



Food Ethics Council



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Business Forum Report, November 2021

## **Flying Dutch**

*Exchanging lessons on food sustainability with the Netherlands*

## The Food Sustainability Index

### What is the FSI & how has it changed?

The Food Sustainability Index ('FSI') was developed in 2016 by Economist Impact, with the support of Barilla Centre for Food and Nutrition Foundation ('BCFN'). Its aim is to capture the key issues within food systems and highlight best practices in food sustainability. In 2016, the first FSI assessed the food sustainability of 25 countries along the three pillars outlined in the 2015 BCFN Milan Protocol (food loss and waste, sustainable agriculture, and nutritional challenges).

Since then, it has expanded in scope and in countries assessed. The 2021 index examines the food systems of 78 countries. It uses 95 individual metrics that cut across these three key pillars, many of which are new this year. Trends since 2018 were assessed and incorporated in 2021, many in response to the COVID-19 pandemic. These include zoonotic diseases; the One Health Approach (linked to COVID-19 because of its integrated approach to health) and food-based dietary guidelines; supply chain resilience and the affordability of sustainable diets; and – with the focus on COP 26 – climate change adaptation and mitigation.

The Netherlands and the UK are in the top 20 on the FSI index. The Netherlands stands at 8 out of 78 countries, and the UK at 20.

### Areas where the UK outperforms the Netherlands

The UK ranks Very High on nutritional challenges, High on food loss and waste, and Medium on sustainable agriculture. There are some areas where the UK excels, including best practice in driving down food waste levels and policy responses to food waste (particularly the Courtauld Commitment 2025). The UK is among the best performers in the FSI for animal welfare policies, scoring second highest in the Animal Protection Index, and highly on antibiotic use in animals. Policy interventions on diets are also good, including the Eatwell Guide and the sugar tax (soft drinks industry levy). However, it was noted that the UK continues to subsidise the sugar industry.

### Areas where the Netherlands outperforms the UK

The Netherlands performs in the top category for food loss and waste and nutritional challenges. In sustainable agriculture it sits in the high (second-best) category. One notable success is a national focus on sustainable water management. Over the last two decades the water dependency for some key crops has significantly reduced. Government and farmers work together to achieve better retention of water on farmlands. In contrast, the UK does not currently have a national strategy that seeks to promote sustainable

water management or water reuse for agricultural purposes. They exist as devolved strategies in England and Wales only.

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“[UK has] a strong nitrogen use efficiency, high-quality soils, high levels of soil organic carbon. But where it really can learn from other countries is in the use of pesticides and synthetic fertilisers in agriculture.”

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The Netherlands also has a strong policy response to the issue of food loss (as well as food waste). Its Together Against Food Waste programme uses the target-measure-act approach, which is best practice in food loss policy. There is also a tool that allows producers to see what food is lost across the different stages of the full supply (and value) chain.

### Areas where both countries could do better

The UK and the Netherlands both do less well in the environmental impact of agriculture on the land (particularly in terms of how much synthetic fertiliser and pesticides are used) and atmosphere, with the UK among the larger agricultural total greenhouse gas ('GHG') emitters. In the Netherlands, greenhouses producers have worked to eliminate chemical pesticides almost completely, relying instead on biological control measures.

The UK and Netherlands both fall short in integrating climate change into their current agricultural policies, and in making specific agricultural commitments in their Nationally Determined Contributions (to decreasing GHG emissions by at least 67% by 2030 compared to 1990 levels) under the Paris Agreement.

## Circular agriculture driving changes in the Netherlands

The Netherlands is a large food producer and exporter. Three years ago, the Dutch government introduced a vision for circular agriculture to drive a transition towards sustainable agriculture and food systems. Circular agriculture is based on the principles of a circular economy, in particular, closing nutrient loops. The Dutch government adopted an integrated approach to the transition, working with regions and businesses to set clear goals.

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“[Circular agriculture] is about moving from a model that is predicated on cost reduction to a model that is predicated on closing the loops so we can reduce our input use.”

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It is recognised that the market may not always pay a fair price for raising standards and practices, so the Dutch government has put measures in place to monitor price formation. For the transition to succeed, farmers need to be paid fairly when the market asks them to implement sustainability measures that affect them financially.

It was suggested that there are three key factors for the transition envisaged in the Dutch vision for circular agriculture.

### **The Golden Triangle**

The Golden Triangle is what the Dutch call their intense and close-knit cooperation between the public sector, academia, research organisations, and business (including the farming industry). It is a model for research and development in which government, research organisations and the private sector work together in applied research and innovation. This successful model has for example led to the growth of the Food Valley cluster around Wageningen University (including businesses such as Unilever).

### **Strong government policies to drive knowledge transfer and innovation**

The Dutch government identified the country's top nine sectors (which include agri-food and horticulture sectors) and developed a strategy to promote the Dutch knowledge economy and closer collaboration between industry, government, scientists and the food sector. The OECD recently praised this approach, calling it among the most ambitious mission-orientated strategic frameworks. It is 'mission-driven' because it links the top nine sectors with finding solutions to the 'grand challenges' facing society.

### **Collaboration between agri-food stakeholders**

The Netherlands has limited and expensive resources (e.g. land and labour), and for farmers to compete in international markets they must be creative in how those resources are used. This has required them to learn how to be cost efficient, and now the Netherlands has a reputation as a leader in efficient agriculture, e.g. getting the most out of every hectare.

The circular agriculture vision is of an integrated approach between the different agricultural sectors (and beyond). This requires increased cooperation and partnerships between the stakeholders in the agri-food sector. Dialogue, sectoral breadth and room for experimentation are important ingredients. Collaboration will lead to improved efficiency and productivity (enabling the Netherlands to compete

strongly on the international stage) and create new synergies in innovation processes.

## **Other factors shaping Netherlands agricultural policy**

### **EU policies**

The EU-wide Farm to Fork strategy sets climate and biodiversity targets for farming and agriculture. There is more emphasis on biodiversity and nature in Farm to Fork than in the UK's policies, although the National Food Strategy is bringing nature back onto the agenda. The Farm to Fork ambitions are for climate smart agriculture and bioenergy. It includes targets to halve pesticide usage, significantly reduce nitrogen use by a minimum of 20% by 2030 and grow organic farmland to 25% of the total land area of Europe.

The Netherlands circular agriculture vision fits with Farm to Fork, especially in terms of closing the nutrients loop, which provides at least a partial solution to issues around GHG emissions. However, Farm to Fork could be seen as being challenging for a higher intensity agricultural model like the Netherlands, given its reliance on pesticide and nitrogen use.

The Common Agricultural Policy ('CAP') directly influences Dutch agricultural policy. In the future, it is hoped the CAP will include ecological programmes, and also Environmental Land Management, such as is happening in the UK. The Dutch government is interested in payments for public goods.

### **Food culture**

Dutch people are becoming more interested in localised food systems. Regional products are increasingly popular, and so are schemes that link farmers directly with customers. Additionally, there is a culture of food innovation.

## **Challenges in Dutch agricultural model**

### **Efficiency vs sustainability**

Dutch efficiency relies on resource-intensive practices, such as high use of artificial fertiliser and pesticide inputs and importing animal feeds. This efficiency has made the Netherlands an agricultural powerhouse, but at an environmental cost. For instance, emissions of ammonia and use of pesticides per hectare of agricultural land are among the highest in the EU.

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*“So in recent years the high externalised cost of some of our agricultural practices have provoked new questions in Dutch society”*

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The most urgent question is how to reduce the high level of nitrogen emissions affecting the Dutch environment. The nitrogen deposition question has caused conflicts across Dutch society between different land users, and between farmers and government. The nitrogen question will demand choices in the near future about how livestock farming is undertaken.

### Precision farming vs regenerative agriculture

The vision for circular agriculture encourages farmers to work together to close nutrient loops and cut emissions along the whole supply chain, closing nutrient cycles locally where possible. This could support more organic or regenerative farming systems. However, it could be argued that the drive to achieve pesticide and nitrogen reductions may result in an increased focus on precision agriculture that locks the Netherlands into a higher intensity agricultural system.

### Food security vs food sustainability

As part of the Farm to Fork strategy, the EU is looking into the carbon content of its imports, including food imports. This will have a huge impact on exporters to the EU (such as Brazil), who see it as a trade protectionist policy because it installs additional, non-tariff barriers on imports.

EU countries will be most able to respond to the new trade rules, so the policy indirectly prioritises EU production. However, it was argued that it is not possible to increase food production in Europe as efficiently (e.g. in terms of reducing emissions) as importing it from countries with more efficient practices. Therefore, the policy could create negative unintended consequences for agricultural sustainability. Some argue that this new policy on imports, devised as a result of its carbon border adjustment plans, is touted as being about sustainability, but it is more about food security – protecting the EU’s food system.

### Concluding comments

The Netherlands performs more highly than the UK in all three pillars on the FSI. However, it can learn some lessons from the UK, particularly around animal welfare, food waste and nutritional policy. The UK can learn much from the Netherlands, especially in the role of government in fostering collaboration and cooperation for R&D and knowledge transfer.

On the wider stage, it was disappointing that food was not high on the agenda at COP26. A small consolation is that nature was a key theme at COP 26. It is important to ensure recognition of the central role of

food and agriculture in relation to reversing biodiversity loss. When the dots are joined between climate and nature, food and farming is at the heart of what needs to be in focus.

“Food wasn't really high on the agenda at COP26 and that really surprised not just me but an awful lot of people in the industry”

*NOTE: observations referring to Dutch government concern the then government’s policy at the time of the event.*

### What next?

#### Lessons for the UK

- Develop a shared vision of sustainable agricultural systems that borrow from circular economy principles
- Encourage a strong culture of collaboration and knowledge sharing across sectors, including business and innovation hubs linked to key universities.
- Encourage development of public-private R&D partnerships to help address societal challenges
- Spell out what Environmental Land Management looks like in practice – for UK farmers, and also to influence changes to EU’s Common Agricultural Policy

#### Selected key questions:

- How can national governments support efficiency in agriculture without locking into a resource intensive, highly industrialised model of farming?
- How can we ensure that food security and food sustainability are compatible goals when it comes to setting trade policy?
- How can we embed food and farming at the heart of debates about climate and nature?

### Further resources

- Food Sustainability Index [\[link\]](#)
- Food Ethics Council snapshot analysis - Reality Check: how is the UK doing on food sustainability [\[link\]](#)
- EU Farm to Fork strategy [\[link\]](#)

#### Other relevant Business Forum reports:

- Lessons from France, world leader on sustainable food and farming [\[link\]](#)
- Lessons on food sustainability from Denmark [\[link\]](#)

This is a report of the Business Forum meeting on 30<sup>th</sup> November 2021. We are grateful to our speakers, **Martin Koehring**, Senior Manager for Sustainability, Climate Change and Natural Resources, and Head of the World Ocean Initiative at Economist Impact (part of The Economist Group); and **Bas Harbers**, Agricultural Advisor at the Dutch embassy in London. **Jo Lewis** Policy and Strategy Director at the Soil Association and Trustee 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](mailto:dan@foodethicscouncil.org) +44 (0) 333 012 4147.