



Lessons on food sustainability from Denmark

What can UK food businesses and government learn from how contentious issues are being tackled in Denmark?

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Denmark amongst leaders on food sustainability

Denmark's position as one of the world leaders on food sustainability was reinforced when it came second in the 'sustainable agriculture' and third in the 'tackling nutritional challenges' parts of the 2018 Food Sustainability Index ('FSI'). The FSI - by the Economist Intelligence Unit ('EIU') & BCFN - compared 67 countries on a basket of measures relating to food loss & waste, sustainable agriculture and nutrition. Overall Denmark came seventh in the FSI, well ahead of the UK, which [only came 24th](#). Denmark and the UK have similarities (e.g. in climate) but also differences (e.g. Denmark's population is only c. 9% of the UK's). Nevertheless, there is a lot the UK and Denmark can learn from each other with regard to healthy, sustainable food systems.

The value of country comparisons

The FSI enables comparisons between different countries, using a mixture of quantitative outcome measures and qualitative judgements on quality of policy responses. No index is perfect and there are aspects of the FSI that can be further strengthened e.g. farm animal welfare metrics and sustainability impacts beyond the farmgate. Nevertheless, it is a valuable tool to compare performance and to learn from how other countries tackle similar challenges, while recognising different political and cultural contexts. National governments and food businesses should seek to continuously improve ambition, performance and transparency – and drive a 'race to goodness'.

Sustainable agriculture is worth investing in

In Denmark the opportunities for investing in sustainable agriculture have been seized upon to a greater extent than in the UK. In Denmark, there have been several initiatives to recycle water, including processes to capture phosphate from sewage sludge and providing irrigation from cleaned-up wastewater. There has been investment in improved utilisation of nitrogen and reduced fertiliser use. There has been a strong emphasis in Denmark on knowledge transfer. Denmark's 'Fund for Organic Agriculture' has provided important funding for initiatives such as the 'Future Cropping' project. Investing in and promoting organic agriculture has been key to Denmark's success.

Taking a bold leadership position on organic

The Danish national government has taken several measures to support organic food production via

public procurement. In 2011, it established a goal of 60% organic in all public settings by 2020. Copenhagen set itself the explicit target of sourcing at least 90% organic food in its municipal institutions, which it has now met. In October 2018, Denmark was awarded silver in UN Future Policy Awards for having one of the most efficient organic initiatives in the world.

Why did it start? One of the reasons suggested was that there were very visible challenges facing Danish harbours at that time. Fish were dying due to high levels of nitrogen from farm run-off – so it was obvious to everyone that there was a problem with primary production methods. Around 25 years ago, Denmark was the first country to implement a national state-controlled organic label. This is now widely used and recognized, alongside EU organic label, and is regarded as an important driver for change. Industry has been working in partnership with the large co-operatives to innovate the organic sector for everyday products.

Denmark's current world-leading status on organic production can be traced back to two national Action Plans drawn up in the 1990s. These were supported with finance and extensive research & development which enabled farms to convert to organic. The Action Plans created specific goals and the sector has worked continuously to meet them. There is some opposition to the levels of subsidy, and ongoing debates about whether and why organic farming should have to work within market conditions. Denmark has a strong focus on public procurement, with a gold, silver and bronze system showing levels of organic products used. These measures have together enabled the sector to develop to a point where it can deliver at the sort of volume required for supplying schools, hospitals and other large-scale operations.

Promoting nutritious diets & collaborative approach

Denmark has a strong record on gastronomy, with Noma regularly rated as one of the top restaurants in the world. The Nordic Diet – which highlights local and seasonal foods in Denmark and fellow Nordic countries – is widely touted as a nutritious diet. It is based on traditional ways of eating and is much lower in sugar and fat than typical diets in the UK for example.

Public-private partnership collaborations are widely used in Denmark. One example is the Danish Whole Grain Partnership established to "create target-oriented and effective interventions to ensure Danes eat more whole grain and thereby improve public health". This has included a small orange 'whole grain'

label visible on many different products including bread and pasta, highlighting the recommended intake of wholegrain as 75g per person. Currently intake in Denmark is 63g per day. This label was developed in partnership with food businesses as a tool to make it easier for the public to make healthy choices.

A 'Salt Partnership' is working with industry to reduce levels, and the 'Keyhole' label motivates different actors to identify categories in which levels of fat, sugar and salt can be reduced in different products. This is currently being revisited to make it more ambitious. In the UK, voluntary agreements around food have had mixed success (at best). Why have these collaborations arguably been more effective in Denmark than UK?

The value of fostering a culture of collaboration

The cooperative movement in Denmark started in the dairy sector, then grew to meat production, especially pork. Arla, the world's biggest organic dairy, operates in this way. This was motivated by a desire to create value for everyone across the value chain. Food Nation Denmark was established as a public-private Partnership in 2017, funded half by Danish government and half by the food industry. Its ambition is to promote the Danish food sector, increase exports, provide more jobs, and attract more talent to work within the sector. Food and agriculture accounts for 25% of Denmark's total exports, which perhaps explains the priority focus from the Government.

“Many [Danish] companies don't see themselves as Danish, but as international. But their DNA is based on the values of the cooperative movement – that is the common factor, no matter where they are producing around the world.”

Equality, trust and transparency reinforce each other

In Denmark, high levels of equality are related to high levels of trust and respect. Denmark has the lowest levels of corruption in the world¹. It has flat hierarchies, and there is a culture of respecting all ideas brought to the table. This has led to high levels of innovation.

There are high levels of government support through strong welfare policies which combine with the culture of consensus politics to leave Denmark scoring near

the top of most quality of life indexes. Whilst food prices in Denmark are high, minimum wages tend to be higher than in the UK too.

As a small country, people in Denmark tend to be more personally connected to farms and farmers, which helps foster trust. Openness and transparency are actively encouraged. One of Denmark's most popular attractions is Horsens abattoir, which is open to the public and hosts thousands every year, from Parliamentarians to school visits. The 'day of the dancing cows' has become a national event – a day in spring when cows on organic farms are let out onto grass, with transport laid on for people so they can participate. All are invited and c. 250,000 people participated at the last event. Some will ask why the cows are only 'let out' for one day, rather than being outside as default?

Some opportunities for Denmark to improve

One area that Denmark scores less well is in tackling food loss and waste, where it only ranks 40th in the FSI, compared to the UK which ranks equal 11th. On the specific measure of food waste per capita, Denmark ranks a lowly 62nd out of the 67 countries in the FSI. The 'One Third' report launched in 2018 is part of recent moves to address this.

One significant challenge in pig and pork production – for which Denmark is well known - relates to animal feed. The pig industry in Denmark in particular relies on large amounts of imports of soy-based protein. It is estimated that an area equivalent to 20% of EU farmed area is used to farm soya outside the EU for livestock feed. Hence countries like Denmark (and the UK) are effectively net importers of land.

The current research and development focus in Denmark is on creating higher value products from leftovers e.g. spent grain from beer production was fed to pigs for many years, but now it has been developed to make a range of whole grain biscuits, with a much higher value. In Denmark the idea of feeding food waste to pigs is not seen as the solution to the protein import challenge. Instead R&D is focused on how to get protein from other sources such as seaweed and grass.

Pig production in Denmark is a major part of the economy and the Danish are proud of this sector in

¹ Denmark came top of the Corruption Perceptions Index 2018 (with UK coming 11th) <https://www.transparency.org/cpi2018>

terms of its productivity and sustainability. The industry has a target to be carbon neutral by 2050 (50% by 2030). Danish Crown, major global meat processing company headquartered in Denmark, held a 'Meat 2030' event in 2018, to explore issues relating to meat production and consumption head on.

As with any form of livestock production, intensive pig production in Denmark raises questions about animal welfare and about what less intensive alternatives might be. IDDRI research demonstrated how the EU can be fed by a transition to agroecological methods by reducing yields of cereal and oil crops that currently go to feeding livestock, increasing farming of grazing ruminants, changing diets and wasting less food – all without the need for agricultural intensification.

Concluding comments

There is much the UK can learn from what is happening in Denmark - while acknowledging that Danish food and farming systems are not perfect. There is amazing work being done by many farmers and food companies in Denmark *and* in UK. It is though helpful to consider how successful approaches in leading countries like Denmark might be adapted for a UK context.

The ingredients for a strong Danish food sustainability performance seem to be a healthy balance of 'top down' and 'bottom up' approaches. The former involves national and regional leadership, clear ambition, cross-party collaboration and a willingness to use legislation and levers such as public procurement to shift the market. The latter includes a crucial role for government in facilitating bottom-up collaboration from farmers and all the way along value chains.

The process of developing a national food strategy for England is a live opportunity to learn lessons from leading countries. It is also an opportunity to tackle head on some key tensions raised in discussion, from 'cheap food versus true cost of food' to 'sustainable intensification versus agroecology' and beyond. The spirit of openness and collaboration that Denmark has fostered is surely one for us all to learn from.

The broader context is of course that the UK is (at time of writing) expected to leave the EU in late 2019. Whatever happens, surely it makes sense for the UK to develop close ties with Denmark – and its Nordic neighbours – and to promote knowledge exchange on sustainable food and farming approaches.

What next?

Lessons for the UK:

- Set bold public procurement targets, e.g. on organic, to give more certainty for investment and encourage innovation. And back those up with meaningful action plans.
- Put in place measures to enable cooperative business models to flourish
- Encourage development of a strong culture of collaboration [The Danish story shows it *is* possible to transform food culture]
- Encourage development of public-private partnerships to help address societal challenges
- Promote farmer-led innovation, citizen involvement & whole value chain collaboration

Key questions to ask include:

- How can national governments support growth of cooperative business models and encourage greater collaboration along value chains?
- How can businesses encourage collaboration in sustainability procurement guidelines?
- How can we develop pioneering sustainable diets strategies that shift diets?
- How can we showcase the best of food & farming (UK and other countries) effectively?
- How can we open up abattoirs and other aspects of food & farming to the public, in a viable way?
- How can greater priority be given to tackling inequality, given the benefits this would bring?

Further resources

1. [Food Sustainability Index \('FSI'\) here – including a Best Practice report here](#)
2. [Food Nation website here](#)
3. [Food Ethics Council's 'Snapshot: UK sustainable food systems in the spotlight' here](#)
4. [Soil Association's Green Brexit report here includes Danish organic food procurement example \(P.30-31\)](#)

Other relevant Business Forum reports:

[Lessons from France: world leader on food sustainable food and farming?](#)

This is a report of the Business Forum meeting on 25th June 2019. We are grateful to our speakers, **Lise Walbom**, CEO of Food Nation Denmark and **Martin Koehring**, Managing Editor & Global Healthcare Lead, Thought Leadership, the Economist Intelligence Unit. **Jo Lewis**, Policy & Strategy Director of the Soil Association and Chair of the Food Ethics Council, chaired the meeting. The views expressed in this report do not necessarily represent those of the Food Ethics Council, nor its members. For more information on the Business Forum, contact Dan Crossley dan@foodethicscouncil.org +44 (0) 333 012 4147.