

A Briefing: Fisheries policy outside the EU¹

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Executive summary

- Whatever trade arrangement the UK decides to adopt with the EU post-Brexit, the UK government will have authority over fisheries policy.
- Under the EU's Common Fisheries Policy (CFP), after many years of stock decline, there has been a recent stabilisation and even increase in stocks. However, the CFP is not an effective way for managing fishing rights.
- Other countries such as Iceland have more effective policies that lead both to sustainable management and also reduce conflict between different interests.
- The UK should adopt a tradable quota share system whereby quotas are allocated as a share of the annual total allowable catch in perpetuity.
- Such a system mirrors the way in which property rights on land encourage sustainable farming.
- Under such a system the quota-holders have an incentive to agree the total allowable catch to maximise sustainability.
- In-shore fisheries might be better managed in other ways with self-management often being more sustainable than government regulation.
- Having determined the principles by which the system should operate, there are a number of practical difficulties that need to be addressed. These are important issues, but need not get in the way of the development of an effective and sustainable property-rights based system for allocating fishing rights

For the first time in 40 years, the UK will shortly have control of fishing policy. Whether or not the UK joins the EEA, we will repatriate authority over fishing policy. The EU Common Fisheries Policy has not been a great success (to say the least) and the UK has the opportunity to draw from economic theory and practical experience to develop better policy.

Sea fisheries management – the essential problem

The essential problem with sea fisheries is that there are often no well-defined property rights. Many fisheries are huge 'commons' that can, in principle, be exploited and ultimately destroyed by trawler owners, despite that never being their explicit intention. As William Forster Lloyd pointed out in a pamphlet back in 1833, when a resource is open to all you get a 'tragedy of the commons' and over-use of the resource.

In that pamphlet he was referring to animal grazing, but what applies to the land can also apply to the sea. When a trawler takes fish from the sea, the owner considers only the value of the fish it catches and the cost of going to sea. He does not consider the reduction in fish (including breeding stock) available to other boats. Over-fishing is the consequence. The theory relating to this problem is well known to economists. There is a simple explanation of the theory and also of the practical and theoretical aspects of promoting sustainable sea fisheries in the book by Hannes H. Gissurarson, "The Icelandic Fisheries – Sustainable and Profitable" published in 2015. Also, Costello et al (2016) suggest

¹ This paper is based on a submission produced as a response to call for evidence on Scotland's relationship with the EU (*Education and Skills, Local Government and Communities, European and External Relations committees of the Scottish Parliament*). The ideas in the paper are based on 'Property Rights and Conservation – the missing theme of *Laudato si'*' to be published by the author in the *Independent Review* in 2017

that various rights-based approaches to fishery management can have a substantial and rapid effect on fish stocks.

For much of human history, the management of sea fishing grounds did not generally matter. The demand for fish was small relative to the resources available and limitations in technology made 'over-fishing' difficult, at least in open waters. However, from the late 20th century at least, this was certainly not the case. Most fisheries are now either fully fished or over-fished².

The EU's response to this inherent problem has been the Common Fisheries Policy (CFP). Whilst it is now the case that fish stocks have stabilised and are even rising within the EU, the CFP has been a very inefficient way to achieve that objective. It is poor at resolving conflicts and has not created a sustainable, long-term approach to managing fisheries. There are much better ways to manage fish stocks sustainably.

Sea fisheries management – a sustainable solution

The solution to the problem of unsustainability is to establish property rights in sea fisheries. This is precisely how we deal with the problem of scarcity and conservation when it comes to the land. This has been acknowledged for centuries. For example, as Thomas Aquinas understood that, when it comes to the land, private property encourages us to work hard and efficiently (because we are the beneficiaries of our efforts). It also encourages peaceful co-operation because we understand who is responsible for what and where our rights begin and end. We also have an incentive to nurture the land when it is privately owned because we are the long-term beneficiaries of its sustainability.

Few would seriously question private property when it comes to the land. For example, it is rare these days to find people who would suggest that farms should be nationalised or collectivised or returned to an unregulated commons where anybody can graze their animals without restriction. It would be understood that this would lead to chaos, inefficiency and environmental catastrophe (rain forest destruction in many countries is a living example of the problems caused by lack of well-defined and well-enforced property rights).

Whilst private property rights work much better than the alternatives on land and government-controlled fisheries do not have a good record either, it is sometimes difficult for people to envisage how private property rights might be an effective way of managing deep sea fisheries. However, much work has been done by economists on this matter and there are now many practical examples of effective schemes.

Creating property rights in deep sea fisheries

One reason why it is difficult for people to envisage property rights solutions to the unsustainability of the fishing industry is the obvious practical problems. Apple orchards and grain fields remain stationary and cattle can be fenced in, but fish are more difficult to pin down. So the development of property rights is not quite as simple as on land. It is not a case of selling off 60 square miles of the North Sea to one trawler owner and 50 square miles to another.

The system that tends to work quite well is that which has been used in Iceland. What happens in such systems is that a given percentage of the total allowable catch in a particular fishing ground is allocated to the different trawler owners as a quota. This right needs to be a right in perpetuity (like a freehold rather than a short-term let), though in Iceland the legal position is slightly vague (and regrettably so). An important aspect of the system is that the quota can then be traded. Each year, a total allowable catch is then set. In practice, the total allowable catch is set by the government in Iceland. However, it need not be set by the government and, indeed, it would be better if it were not. Because each trawler owner's right stretches into perpetuity, trawler owners have an incentive to agree to set the catch in a given year in such a way that sustainability is maximised. Fewer fish caught this year (up to a point), means more fish available to breed and more fish in the future and so the value of the quota increases. If the quotas are tradable, the increase in the value of the quota would be observable. Because each of the trawler owners has a right to a percentage of the total allowable catch stretching out forever, they

² See, for example, the FAO report: <http://www.fao.org/3/a-i5555e.pdf>

would wish to ensure a sustainable fishery, thus maximising (as economists put it) the net present value of the fish that they can catch over an indefinite period. It is the net present value of all future catches that will largely determine the value of the tradable quota.

In the EU, there is a continual battle between the Commission, scientists and trawler owners, all of whom have different interests, and the EU tends to come up with solutions to allocating fishing rights that satisfy nobody. In Iceland, there tends to be broad harmony between all parties thus producing co-operation as well as a sustainable fishery. Indeed, the evidence suggests that the job of setting the annual quota could easily enough be given to the trawler owners in the same way that farmers decide how many cattle to graze on each hectare of land. The trawler owners have a property right that gives them a long-term interest in sustainability. Gissurarson (2015, page 70), writing about the Icelandic system of fishing quotas writes: "In Iceland, owners of fishing vessels now fully support a cautious setting of TACs [total allowable catch] in different species. They have become ardent conservationists...[T]he private interests of individual fishermen coincide with the public interest."

Practical questions

Such a proposal should be the starting point for the development of policy in the UK. There is no obvious second-best solution worth considering. There are, however, many practical details. These include issues such as:

- How fishing grounds are defined
- How the quotas for different types of fish interact with each other
- Whether the behaviour of particular types of fish mean that a different approach should be taken in some circumstances
- How catches should be monitored
- How to deal with fishing grounds where the movement of fish runs across the territorial waters of different countries
- Whether there should be any restrictions on the selling of rights (e.g. competition issues etc)?
- How to manage inshore fisheries (which, in principle are easier than the management of deep sea fisheries but should probably be separate).³

Perhaps the biggest practical issue is how to allocate the initial rights that can then be bought and sold on the open market. This was somewhat controversial in Iceland. In the UK, it would also have to be decided whether to treat foreign trawler owners who currently fish in what will become British waters the same way as British trawler owners, whether to give the rights away to current trawler owners or sell them to the highest bidder, and so on.

These are practical questions which are best fixed after a decision to adopt a sensible, sustainable, long-term approach to the management of fisheries has been made.

References

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³ It is likely that some of the principles developed by Nobel Prize winner the late Elinor Ostrom would be more appropriate for inshore fisheries – that is that they can be largely self-managed with little government intervention.