic regulation, this fertilizer could otherwise have been used, if fertilizers from organic production could not be obtained within a reasonable distance. Similarly, there are ongoing discussions in the EU on intensive livestock farming, which will clarify the use of non-organic fertilisers and may also limit the use of conventional fertiliser.

The precautionary principle of organic production means avoiding the use of organic resources that may potentially contain unwanted substances and materials such as microplastics, PFAS, etc. Thus, in some cases, the precautionary principle limits the possibility of recycling organic resources from society that could have been used as fertiliser.

One way to address the need for nutrients and reduce dependency on conventional livestock fertiliser is to get alternative fertiliser sources approved under the EU organic regulations. As such, the industry is preparing proposals for new fertiliser sources, which the Danish Agricultural Agency will review and assesses and, following consultation with the organic industry, submit for approval by the European Commission. The option of setting up a special fund for organic farming within future biogas subsidy tenders will be examined, when assessing the first subsidy tender.

In addition, optimising the use of nutrients in the organic cultivation system, e.g. by using voluntary catch crops or undersowing clover grass as year-round green fertiliser, are just some of the measures organic farmers are forced to use to deal with rising fertiliser prices, increased demand for biomass and new EU requirements for organic crop rotations.

Regarding organic feed, the European Commission is developing rules for the use of vegetable proteins, microalgae, yeast, animal proteins and insects as feed for organic animals. In addition, Aarhus University estimates that green biorefining will allow for the production of feed protein based on green biomass to cover the protein needs of the organic pig and poultry sector. The Agricultural Agreement has allocated a total of DKK 260 million for the period 2022-2026 for green biorefining.

Animal welfare

Animal welfare is a cornerstone of organic farming as it is crucial to the credibility of organic production, and is an important factor in many consumers' choice of organic food. It is therefore important to ensure that animal welfare follows the principles of organic farming and finds solutions to relevant welfare challenges. Through the Danish Agricultural Agency under the research-based government service, the Danish Veterinary and Food Administration will, explore opportunities to further increase animal welfare in organic farming and identify which areas to investigate and work on further.

Conversion of publicly owned land

From 2014 to 2022, the organically managed share of the government's agricultural land increased from 31 percent to 38 percent. However, there is an additional potential of up to 29,000 hectares of state-owned farmland that is not currently under organic cultivation. In the same period, the organic share of the municipalities' land increased from 19 percent to 34 percent, and the share of the Danish National Church's land increased from 10 percent to 17 percent. For municipalities and the Danish National Church, this means an additional potential of up to 24,000 hectares of farmland that is not yet cultivated organically. This amounts to a total potential of 53,000 hectares of publicly owned lands.

The Danish National Church has plans for this area and is contributing to the green transition through a project entitled "Folkekirkens Grønne Omstilling" (The Church of Denmark's Green Transition). The project encompasses the entire Danish National Church and the green transition will be achieved by converting the church's 8,500 hectares of farmland to more climate and environmentally friendly land use (such as organic farmland and untouched forests, etc.). The project is running from 2022 to 2025 and is financed with DKK 18.7 million from the Church of Denmark's Common Fund.

Danish organic aquaculture

The gross production of organic aquaculture products in Denmark increased from 276 tonnes in 2012 to 5,487 tonnes in 2020. After a period of increasing production of organic rainbow trout until 2016, when production reached 1,831 tonnes, production in 2020 dropped to 642 tonnes. By contrast, the production of organic mussels increased from 13 tonnes in 2012 to 4,818 tonnes in 2021.

Public interests

An important operator in promoting organic farming is the state and other public bodies that own agricultural land. A large part of these areas are leased, and here the public sector has the opportunity to take the lead and push for more organic farming. We need to stay focused on converting as many state-owned areas to organic farming as possible, such as by entering into new lease agreements. Likewise, municipalities and other public operators are encouraged to continue their efforts to increase organic farming on their own land.

Drinking water

Protecting areas where drinking water is extracted is another joint responsibility. Here, increased organic farming can play an important role in ensuring the protection of groundwater, and thus drinking water. For example, the Danish government has adopted an emergency plan for groundwater protection zones. The emergency plan will oblige municipalities to prohibit the use of pesticides in areas surrounding the country's numerous drinking water wells, if there is a risk of contamination. Converting to organic farming can be a good solution for landowners, who are no longer allowed to use conventional pesticides on the areas surrounding drinking water wells. Municipalities also have efforts in place to protect drinking water, where organic farming is also an option. With contributions from the University of Copenhagen, the government will explore the possibility of promoting organic farming in areas around drinking water wells that need protection.

Organic aquaculture

Organic farming is not just about golden cornfields and grazing cows, it is also about the marine environment. There is potential to expand organic aquaculture in Denmark. The total organic share of seafood retail sales was less than 1 percent in 2022. Converting to organic aquaculture would result in better animal welfare and reduce the use of medicines and additives in aquaculture production. An increased focus on organic aquaculture follows the EU's goal to strengthen organic production in the aquaculture sector in line with the 2020 Farm to Fork Strategy.

Barriers to promoting organic aquaculture include EU regulations that restrict the use of environmental technology. These rules set limits on water recirculation and the permitted degree that the system can be closed. The government will review the EU regulations for organic aquaculture to ensure appropriate use of environmental technology in aquaculture.

At a national level, in the agreement on the distribution of funds from the Marine, Fisheries and Aquaculture Program for the period 2021 to 2023, DKK 21.0 million has been allocated for grants that promote green transition and cleaning technology in the aquaculture sector. The aim is to reduce the sector's carbon footprint and limit the emission of nitrogen, phosphorus and organic matter to the surrounding environment, including in organic aquaculture. DKK 27.6 million has also been allocated for development projects, including organic aquaculture.

Dialogue on organic farming

Over the years, the development in organic farming has been underpinned by good communication between all relevant stakeholders. The government will take the initiative to set up a dialogue group within the Danish Agricultural Agency's area, where relevant stakeholders can discuss key issues within organic farming. Discussions might cover e.g. proposals for developing the requirements for Danish organic farmers set out in the EU Organic Regulation. These common organic rules give consumers the assurance that what they buy is produced in accordance with a common organic standard that regulates all aspects of organic production. It is important to continue developing the EU's organic legislation together with stakeholders to ensure the further development of organic farming and its compliance with organic principles and market needs.

How the government plans to strengthen organic foundations

- In the Agricultural Agreement approx. DKK 3.6 billion has been allocated to the organic area subsidy scheme for the period 2023 to 2030. From 2024, the government has decided to increase the subsidy for organic areas by DKK 330 per hectare, so that the total subsidy will be DKK 1,200 per hectare.
- As part of implementing the CAP in Denmark, a total of
 - DKK 285 million has been allocated to the Common Market Organisation, which includes support for producers in the fruit and vegetable sector, and this will further support organic production and marketing in the period 2023 to 2027.
 - DKK 560 million for the environmental and climate technology scheme to support organic production and processing technologies for the period 2023 to 2027.
 - DKK 260 million for green biorefining for the period 2022 to 2026 to support the need for organic, locally produced and sustainable protein sources.
- The Plant Foundation has allocated DKK 4 million annually in 2021 to 2024 for conversion and retention checks.
- From August 2023, a new specialization in organic cultivation has been introduced in the agricultural education programme, enabling students to manage organic livestock and plant production.
- Several courses focusing on organic catering in foodservice as well as organic agricultural production are offered in the labour market training programmes.
- The government has allocated DKK 4.4 million annually from 2024 onwards to run a Knowledge Centre for Agriculture, as well as DKK 7.5 million in 2024 and DKK 3.0 million in 2025 for equipment for the knowledge center to ensure that agricultural education stays up to date with the rapid developments in technology and the green transition.

- The Danish Agricultural Agency and the industry are working together to gain access to new fertiliser sources.
- The Danish Ministry of Climate, Energy and Utilities will, as part of their evaluation of the first upcoming financial support tender for biogas, investigate the possibility of creating a special fund for organic farming to produce degassed biomass that can be used as fertiliser.
- The government will keep investigating the status and potential for increasing Danish self-sufficiency within organic protein feed.
- Under the research-based government service the Ministry of Food, Agriculture and Fisheries will prepare notes and clarifications that can support the professional foundation for good animal welfare in organic farming.
- The government plans to strengthen co-operation between the authorities on the conversion of state-owned land, and will encourage municipalities and other public operators to continue promoting more organic farming on their land.
- The government will examine the possibility of promoting organic farming in areas around drinking water wells in need of protection.
- With the agreement on the distribution of funds from the Marine, Fisheries and Aquaculture Programme in the period 2021 to 2023, DKK 21.0 million has been allocated under the theme Green transition Aquaculture for grants for investing in climate solutions and cleaning technology to reduce the aquaculture sector's climate footprint and emissions of nitrogen, phosphorus and organic matter to the surrounding environment, including in organic aquaculture. A further DKK 27.6 million has been allocated for development projects, which include projects in organic aquaculture.
- The Ministry of Food, Agriculture and Fisheries will take a closer look at the EU rules for organic aquaculture with a view to using appropriate technological solutions in production.
- Denmark is working to ensure that future EU regulation of seeds and other plant propagation material helps strengthen organic farming.



5.0

Organic food on the menu

In recent years, there has been an increase in sales and therefore demand for organic food. Consumers cite the environment and health as the main reasons for choosing organic food.

Professional kitchens, which include restaurants, canteens and institutions etc., play a crucial role in the food supply chain and have a major influence on consumers' dietary habits and sustainability practices. Therefore, professional kitchens are key to increasing organic consumption.

In 2022, organic food accounted for around 13 per cent of total sales to professional kitchens. Organic food purchased in public foodservice kitchens accounted for more than one-third of the total organic sales to professional kitchens, see figure 1.

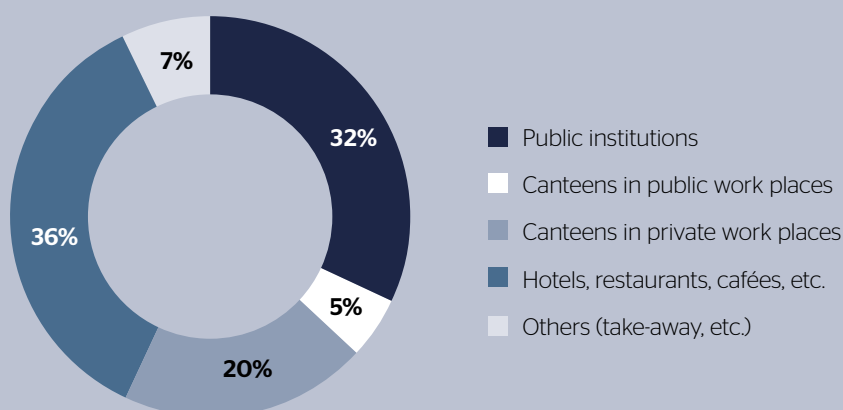
Private professional kitchens such as hotels, restaurants, cafés and the entertainment industry (amusement

parks, etc.) are also big buyers of organic food, accounting for more than one-third of demand.

Kitchen conversion

Putting more organic options on the menu requires change, not least in terms of developing the skills of kitchen staff. For a professional kitchen to convert to the use of organic produce successfully, it is essential that the staff have the necessary skills. As part of the organic conversion of kitchens, the Fund for Organic Farming is providing funding for projects related to the competence development of kitchen staff and associated employees, allowing them to learn about sustainable meal production, to follow official dietary guidelines, reduce food waste and use seasonal produce. DKK 54 million has been allocated under the Fund for Organic Farming for the period 2021 to 2024 for the organic conversion of professional and foodservice kitchens.

Figure 1
Organic sales in foodservice by different customer groups in 2022.



Source:
Statistics Denmark

As part of this conversion, the foodservice kitchens will also have their production processes, workflows, purchasing, etc. reviewed by a conversion consultant. The review will identify areas, where resources can be optimised and food waste can be reduced. In some cases, the savings from reducing food waste can almost outweigh the increased costs of going organic. The organic market analysis coordinated by ICROFS also shows that organic conversion goes hand in hand with a shift to a more plant-rich diet, as foodservice kitchens can keep additional organic costs down by increasing the share of fruit and vegetables and decreasing the share of meat.

Like other professional kitchens, Danish continuation schools and folk high schools can also contribute to a more organic future. However, these institutions are currently not eligible to apply for funding for kitchen conversion from the Fund for Organic Farming. The government therefore wants to investigate the possibility of allocating funds from the Fund for Organic Farming to continuation schools and folk high schools as an incentive to convert these kitchens to using organic produce.

In addition, the Plant-based Food Grant also supports the conversion to more organic produce as at least half of the Fund's DKK 675 million should be used for this purpose by 2030.

Public procurement

One way to increase the demand for organic food is through the joint green food policy for state canteens, which currently requires at least 60% of the food to be organic (equivalent to the silver level of the Danish Organic Cuisine Label) and requires efforts to reduce food waste. Suppliers should also be able to offer meat-free alternatives, if there is local demand. These requirements should be implemented as soon as possible in state institutions (including state-funded independent institutions), such as through the Danish State Facility Management.

The public procurement of food is organised in a food agreement with Staten og Kommunernes Indkøbsservice (SKI), which includes a wide selection of organic food, and in a State Facility Management agreement.

To further support more climate-friendly and sustainable meals in the public sector, SKI will offer a number of free courses for any kitchen staff covered by the new agreement. The aim is to equip kitchen staff to make more sustainable purchases and ensure that purchases are followed up by more sustainable behaviour in both handling and prepa-

The Danish State Facility Management

A large part of the Danish State Facility Management's tasks fall under the Danish Building and Property Agency, which, together with a service provider, will offer, manage and deliver services, including canteen operations, to the state institutions. The rollout of the Danish State Facility Management is taking place in three waves in three different EU tenders.

Wave 1 went live on October 1 2019 and has an annual value of DKK 280 million. The agreement covers 42 state institutions with a total of 20,000 employees. Wave 2 went live on October 1 2022 and has an annual value of DKK 280 million. The agreement covers 56 state institutions with a total of 10,000 employees. The rollout of wave 3 is expected to start in 2024 with a total annual value of approximately DKK 300 million. The agreement is expected to include approximately 60 state institutions with a total of 14,000 employees. All three agreements will run for seven years. Wave 1 requires the supplier to deliver a minimum of 40 percent organic food, while waves 2 and 3 require a minimum of 60 percent organic.

ration. Two course days focusing on climate and reducing food waste will be held for the affiliated kitchens. The individual kitchens will be instructed on topics such as the climate impact of ingredients and meals, reducing meat consumption and preparing more plant-based meals, sourcing and preparing more sustainable fish, organic food, etc. The new food agreement is currently out to tender and is expected to come into force in March 2024.

How the government is pushing for the inclusion of more organic food on the menu

- DKK 54 million has been allocated through the Fund for Organic Farming for the period 2021 to 2024 to support the switch to organic produce in professional kitchens. The kitchen conversion fund is expected to greatly promote the involvement of consultants who will help optimise kitchen resources.
- The government wants to investigate the possibility of continuation schools and folk high school to have a share of the funds under the Fund for Organic Farming, which is allocated for the organic conversion of professional kitchens.
- The Agricultural Agreement has allocated a total of DKK 675 million for the period 2023 to 2030 for the Plant-based Food Grant. This applies to efforts in the entire value chain, and at least half of the funds are to be spent on organic projects.
- The Budget Guidelines has set a requirement for at least 60 percent of food in state canteens to be organic, and this requirement must be implemented in state institutions, e.g. through the State Facility Management.
- In 2023, many municipalities, regions and other public organisations have chosen to join the new food agreement, which includes greater requirements for suppliers of organic and plant-based foods in public kitchens, and offers free courses to boost the skills of relevant employees. The food agreement has an estimated total value of DKK 3.4 billion over four years.
- The government will work to ensure that there is a focus on organic products in the Danish application of EU school schemes.

Analyses and knowledge needs

- The Danish Veterinary and Food Administration will continuously identify knowledge gaps in the marketing of organic foods and look for opportunities to fill these gaps in its regulatory services.



6.0

A strong organic market and organic exports

The past 20 years have seen a positive growth in sales of organic food both domestically and abroad. The majority of this growth comes from the domestic market, with organic food sales reaching almost DKK 18 billion in 2021, of which DKK 16 billion came from retail. Organic exports amounted to around DKK 3 billion in the same period, see figure 2.

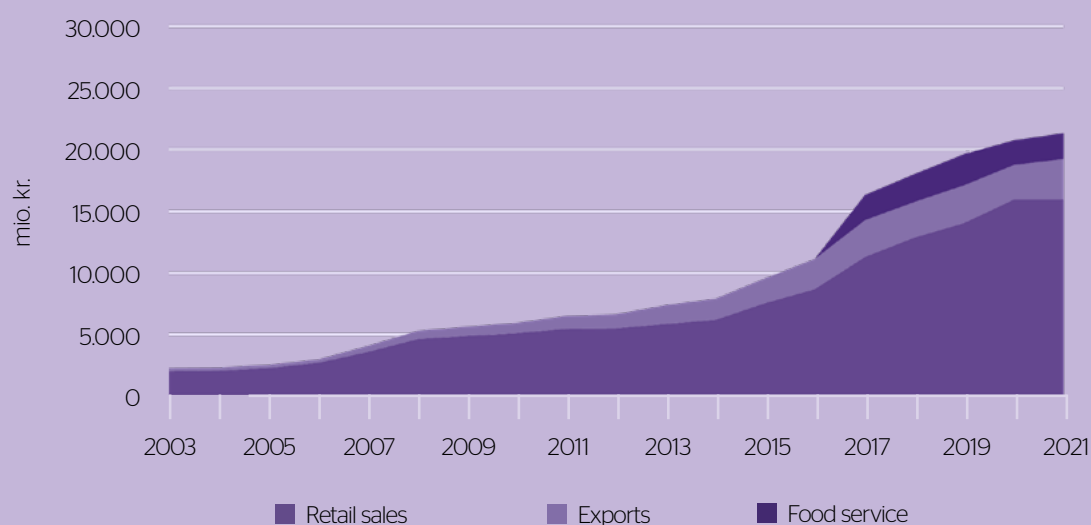
The Danish retail sector

Sustainable food production without the use of chemically synthesized fertilizers and synthetic pesticides and, not least, animal welfare and health, is of great importance to consumers when making choices in the supermarket. This is reflected in our shopping habits, with almost half of all the eggs,

oatmeal and milk we buy being organic. Turnover in the Danish retail sector has increased almost eightfold over the last two decades. Products such as milk and eggs in particular, and more recently organic fruit and vegetables, have played a major role in the development of organic retail sales, see figure 3. Although the organic market is widespread in Denmark, there is still growth potential in certain product categories.

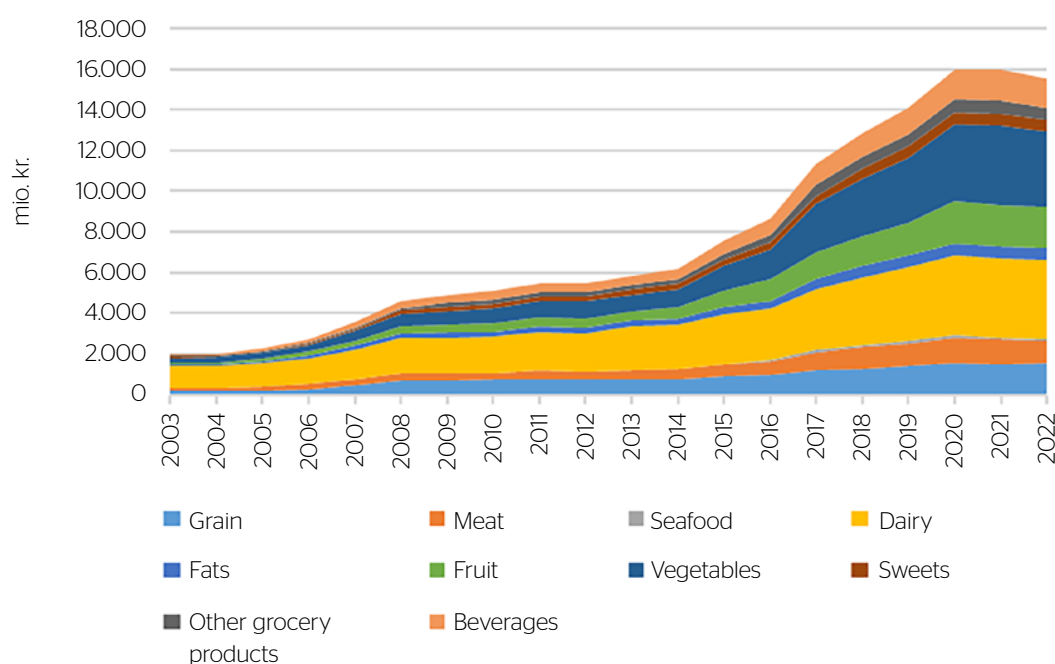
The driving force behind the increasing sales over the years is estimated to be the increased supply of organic alternatives in several product categories and the availability of organic food in retail, but also e.g. the increasing supply of meal box solutions and organic food in online stores. Trust in the Danish

Figure 2
Developments in the organic food trade.



Source:
Statistics Denmark

Figure 3
Sales developments
of different organic
product groups



Source:
Statistics Denmark

organic Ø label (Ø-mærket) and the retail chains' own organic brands has also been an important driver.

However, the price difference between organic and conventional food is a significant barrier for consumers. Price-conscious consumers will often refrain from buying organic products. Sales of organic products decreased slightly in 2022. Statistics Denmark estimates that a contributing factor to this was the increased inflation in society, which was partly down to Russia's invasion of Ukraine. A lack of consumer knowledge about what organic food really is also constitutes a barrier. If organic production increased significantly, the result could lead to downward pressure on the market price of organic food.

Hence, we need to increase sales to existing markets and customers to strengthen the organic market. Trust plays a crucial role in this matter, which is why it is important to maintain and strengthen the credibility and image of organic food through recognised labelling schemes such as the organic Ø-label in Denmark. Increased consumer awareness of the importance of organic products for the climate, environment, animal welfare and health will help grow demand for organic products.

The Fund for Organic Farming, the Plant-based Food Grant and the EU sales promotion scheme will help support increased sales of organic food in retail.

The Plant-based Food Grant can thus help boost the supply of organic food by providing grants for information activities, advice, research and development, etc. including variety development, cultivation and processing, and for promotional measures for plant-based foods. The Fund for Organic Farming provides support for organic farmers and producers, along with support for marketing campaigns and information materials. Similarly, under the EU's promotional scheme, support is available for marketing campaigns and information campaigns to boost the consumption of organic food.

Stronger organic exports

Danish organic exports have tripled over the last 10 years to DKK 3 billion in 2021. The increasing global focus on sustainability and healthy food has provided good conditions for organic goods, and organic exports are generally growing. Although the potential for organic food is great, the competition is challenging and markets are volatile, which requires effort from authorities and companies to ensure access to exporting organic goods. Global consumer trends such as sustainability, health, climate and preferences for locally produced food can also affect exports. To promote organic exports, it is essential to ensure access to export markets and consider these factors.

According to a market analysis from Aarhus University, the majority of organic exports go to neighbouring markets such as Germany, Sweden, the Netherlands and France, but there is also potential

for exports to third countries outside the EU. Dairy products are the largest organic export product group, followed by meat, fruit and vegetables.

The increase in organic exports is usually driven by increased demand in existing export markets or by gaining new market access to third countries. Developments fluctuated between 2016 and 2021 due to factors such as COVID-19 and trade barriers. High inflation, rising energy prices and increased production costs can challenge export growth in the short term.

The EU's goal of increasing organic area to 25 percent by 2030 can have both positive and negative consequences for Danish organic production and sales of organic products in EU countries. On the positive side, it could open up new markets and segments and give Danish manufacturers a competitive edge and the opportunity to innovate. On the downside, increased competition and challenges could arise, including overcapacity. Therefore, Danish organic producers will need to stay competitive and have a strong branding and marketing strategy.

In 2022, the former government launched the Action Plan for the food cluster's exports, with a goal of increasing organic exports. A task force was set up comprising companies, organisations and authorities. The task force has recommended measures to boost organic product exports and to support the target of doubling organic exports. Recommended measures include reducing regulatory and market barriers, strengthening branding and export promotion. As such, the government will support organic exports by advising Danish export companies, providing subsidies for joint business promotional campaigns and by promoting the Danish food cluster, including organic farming, through initiatives such as the public-private marketing consortium Food Nation.

How the government plans to strengthen the organic market

- The government has allocated DKK 675 million to the Plant-based Food Grant for the period 2023 to 2030, with the aim of spending at least half of the fund's resources on organic food. The Fund provides support for, among other things, promotional campaigns for organic plant-based foods.
- DKK 6 million has been allocated annually for export promotion of organic products and DKK 10 million annually for national sales for the period 2021 to 2024 under the Fund for Organic Farming.
- The Danish Ministry of Foreign Affairs and the Ministry of Food, Agriculture and Fisheries will continue to advise Danish export companies via the Danish representations, maintain the Ministry of Foreign Affairs' grant for joint business promotion campaigns, and support companies in export markets, including negotiating bilateral agreements so that Danish companies have access to selling their goods.
- The government will spread awareness of organic farming through bilateral cooperation agreements with selected markets.
- The government will promote and market the Danish food cluster, including organic food, through Food Nation.

The government calls on businesses and other operators to

- Exploit the opportunities to apply for funds for sales and marketing campaigns for organic food in the EU's promotion policy, as well as under the Plant-based Food Grant and the Fund for Organic Farming.
- Follow up on the recommendations for organic exports from the Forum for the Food Cluster's Exports, including initiating the industry's own efforts.
- Organize a joint celebration of organic produce with the EU's annual Organic Day on September 23rd in retail stores, restaurants, etc. in order to increase consumer knowledge and awareness of organic products.



7.0

Research and innovation

Prioritising research and development in organic farming is essential if Denmark is to maintain and expand its status as a pioneer in organic farming. A targeted effort is required to identify and utilise the full potential and to overcome any obstacles through innovative initiatives. Research and innovation will boost productivity and help achieve sustainability, which is crucial to further develop the Danish organic sector.

The analyses behind the organic strategy have identified several knowledge gaps in organic production and marketing. Greater knowledge is required on increased nutrient supply and recycling in organic farming, such as the development of clover grass systems for protein and biogas production, as well as a deeper understanding of the challenges of introducing more legumes in the crop rotation. Support for research projects that aim to optimise cultivation methods, develop new products and find solutions to challenges in organic production is therefore important. Furthermore, it is highlighted that consumer behaviour analysis is based on outdated studies and an updated analysis is therefore needed on newer demand trends such as plant-based foods, as well as factors that influence consumer attitudes towards buying organic food.

Close cooperation between authorities, farmers, food companies and interest organisations is cru-

cial in this context. Through discussion and exchanging experiences, we can identify and solve challenges, develop better practices and promote innovation in organic farming. There is currently a wide range of opportunities available to drive organic research and innovation at both a national and a European level.

National research and innovation funds

Nationally in Denmark, there is a focus on supporting organic growth through research and innovation. Under the research reserve, DKK 50 million has been allocated annually for the past three years to various organic projects, a figure that will increase to DKK 70 million in 2024. This includes both research-based public sector services and investments in green research, technology and innovation. The aim is to develop technologies and solutions that protect the climate, environment and nature and reduce the climate and environmental impact of both conventional and organic food production and agriculture.

The Fund for Organic Farming provides an opportunity to boost development opportunities and competitiveness for organic farming through support for marketing promotion, research, trials, product development, advice, education, disease prevention, disease control and animal welfare and control.

The research-based government service

The research-based government service is an umbrella term for a range of services (e.g. research, consultancy and emergency services) that universities provide to ministries. The government will use this service to regularly launch projects that are relevant to the organic sector.

EU research and innovation funds

The EU's research and innovation programme, Horizon Europe also provides support for research and innovation in organic farming for the period 2021 to 2027. Horizon Europe has a total budget of €95.5 billion.

A number of research and development programmes have been launched Under Horizon Europe and previous EU framework programmes for research and innovation that support organic growth. One area is investigating how to increase field crops through improved organic farming strategies. In Horizon Europe's work programme for 2023 to 2024, €43 million has been earmarked for six topics related to organic farming.

There are also a number of other research themes and major initiatives that are important for organic farming. These include a new EU research and innovation partnership focusing on agroecology, which is supported by Innovation Fund Denmark with an expected DKK 7.5 million. Furthermore, approx. DKK 1.9 million is targeted at organic research and innovation from GUDP. The EU partnership is expected to launch in 2024 with the first calls for funding for concrete projects. The total budget is expected to reach over DKK 3.7 billion.

Knowledge collaboration

Strong knowledge collaboration across the value chain is essential. The International Centre for Research in Organic Food Systems (ICROFS) plays an important role in organic research and innovation. ICROFS actively contributes to the continued development of a market-oriented and competitive organic sector in Denmark. The centre is committed to providing knowledge-sharing, coordination, management and execution of strategic and practice-oriented research. Funding for ICROFS comes both from external funds and from the Ministry of Food, Agriculture and Fisheries. ICROFS helps assess specific organic research projects for the implementation of annual funds from the research reserve, which are implemented through GUDP (green development and demonstration program).

Another key player in the field is the Innovation Centre for Organic Farming, which acts as a bridge between research and organic farmers. The centre is dedicated to conducting organic research, performing experiments and promoting the development of new solutions. The centre also collects and disseminates important knowledge about organic farming. The Innovation Centre has contact with more than half of the organic producers in Denmark.

How the government plans to strengthen the organic research and innovation

- The government will use this service to regularly launch projects that are relevant to the organic sector.
- DKK 10 million is allocated annually to the Fund for Organic Farming. The Fund's basic grant was increased by DKK 45 million annually for 2021 to 2024. Furthermore, the Fund released an additional DKK 25 million in 2023 from the Plant-based Food Grant. In 2023, the Fund allocated approximately DKK 19 million for research and trials.
- The parties behind the Agreement on the distribution of the research reserve etc. in 2024 have allocated DKK 70 million to organic projects to be implemented through GUDP in collaboration with ICROFS.
- The parties behind the Agreement on the distribution of the research reserve etc. in 2024 have allocated DKK 75 million to support research and development in healthy climate-friendly foods and food systems, including plant-based and organic foods. The funds are implemented by the Ministry of Food, Agriculture and Fisheries through the Plant-based Food Grant and GUDP.
- The government has allocated DKK 10 million annually to the Innovation Centre for Organic Farming for the period 2021 to 2024.
- Approximately DKK 160 million has been allocated annually until 2024 for the cluster program "Innovation power: Danish clusters for knowledge and business 2021 to 2024", including Food & Bio Cluster Denmark, with a focus on strengthening knowledge-based innovation and knowledge collaboration across the entire value chain.
- With the Agreement on the distribution of the research reserve, etc. the government has allocated DKK 318.3 million in 2024 for distribution between four green research and innovation partnerships, including AgriFoodTure.
- The Agreement on the distribution of the research reserve, etc. in 2024, has also allocated DKK 338.2 million to green research, technology and innovation in seven areas, cf. green research strategy for 2020, including within the theme 'Agriculture and food production', which offer support for projects within organic farming.

- As part of implementing the Agricultural Agreement, the government will initiate an analysis of opportunities and potentials in Denmark for forestry and regenerative agriculture.

The government calls on businesses and other operators to

- Participate in national and European research and innovation programmes, including active participation in the Agroecology Partnership and other relevant EU partnerships



Appendix A.

Overview of the development in organic area, consumption and exports until 2021-22

Figure A.
Development in organic farms' reported production area with indication of fully converted organic area for the period 1988-2022

Source:
Danish Agricultural
Agency

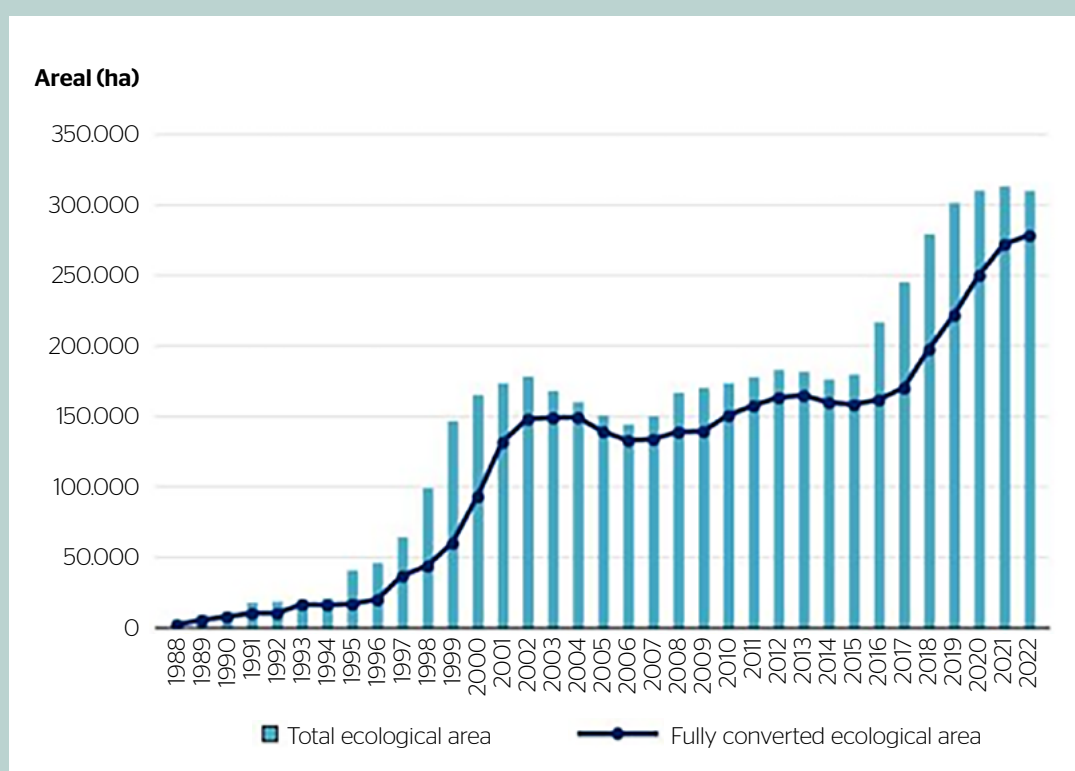
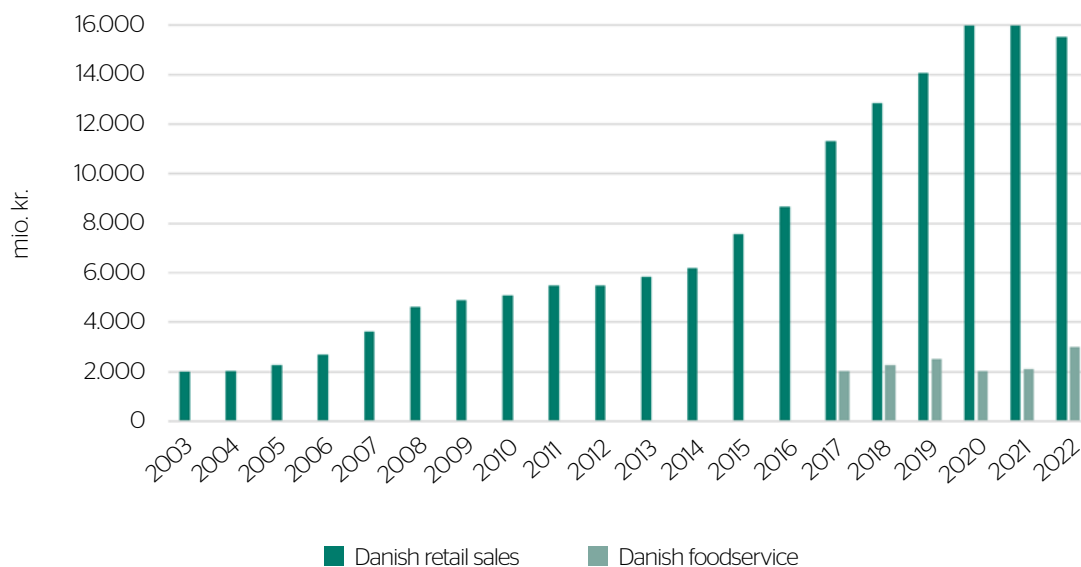
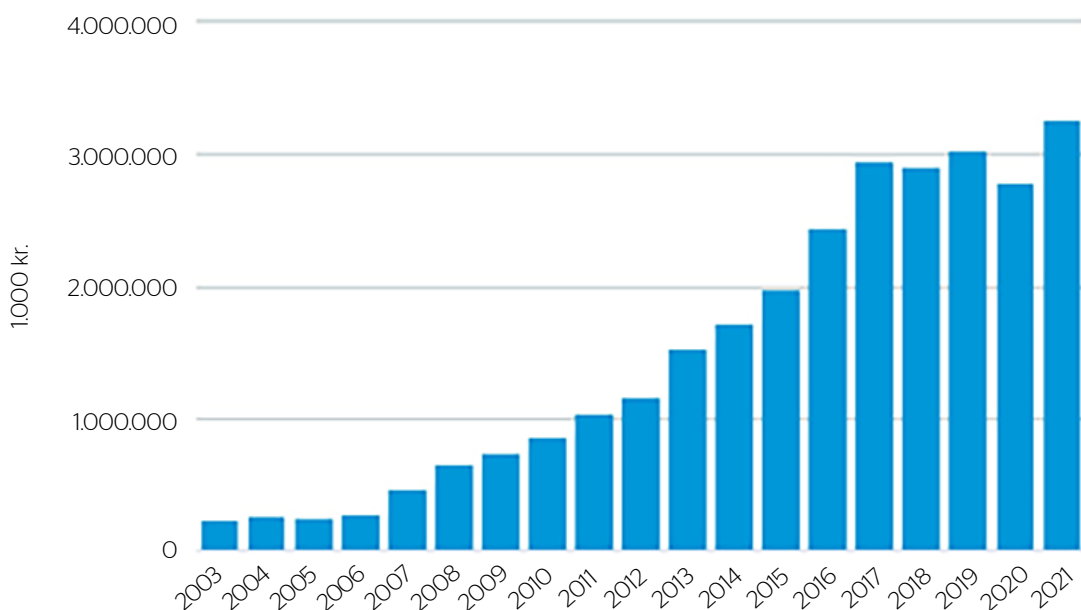


Figure B.
Development in
Danish retail sales
and foodservice of
organic food



Source:
Statistics Denmark

Figure C.
Development in
Danish exports of
organic products



Source:
Statistics Denmark



