

# BLUE FOODS: SEAFOOD AS A SOLUTION

## PART 1: PUTTING FISHING ON THE FOOD AGENDA

Policy Brief No. 23 - February 2024

### OVERVIEW

- Seafood offers a range of social, economic, and environmental benefits, including ones that remain to be fully explored such as carbon sequestration and supporting marine biodiversity.
- In the UK, consumption of seafood is lower than that recommended by national public health guidelines. Much of the seafood that is eaten in the UK is imported from abroad. This has negative implications for the UK fishing industry and national food security in the longer term.

### Key recommendations for policymakers to capitalise on “Blue Food” are:

- To increase the consumption of UK seafood through public procurement changes.
- To fund and facilitate ongoing educational efforts to encourage UK consumers to eat more UK seafood.
- To invest in and provide infrastructure to UK seafood businesses to encourage innovation and facilitate the processing, transport, and distribution of seafood both within and beyond national borders.
- To ensure that UK fishers receive fair wages and do not face an unfair playing field on which seafood imported from abroad may be cheaper because it is subject to less stringent environmental and social regulations.



This is not an official publication of the House of Commons or the House of Lords. It has not been approved by either House or its committees. All Party Parliamentary Groups are informal groups of Members of both Houses with a common interest in particular issues. The views in this report are those expressed during the relevant meeting of the Group.

## BACKGROUND

Seafood – or ‘Blue Food’ – plays a central role in global food security, livelihoods, economies, and cultural heritage. The UK Government recognised this in its Food Strategy, published in 2022 (1), which positions food systems as vital to a thriving UK economy, boosting health and wellbeing, and increasing food security. However, the role of fisheries and seafood in delivering these benefits is yet to be fully defined. Further, while the Strategy introduces policy initiatives to promote sustainable, resilient, healthy, and affordable food systems, knowledge gaps around the full spectrum of benefits and opportunities of seafood consumption remain. These include the potential for tackling climate change and biodiversity loss, and the resulting positive impacts on people and communities.

Pushing fisheries and seafood higher up the food agenda is all the more important given that – as explored in the APPG on Fisheries’ earlier brief ‘Fisheries and Food Policy’ (2) – average seafood consumption in the UK is lower than the level recommended by the Government for health, with most of the seafood consumed in the UK imported from abroad.

This briefing synthesises discussions from the APPG on Fisheries event ‘Blue Foods: Seafood as a Solution – Putting Fishing on the Food Agenda’, which was held on 28 November 2023 (3) as the first in a three-part series examining seafood as a solution to the economic, environmental, and societal challenges posed by food production. Where additional sources have been used in this briefing, citations are provided.

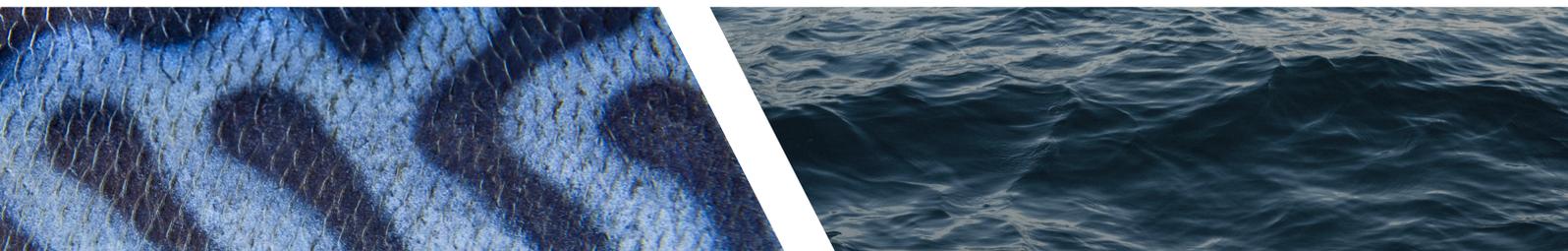


## The benefits of increasing seafood consumption

Increasing consumption of seafood, in particular that produced in the UK, offers a range of societal, economic, and environmental benefits, including:

- **Public health:** Seafood, particularly oily fish, provides an excellent source of many vitamins and minerals and can play an important role in reducing the risk of cardiovascular, colorectal, and other diseases (4, 5).
- **Employment:** The UK Government’s Food Strategy recognises the contribution of the seafood sector to employment in the UK (1), while the fishing industry is a fundamental economic – and cultural heritage – element of many coastal communities (6).

- **Food security:** The UK supply chain currently sources most of its seafood from abroad, and relies heavily on just a few types of fish. Maintaining a healthy fishing industry will make the UK more resilient to any future “shocks” to the global food system. Tackling waste in the seafood supply chain – both before and after food reaches end-consumers – will also bolster national food security, as well as reducing the emissions generated in feeding people in the UK.
- **Lower carbon emissions:** Research indicates that many types of seafood have a lower carbon footprint than meat. For example, research suggests that producing 1 kg of chicken – which typically generates fewer emissions than other types of meat – still generates twice as much CO<sub>2</sub> as the same amount of wild-caught sardines (7). Additionally, eating seafood that has been produced in the UK rather than imported products offers further opportunity to reduce emissions from transport.
- **Mitigation of climate change and biodiversity loss:** Some forms of Blue Food in the UK offer the opportunity not only to deliver nutritious food with low environmental cost, but to actively sequester carbon and to boost marine biodiversity through creating, protecting, and improving the quality of habitats. These Blue Foods include farmed shellfish, microalgae, and macroalgae (seaweed), which provide or have the potential to provide fertilisers and food for people, livestock, and farmed fish. Projects are also underway to explore the potential to co-locate seaweed and shellfish farms with offshore wind farms (8).



### **Project showcase: Regenerative shellfish and seaweed farming in Dorset**

A growing number of aquaculture initiatives are taking seed in the county of Dorset, including shellfish and seaweed farms (9). These are being monitored for their potential to provide “regenerative aquaculture” by delivering ecosystem services such as water filtration and purification, reducing the intensity and impact of waves during storms, and providing new sheltering and foraging opportunities for a variety of marine life. The potential of these initiatives has been recognised by the Department for International Trade, which has awarded Dorset with a High Potential Opportunity (HPO) for Sustainable Aquaculture which – it is hoped – will attract more investment in regenerative aquaculture in the area (10).

### **Encouraging the consumption of UK seafood**

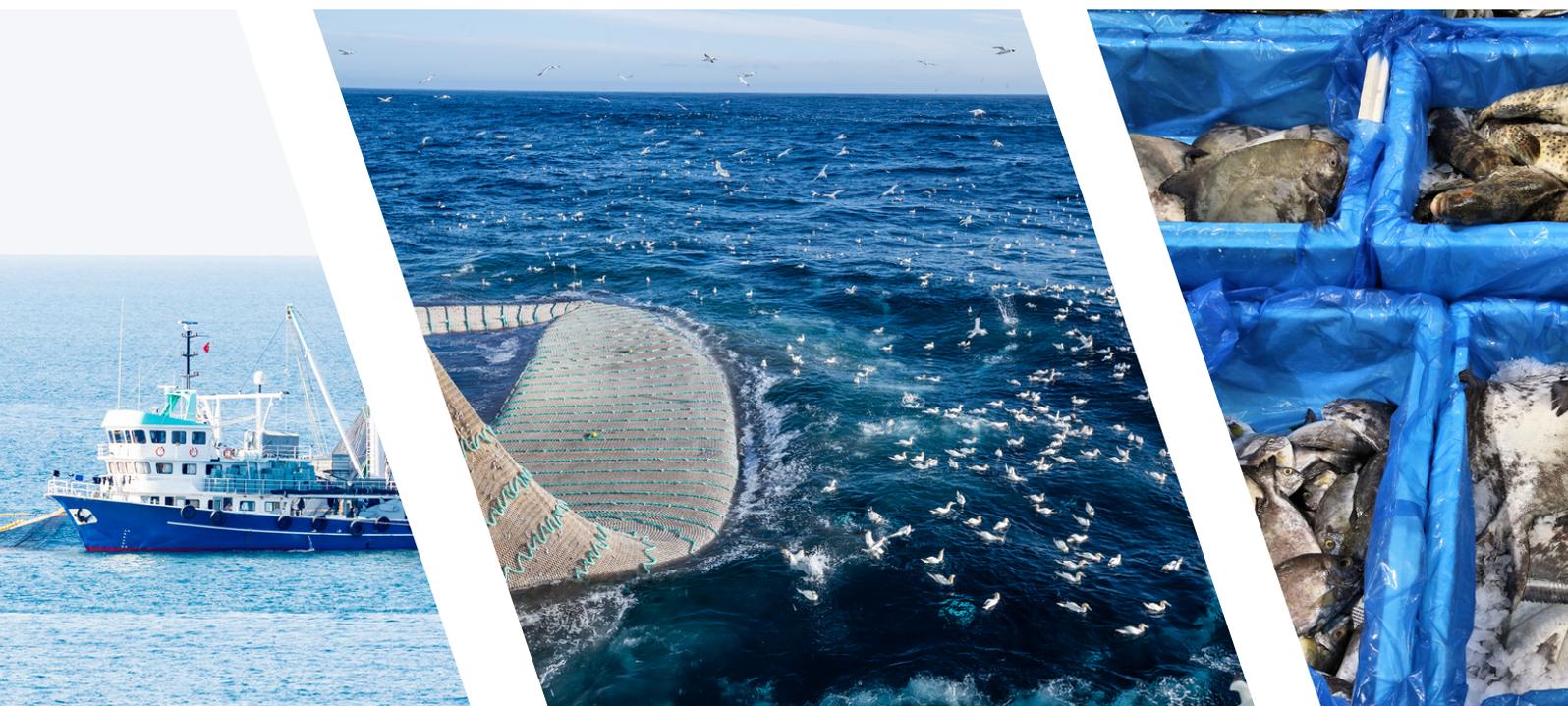
The APPG on Fisheries’ earlier brief ‘Fisheries and Food Policy’ recommended increasing the consumption of and demand for UK-produced seafood via policy changes to public procurement, large retailers helping influence consumer habits, and educational initiatives (2). Speakers at the first Blue Foods event reiterated the importance of these approaches and put forward fresh perspectives and recommendations which would be best delivered through collaboration and collective engagement by policymakers, the seafood supply chain, and the fishing industry.

Compared to imported seafood, it can be more difficult to guarantee consistency and regularity in the supply of UK-produced seafood, which has knock-on effects for UK supply chains. Fishing is

often concentrated in specific regions of the country with relatively small fleets, from which it can take longer to transport fish to markets and distribution centres. At the broader level, the risk of large fluctuations between years in Total Allowable Catch for some UK fisheries, as result of annual agreements made with the EU and other Coastal States based on International Council for the Exploration of the Sea (ICES) advice, also affects the supply chain's confidence in sourcing from the UK. Multi-year planning and strategising at the fisheries management level – while continuing to prioritise stock sustainability – could offer UK fisheries, and therefore the supply chain, more certainty.

A question was also raised at the event about the possibility of public concern around the safety of UK seafood, especially shellfish, due to coastal pollution and poor water quality. While it is unclear if this is affecting demand for UK seafood among consumers, the industry itself is being affected by the management of sewage and water pollution. Shadow Fisheries Minister Daniel Zeichner MP stated that he had heard from shellfish fishers in West Mersey that sewage outflows often restrict where they can operate (3). Meanwhile, the UK's departure from the EU means that its water quality is now deemed poorer under EU law – regardless of any actual change in water quality – which, in turn, means that UK shellfish must now undergo cleaning before it can be exported to the EU. However, there is a lack of infrastructure nationally for the cleaning of shellfish to enable this seafood to meet EU standards (11). The UK Government has a clear role to play in funding and facilitating the development of this infrastructure and in addressing systemic issues around sewage and water pollution. Longer-term actions such as these could, in the shorter term, be supported by encouraging domestic consumption of UK shellfish and other seafood.

Education of and marketing to UK consumers should focus on the benefits of seafood as a form of low-carbon food and on taking the “worry” out of fish preparation. Non-profit initiatives such as the Fish in School Hero programme, run by the Food Teachers Centre, and public bodies such as Seafish, have a key role to play in this. One example of success is the increasing popularity of hake among UK consumers, which has been promoted as a sustainable seafood choice by organisations including the Marine Conservation Society (12) and the Marine Stewardship Council (13).





## Project showcase: The Fish in School Hero programme

Run by the Food Teachers Centre, the aim of the Fish in School Hero programme is for every child to have a chance to prepare, cook, and eat fish before they leave school. Seafood is rarely featured in cookery lessons for a number of reasons, including cost, uncertainty about where to source from, and lack of confidence among teachers in cooking with it.

To address this, and to give students the confidence and appetite to cook with seafood, the programme provides training, resources, sourcing advice, and student masterclasses – while connecting schools with “local industry heroes” including fishmongers, seafood-loving chefs, suppliers, and producers. One of the highlights of the programme to date has been Mighty Mussels 2023 where, over the course of a month, a total of two tonnes of live mussels were delivered to and cooked in 190 schools. The Food Teachers Centre estimates that the programme currently reaches at least 38,000 students per year (14).

## Equitable production and sourcing of seafood

Speakers at the APPG on Fisheries event were frank about the reality that UK seafood often costs more because of the safety, hygiene, labour, and sustainability regulations that UK fishers are subject to. These regulations are comparatively stricter than those placed on some fishing fleets in countries such as Russia and China – two key sources of seafood imported to the UK. At the same time, there remain improvements to be made in ensuring that fishers in UK fleets consistently receive a fair living wage, as the APPG on Fisheries heard at its earlier event ‘Fishing Crews Today and Tomorrow’ (15).

While the UK ‘leads the world’ in setting sourcing policies aimed at preventing the import of seafood from unsustainable fisheries lacking fair labour rules and safe working practices, challenges remain in consistently achieving this level of assurance. For example, Marine Stewardship Council (MSC) certification is considered to be the highest standard for sustainable seafood, with the MSC having worked in recent years to better incorporate social responsibility into its requirements (16). However, advocacy groups highlight that progress is still to be made in ensuring that fisheries and supply chain companies carrying out labour rights abuses are not certified (17).

Policy change to improve assurance in the UK supply chain for ethical and sustainable seafood from abroad would help to level the playing field for UK fishers. This may well increase prices for consumers. As such, concerted and collaborative efforts to raise awareness of both the environmental and socio-economic benefits of UK seafood will enable UK consumers to make informed purchasing decisions and may help to overcome the challenge of consumer preferences for cheap food.

Ensuring social justice in the UK fishing industry will, crucially, provide practical long-term benefits to national food security. The APPG on Fisheries has previously heard from both the industry and MPs that fleets are struggling to recruit and retain crew due to a combination of factors, including low or fluctuating wages, the perception of fishing careers as being too unsafe and uncomfortable, the costs of training, and regulatory burdens. These concerns are borne out by figures showing a fall in the number of UK fishers (18): in 2021, there were a total of 11,000 fishers in the UK, representing almost a halving of the fishing workforce since the mid-1990s. The size of the entire UK fishing fleet has reduced by 33% since 1996. It is essential to ensure that, in addition to labour capacity, vital skills and knowledge are not lost as ageing fishers retire from the industry. Maintaining both expertise and productive capacity in the UK fishing industry will make UK food systems more resilient should climate change or other environmental or political crises compromise the ability to import seafood.

## CONCLUSIONS

Seafood – or Blue Food – is a fundamental element of food systems and offers a range of social, economic, and environmental benefits that the UK should aim to fully explore. In addition to the well-recognised importance of seafood to public health and employment in coastal communities, Blue Food offers lower-carbon protein and nutrition in comparison to meat, and could even have net-positive impacts on climate change mitigation and marine ecosystem health. However, there are still key barriers to fully realising these opportunities, notably: knowledge and research gaps; inadequate domestic demand for UK seafood; broader environmental issues around water quality and fisheries management; and economic and social challenges in the UK seafood sector.

The fishing industry, non-profit organisations, and government bodies already seek to address these issues via a range of approaches such as educational programmes and innovative aquaculture. There are clear opportunities for policymakers to further support these through investments in infrastructure, more strategic approaches to fisheries management and water quality, changes to public procurement, and ensuring that social justice is accounted for both in UK fisheries and in the supply chains of seafood imported from abroad. In combination, these actions could be a boon to national food security, by creating a positive feedback loop where increasing domestic consumption of and demand for UK seafood bolsters the resilience of the UK fishing industry and its capacity to feed the population, while simultaneously delivering climate and biodiversity solutions.



## REFERENCES

1. [UK Government, Government food strategy, June 2022. Accessed December 2023.](#)
2. [APPG on Fisheries, Fisheries and Food Policy, September 2022. Accessed December 2023.](#)
3. [APPG on Fisheries, Blue Foods: Seafood as a Solution Pt. 1: All Our Panelists' Answers, December 2023. Accessed December 2023.](#)
4. [NHS, Fish and shellfish, November 2022. Accessed December 2023.](#)
5. [SACN, Advice on fish consumption: benefits & risks, June 2004. Accessed July 2022.](#)
6. [APPG on Fisheries, Fishing in a Changing Seascape, January 2023. Accessed December 2023.](#)
7. [Economist Impact, Data point: should we eat more "blue food"?, April 2022. Accessed December 2023.](#)
8. [The Fish Site, EU-funded project aims to solidify wind farms as viable aquaculture sites, November 2023. Accessed December 2023.](#)
9. [Global Seafood Alliance, Projects in Denmark and England focus on education and building climate-positive models, January 2022. Accessed December 2023.](#)
10. [Dorset Coast Forum, Aquaculture. Accessed December 2023.](#)
11. [Prospect, The Brexit shellfish fiasco, explained, February 2021. Accessed December 2023.](#)
12. [Marine Conservation Society, Top 5 sustainable seafood swaps. Accessed December 2023.](#)
13. [Marine Stewardship Council, A foodie's guide to sustainable hake. Accessed December 2023.](#)
14. [Food Teachers Centre, Fish Heroes. Accessed December 2023.](#)
15. [APPG on Fisheries, Fishing Crews Today and Tomorrow: All Our Panelists' Answers, October 2022. Accessed December 2023.](#)
16. [Marine Stewardship Council, Introducing the MSC Labour Eligibility Requirements. Accessed December 2023.](#)
17. [Human Rights at Sea, Opinion. MSC: Must change or step away from voluntary standards for human rights protections in seafood supply chains, October 2023. Accessed December 2023.](#)
18. [House of Commons Library, UK fisheries statistics, October 2022.](#)
19. [The White Paper: Unlocking opportunities of planet-friendly School Meals](#)
20. [Stanford Center for Ocean Solutions leads two-year project to evaluate the potential of blue foods in climate adaptation and mitigation strategies](#)
21. [The Mission of the 100% Fish Project at the Iceland Ocean Cluster](#)



The All Party Parliamentary Group on Fisheries is supported by The Fishmongers' Company. The Secretariat is provided by Mindfully Wired Communications.

